

## Relationship Between Adolescents and Young Adults' Knowledge about HIV/AIDS and Risk Behaviors: How can Knowledge be Complemented?

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**Abstract:** This study was aimed at reviewing existing literature about the relationship that studies have established between knowledge of HIV/AIDS and risk behaviors towards the disease as well as the ways that the knowledge drive can be complemented to help reduce risk behaviors. That high levels of risk behaviors were reported among people with high levels of knowledge about the disease is indicative of the fact that knowledge alone is not sufficient to eliminate risk behaviors. To complement the knowledge drive, involvement of peer groups, community action including those of religious organizations, involvement of voluntary HIV positive individuals to bring the disease to the people, culture specific approaches have all been proved to be vital in the fight against the disease. These may direct HIV/AIDS organizations towards making the fight against the disease effective by incorporating these means of complementing knowledge in their activities.

**Key words:** Knowledge, HIV/AIDS, risk behaviors, adolescents and young adults, China

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### INTRODUCTION

The fight against the spread of the Human Immunodeficiency Virus HIV/AIDS pandemic has focused on education, disseminating information or knowledge about the modes of transmission and methods of prevention of the disease. Is the campaign succeeding in reducing risky/unsafe behaviors or do people, particularly the sexually active young generation have other concerns other than the risk posed by HIV/AIDS.

Research on the effect of knowledge on risk behaviors often uses self-reporting techniques such as questionnaires and interviews about the knowledge level and extent of risk behavior of participants. However, as a drawback, self-report studies about unsafe/risky behaviors may result in under-reporting of unsafe behaviors by people not wanting to disclose behaviors that might be viewed as socially unacceptable or stigmatizing (Sowell *et al.*, 1996).

HIV transmission knowledge studies normally turn out generally high levels of knowledge about the disease among participants (Sowell *et al.*, 1996; (Barden-O'Fallon *et al.*, 2004) some of whom over estimate their levels of knowledge. People who fall into the poorly informed category as a result of knowledge tests, consistently over-estimate their knowledge level which places them at unanticipated risk for HIV infection, Sowell *et al.* (1996). This category of people may be difficult to reach with HIV prevention messages because they always pretend to know.

One way of evaluating the effectiveness of the knowledge campaign is to review literature on studies that have investigated the relationship between the knowledge levels and risk behavior levels. Various approaches across differing populations may have been used in those studies with mixed results. Cataloguing of these might provide a good platform for determining the success of the knowledge drive. Other studies may have investigated factors that could make knowledge acquisition effective while others could complement the knowledge campaign. These form the core of this review study.

### KNOWLEDGE OF HIV/AIDS AND RISK BEHAVIORS

The essence of educating the populace about the modes of transmission and methods of prevention of the HIV/AIDS disease is to reduce unsafe/risky behavior. However, studies have revealed that knowledge does not necessarily reduce risk behavior. Knowledge is significantly related to condom use and participating in safe sexual behaviors but knowledge alone is not sufficient to eliminate risk behaviors (Sowell *et al.*, 1996). These findings were consistent with numerous others who reported high levels of risk behaviors among people with moderate or high levels of HIV knowledge across populations (Sharts-Hopko and Bonas, 1998; Archibald, 2007; Tanaka *et al.*, 2008). In fact from an extreme angle, it was suggested that there was virtually no correlation between HIV/AIDS knowledge and the practice of safer sexual behavior (Tanaka *et al.*, 2008).

What people perceive to be HIV/AIDS risky behavior is an integral component of any attempt to reduce risk taking and this can be influenced by knowledge. Knowledge about HIV/AIDS has been found to be associated with risk perception but that men's knowledge of HIV/AIDS does not have as much impact on risk perception as do other factors. Women on the other hand who seem to have comparatively low knowledge of the disease have more of an association with individual risk perception (Barden-O'Fallon *et al.*, 2004).

A relationship has also been established between unsafe sexual behavior and age and gender. Young men (aged 15-27) were more likely to engage in unsafe sexual activities (Sowell *et al.*, 1996). In fact college students, most of whom are adolescents in their late teens and young adults have been recognized as a population at risk for HIV infection. This is because behaviors such as risky sexual experiences, partner change, peer influence and the use of alcohol and other drugs they engage in can only increase their vulnerability (Ferrer *et al.*, 2007).

One factor that has generally influenced sexual risk behavior for HIV infection among the youths is drug and alcohol usage. Participants most often cited being high on drugs and or alcohol while engaging in risk behavior. This behavior is not knowledge related because they often know of the consequences of their behaviors but they chose to do them. In fact it is reported that almost 20% of the participants in one study knew the risks and chose to take it (Sowell *et al.*, 1996).

Do adolescents and young adults really have concern about HIV/AIDS? Studies have shown that there is no relationship between college students knowledge and personal concern about contracting HIV/AIDS (Ferrer *et al.*, 2007). This study shows that despite high levels of knowledge of risk among college students, they were not personally concerned about contracting the virus. This certainly exposes them to infection.

On their own part, adolescent girls have something else relating to sexuality to worry about other than HIV. Sexually active adolescents are more concerned about getting pregnant and their reputation than they are about HIV/AIDS (McCree *et al.*, 2003).

Being educated may mean being enlightened and responsible. Knowledge of HIV/AIDS is significantly associated with level of education which might protect against HIV infection through information and knowledge that may affect long term behavioral change (Essien *et al.*, 2009).

The knowledge disseminated about HIV prevention is hinged around the ABC model. A stands for Abstinence B for Be faithful and C for condomization i.e., the use of condoms for prevention. It has been suggested that knowledge is the only predictor of condom use and

that lack of understanding of the productive benefits of condom use can result in their decrease use (Sowell *et al.*, 1996).

Ideological identities have also been found to influence sexual risk behaviors in adolescents (Archibald, 2007). It has been suggested that there is an inverse relationship between religious beliefs and risky life style behavior and that adolescents involved in Churches tend to have more accurate information regarding the disease and how to practice abstinence and avoid drugs and alcohol while observing the principles of the church. Highly religious teenagers tend to believe that HIV/AIDS like other illnesses is a test of one's allegiance to God. This attitude is grounded in church teachings (Archibald, 2007). Religious organizations, their beliefs and practices have clear significance to sexual manners related to HIV risk (Velayati *et al.*, 2007).

### COMPLEMENTING KNOWLEDGE

Knowledge dissemination alone has been found to be insufficient in slowing down the spread of the virus. Knowledge and other intervention methods have been suggested as a combination that could make the difference such as education and skills development (Ferrer *et al.*, 2007), small group discussions led by peers or voluntary outreach (Janz *et al.*, 1996; Sharts-Hopko and Bonas, 1998). It is also suggested that peer education is more effective when it occurs where young people live rather than in classrooms (Sharts-Hopko and Bonas, 1998).

In addition to the knowledge campaign individuals need to be motivated towards reducing their risk behaviors. In that direction, principles that have as core bases motivational factors, problem solving and decision making competencies, behavioral skills and social responsibilities to complement the knowledge drive for reducing risk behaviors have been put forward (Rotheram-Borus *et al.*, 2009a). Prevention programs should incorporate among other thing activities and scripts and should be delivered in small groups.

In the face of the inadequacies in current approaches, it has been suggested that radically different conceptualizations and prevention strategies are needed. Programs such as family wellness, mentor mothers and internet based innovations to help create health promoting communities should be put in place. A social space for interaction and critical thinking is needed in communities in order to build knowledge and skills in both formal and informal networks (Rotheram-Borus *et al.*, 2009b). To be very effective, knowledge should be backed up by concrete evidence in the face of denials. It has been found out that knowing someone who has been impeded

by the disease or who has died of AIDS appear to be the most significant behavioral contributor to knowledge of HIV/AIDS for men and women (Essien *et al.*, 2009; Barden-O'Fallon *et al.*, 2004). Other determinants of knowledge efficacy include having been tested for HIV and or treated for STI within a year (Barden-O'Fallon *et al.*, 2004)

Differences exist between and within cultures. While some traditional and cultural practices and beliefs within a society might discourage certain risk behaviors, others might inadvertently encourage risk behaviors. As a result culturally sensitive prevention approaches are to be identified and implemented so that culture-specific causative agents are curtailed (Archibald, 2007).

### CONCLUSION

It is apparent that just disseminating knowledge about the modes of transmission and methods of prevention is insufficient in reducing risk behaviors and consequently the spread of the disease. High levels of risk behaviors among individuals with high levels of knowledge about the disease means that radical approaches are required to role back the spread of the disease. The involvement of community leaders is an indispensable approach that might yield fruits because people seem to be loyal to their authorities. This includes religious communities whose principles, ideologies and doctrines favor those activities that expose people to less risk. As a matter of collective responsibility, HIV positive individuals should be encouraged to voluntarily bring the disease to the people as this might have a motivating effect in reducing risk behaviors. That adolescent girls are more concerned about things like getting pregnant than they are about the risk of HIV is an indication that what has been called family life education should be taken seriously. Schools and colleges should incorporate sex education and family planning in their curricula to educate, particularly the girls, stressing such concepts as delayed sex or on the outside, protected intercourse.

The culture of a society is a way of life of the society, most of which have been inherited across generations. Some of these ways of life expose people to HIV infection. As a result, if the fight against HIV/AIDS is to be effective and sustainable in reducing risk behaviors then culturally specific approaches could be utilized. Differences exist between and even within cultures as a result, every culture should be encouraged to identify those practices or activities that are HIV friendly and resources mobilized to reduce if not eliminate risks. It is recommended that culture specific research be carried out to identify those HIV prone cultural practices and activities and efforts made to curtail them.

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