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Religiosity and Determinants of Safe Sex in Iranian Non-Medical Male Students

Kambiz Karimzadeh Shirazi · Mohammad Ali Morowatisharifabad

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Abstract This study evaluates the safe sex determinants in college students. In the qualitative section, premarital sex, sex with steady girlfriend and religion's impact were highlighted. In the quantitative part, the relations between the religiosity score and past sexual activity, attitude, norms, and self-efficacy with regard to sexual abstinence were investigated. Students who had a higher religious score were significantly more likely to have high self-efficacy in refusing sex, and their attitudes supported their abstinence. Additionally, these students were more likely never to have had a sexual relationship. Findings suggest that greater religious involvement is a protective factor in high-risk sexual behavior.

Keywords Religiosity · Aids · Safe sex · Collage students

Introduction

The first HIV case in Iran was identified in 1987. The total number of registered HIV-infected cases was calculated as 13,702 by late September 2006, of which 94.5% were men (Iran Ministry of Health 2006). The trend of transmission has changed from intravenous drug users to high-risk sexual behavior (Mohraz 2004), which has resulted in the need for more investigation of such a socially sensitive topic.

There has been an increase in the average age of marriage for both sexes, as well as a rise in the number of young unmarried people in Iran, as they cannot afford to be married at a younger age (Aghajanian and Mehryar 1999). While waiting for marriage, young people

K. K. Shirazi (⊠)

School of Health, Department of Public Health, Imam Hossein/Ostandari Square,

Damideh Health Center, Yasuj, Iran e-mail: karimzadehshirazi@yahoo.com

M. A. Morowatisharifabad

Yazd Shahid Sadooghi University of Medical Sciences and Health Services, P.O. Box 887,

Daneshjoo Blvd, Yazd, Iran e-mail: morowaty@yahoo.com



may engage in potentially risky premarital sexual activities. Although research is very limited, premarital sexual relations are reported. For example, among the general population in Tehran, aged 15–18, 28% reported having sexual contact (including all types of sexual experiences from hugging, kissing, and touching to intercourse) at least once. Yet, half had never seen a condom, and even fewer than half knew that condoms could prevent sexually transmitted infections (Mohammadi et al. 2006). University and college environments provide an ideal setting for building awareness about HIV/AIDS. Some factors such as peer pressure and lack of maturity may place college students at risk for HIV infection (Meilman 1993; CDC 1995). College students may have unprotected sex while under the influence of alcohol or other drugs, which they may not ordinarily do (CDC 1995).

To avoid any conflicts with people's concerns, especially with their religious beliefs, previous studies in Iran had limited objectives and questions pertaining to risk behaviors or sexual activities (Mohammadi et al. 2006; Montazeri 2005; Tayoosi et al. 2004). Therefore, it is necessary to explore and identify determinants of safe sex behavior among Iranian adolescents before undertaking any preventive intervention development. Additionally, it has been hypothesized that the low prevalence of HIV in the Middle East countries, such as Iran, is somehow linked to Islam and its influence on the behaviors that affect transmission of HIV (Obermeyer 2006). A comparative analysis of data from African countries showed that the prevalence of HIV is negatively associated with the percentage of the Muslim population, but that the link between being Muslim and sexual risk factors are ambiguous (Gray 2004). Because of the far-reaching ramifications of sexual relations outside of marriage, Muslims are prohibited by God from such behavior. Some of the negative results of sex outside of marriage include the potential for unwanted pregnancies, transmission of sexually transmitted diseases, disruption of the family and marriage (in cases of adultery), and emotional and psychological difficulties resulting from the lack of commitment associated with most relationships outside of marriage. As in other religions, extra- and pre-marital sex are considered major sins (Muslim Women's League 1999). Furthermore, having strong religious beliefs have been shown to be a protective factor against many risk behaviors, including tobacco, alcohol, drug use, violence, and initiation of sex (Griffith et al. 1980; Zaleski and Schiaffino 2000; McCree et al. 2003).

We conducted a review of the literature, using the topic of HIV preventive sexual behaviors, especially among Middle East countries and found that in the context of safer sex campaigns, Ajzen's theory of planned behavior (Ajzen 1991) is one of the most widely used models. The model postulates that the intention to engage in safer sex is a direct predictor of actual safer sex behavior in the future. In turn, the intention is assumed to be based upon attitudes, social norms, and self-efficacy with respect to safer sex (Yzer et al. 2000). Therefore, in the present study we hypothesized major determinants of behavior based on the theory of planned behavior. These determinants were attitudes, norms and self-efficacy with regard to practicing safe sex. In addition, we hypothesized those students who had high religiosity scores would report attitudes and norms that were less supportive of having sexual contact and would have higher self-efficacy for refusing sex than those who had lower religiosity scores. We also hypothesized that individuals who had never had sexual contact would report higher religiosity scores than those who had experienced a sexual relationship.

This cross-sectional study, using a mixed methodology design, explored the determinants of safe sex and AIDS prevention among Iranian male college students. In addition, this study evaluated the relationship between religiosity and sexual behaviors. Although Iran is a religious and conservative society, no Iranian research has been conducted to examine the relationship between religiosity and sexual behavior among male college students.



Methods

Participants

There were three inclusion criteria, (1) gender (male), (2) marital status (unmarried), and (3) education (at least 2 years of college education). The sample consisted of 200 non-medical college students who volunteered to participate in the study. Due to the non-probability nature of the sampling, external validity of the findings is limited to study participants.

Procedures

We used both qualitative and quantitative methods. The qualitative component of the investigation consisted of conducting semi-structured interviews with 15 male students to learn about their perspectives on HIV and AIDS. Analysis of the data showed that on the average, male students seemed to be quite well informed about HIV prevention. They did not consider AIDS to be their problem as long as the sexual relationship was going to be monogamous in nature and with a well-known partner. Most of them agreed that greater religious involvement plays an important role in preventing AIDS. A considerable proportion of the students had positive attitudes toward safe sex behaviors and AIDS prevention programs among the Iranian people. About 50% of respondents believed that unmarried young men should not have sex.

The survey questionnaire was developed by the researchers and was pilot-tested with a small sample of male students to examine its utility. A five-point Likert-type scaling, ranging from strongly agree to strongly disagree was employed. The questionnaire is depicted in Table 1.

Table 1 Scales and items of sexual behavior

Demographics and behavior

- -Age
- -Past sexual relationships (yes/no)

Scales

Norms about sexual relationship

- -Most of my friends believe unmarried men my age should wait until they are married before they have sex.
- -Most of my friends believe it's OK for unmarried men my age to have sex with a steady girl friend.
- -Most of my friends believe it's OK for unmarried men my age to have sex with several different people. Attitudes about sexual relationship
- -I believe unmarried men my age should wait until they are married before they have sex.
- -I believe it's OK for unmarried men my age to have sex with a steady girl friend.
- -I believe it's OK for unmarried men my age to have sex with several different people.

Self-efficacy in refusing sex

- -How sure are you that you could keep from having sex until you are married?
- -How sure are you that you could keep from having sex with a steady girl friend?
- -How sure are you that you could keep from having sex with new different people?

Religiosity

- -How often do you pray?
- -How often do you fast (on Ramadan)?
- -How often do you talk to others about religious concerns?
- -How often do you follow religious rules?



Data Analysis

The statistical analyses were conducted in several sequential steps. First, descriptive statistics were used to summarize and organize the demographic characteristics of the participants, as well as their sexual relationship behaviors scale. Not all scale scores were normally distributed. Therefore, medial split was employed to dichotomize the scale scores into high and low. To assess concurrent validity of study scales, we tested the relationships between the sexual cognitive determinants (attitude, norms, and self-efficacy) and religiosity score and sexual contacts. We compared students who reported greater religious involvement with those who reported less religious involvement, as well as the students who had sexual contact with those who did not have sexual contact with respect to important mediators (i.e., attitudes, self-efficacy, norms, and sexual activity). The adjusted ORs with their corresponding 95% confidence intervals (CI) were calculated by multivariable logistic regression models to assess the significant and magnitude of the associations among religiosity, sexual activity and theoretically important mediators.

Results

Participants were all Shiite Moslem, and the majority (55%) reported a high religious score (>12). The mean age of participants was 23 years. Twenty percent of respondents had sexual contact (Table 2).

In general, the students' attitudes towards sexual abstinence were found to be positive. Nearly 57% of the respondents agreed with having no sex until marriage and 42% believed that their friends also agreed with the idea of sexual abstinence before marriage. The most disagreement was found with sex with new, different people. Nearly 58% of the respondents did not have enough confidence to abstain from sexual intercourse until getting married (Table 3).

The results also indicated that there were statistically significant differences between those with sexual experiences and those without on the basis of sexual relationship scale scores (P < .001). In summary, students who never had sex had more supportive attitudes (OR 5.45, 95% CI: 2.24–13.24) and perceived norms (OR 8.04, 95% CI: 1.48–43.60) toward not having sex than those who were sexually active (Table 4). In addition, those who were sexually experienced had lower self-efficacy in refusing sex than those who were

Table 2 The respondents characteristics (n = 200)

Characteristics	
Age	
Mean (SD)	22.97 (1.80)
Range	20–27
History of sexual contact	n, (%)
Yes	40 (20)
No	160 (80)
Religious involvement	
Mean (SD)	11.91 (2.41)
Range	6–16
Median	12



Table 3 The respondent's attitudes, norms and self-efficacy towards sexual behavior (n = 200)

	Percentage level of agreement						
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	P value	
Attitudes							
No sex until marriage	10	47	5	24	14	.000	
Sex with steady girl friend	7	35	2	46	10	.000	
Sex with new, unknown people	2	12.5	8	59.5	18	.000	
Norms							
No sex until marriage	7	31.5	4	54	3.5	.000	
Sex with steady girl friend	9	28.5	4	48.5	10	.000	
Sex with new, unknown people	_	5	11	63	21	.000	
Self-efficacy							
No sex until marriage	21.5	19	2	30.5	27	.000	
No sex with steady girl friend	9.5	40.5	31.5	16	2.5	.000	
No sex with new, unknown people	21.5	49	25	4.5	-	.000	

Table 4 Association between sexual activity and religiosity, attitudes, norms and self-efficacy toward not having sex until marriage

Sexual activity (no/yes)	Religiosity (high/low)							
	OR	95% CI	P value	OR	95% CI	P value		
Attitude	5.45	(2.24–13.24)	.000	4.55	(2.39-8.67)	.000		
Norm	8.04	(1.48-43.60)	.012	_	_	N.S		
Self-efficacy	21.71	(8.65-54.46)	.000	3.04	(1.58-5.84)	.001		
Sexual activity (No/yes)	-	-	-	5.00	(2.28–10.95)	.000		

N.S: Not significant

not (OR 21.71, 95% CI: 8.65–54.46). Furthermore, a greater religious score was associated with less sexual contact, greater self-efficacy, as well as more positive attitudes toward having no sex until marriage. Students who had greater religious involvement were 5 times more likely to have never had sexual contact. Additionally, students with greater religious scores were 3.04 times more likely to have higher self-efficacy to refuse sex until they were married and 4.55 times more likely to have positive attitudes toward having no sex.

Discussion

The present study evaluated the attitude, norms, and self-efficacy of a sample of male college students in Iran toward not having sex until marriage. Students' level of religiosity and past sexual relationships was examined as the primary predictors of these determinants. In this study, 57% of participants believed (agree/strongly agree) that unmarried



young men should not have sex, which was consistent with the study of Mohammadi et al. in which 55% of adolescents agreed with no sex until marriage (Mohammadi et al. 2006). Moreover, the moderate attitudes and norms toward sex with a steady girlfriend in Iran, in which any premarital sexual contact is unacceptable, can be admonitory and meaningful. This result shows that there is still a need to identify psychological determinants which may decrease gaps in our understanding of the safe and unsafe sexual behaviors among Iranian male students with their steady girlfriends. For example, we need to understand how condom use could be promoted in these sexual relationships.

We found a clear relationship between attitude and norms toward having sexual experience. Previous researches reported that attitudes and norms might predict sexual behaviors (Reinecke et al. 1996; van Empelen et al. 2001; Corby et al. 1996). In the current study, self-efficacy in sexual abstinence was most strongly predicted by past sexual activity. It is similar to other research findings, in which this association was found between sexual behavior and self-efficacy (Reinecke et al. 1996; Corby et al. 1996). This would be in accordance with Bandura's theory that self-efficacy predicts behavior and behavior in turn predicts self-efficacy (Bandura 1986).

Our findings also suggest that greater religious involvement is a protective factor to have high-risk sexual behavior. The students who had higher religious scores were significantly more likely to have high self-efficacy in refusing sex, and their attitudes supported their abstinence. Additionally, these students were more likely never to have had a sexual relationship. These results for male Iranian students corroborate the findings of past researches on religion and risk in sexual behavior among other adolescent groups (Belgrave et al. 2000; Poulson et al. 1998). Several researchers in other religions found that religious identification is a protective factor against initiating sexual activity and adolescents who place less value on their religious beliefs report lower self-restraining sexual behavior (McCree et al. 2003; Holder et al. 2000; Miller and Gur 2002). It is consistent with social norms and religious values in Islamic societies that inhibit unmarried persons from high-risk sexual behaviors. A population-based study in Iran found that about 80% of the respondents agreed with the notion that the lack of religious and moral commitments could result in AIDS infection (Montazeri 2005). In a study by Mohammadi et al., boys who regarded themselves as "religious" had less knowledge of sexual issues compared with those who regarded themselves as being "somewhat religious" or "not religious" (Mohammadi et al. 2006).

In the present study, we examined the effectiveness of distal domain of religion, which mainly tap individual behaviors (e.g., frequency of prayer, fasting). Some research in other religions suggests that proximal domain of religion, which gage the function of religion for individuals (e.g., religion coping, spiritual meaning), has more association with reducing voluntary sexual activity (Hodge et al. 2001; Cotton et al. 2006). It is suggested that future studies evaluate the effectiveness of proximal domain of religion on high-risk sexual behaviors among this population.

Caution is warranted in interpreting the findings. One could criticize the reliability of self-reports of Iranian students. There is no study to show that Iranian adolescents' self-reports of sexual behaviors are reliable. Moreover, studies have shown that socially sensitive behaviors are less likely to be underreported when using self-administered questioning rather than face-to-face interviews (Des Jarlais et al. 1999).

The data presented have important implications for the planning of interventions to have safe sex and to prevent HIV disease among male Iranian students. It seems that faith-based HIV prevention programs may be a more acceptable, credible, and potentially more effective way to educate young Iranian people regarding HIV prevention. Sex education



can be taught in a way that informs young people about sexuality in scientific and moral terms. The moral and religious aspects of sexuality can be incorporated either in universities of a particular religious denomination or in adjunctive coursework offered by religion departments. Regardless of the challenges of each society, young people must be adequately informed.

This article is the first attempt to develop a sexual relationship scale for addressing the determinants of sexual behavior among male Iranian students, and the findings seem promising. However, further research is needed to demonstrate the effectiveness of sexual health approaches to delineate which components are essential and which ones are more peripheral to its effectiveness.

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