

# Role of shame in the stigmatization of people with human immunodeficiency virus: a survey of female college students in 3 Arab countries

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تأثير الشعور بالعار في وصم المصابين بفيروس العوز المناعي البشري: مسح الطالبات الجامعيات في ثلاثة بلدان عربية  
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**الخلاصة:** تعد وصمة الإيدز تحدياً يعرقل مكافحة وباء الإيدز والعدوى بفيروسه ولا سيما في الثقافات التي هي أكثر محافظة. وقد استكشفت هذه الدراسة أثر المعارف عن الإيدز والعدوى بفيروسه، وأثر الشعور بالعار، في وصم المعاشين للإيدز والعدوى بفيروسه في العالم العربي. وقد جمعت معطيات المسح من 277 طالبة جامعية في ثلاثة بلدان عربية هي: الكويت، والبحرين، والأردن. أما في البحرين وحدها فقد ترابطت المعارف عن الإيدز والعدوى بفيروسه ترابطاً عكسياً مع المواقف السلبية نحو المصابين بالإيدز أو العدوى بفيروسه. ولو أن الشعور بالعار المتعلق بالإيدز كان منبئاً قوياً بحدوث وصمة الإيدز في البلدان الثلاثة جميعاً. وتخلص الدراسة إلى أن هناك حاجة لتثقيف الشباب حول فيروس الإيدز في البلدان العربية، ولا سيما الفتيات، وذلك من أجل الحفاظ على صحتهم والحد من مشكلة الوصمة المرتبطة بالإيدز.

**ABSTRACT** AIDS stigma is a challenge to controlling the HIV/AIDS epidemic especially in more conservative cultures. This study explored the impact of knowledge about HIV and AIDS, and the impact of shame, on the stigmatization of people living with HIV/AIDS in the Arab world. Survey data were collected from 277 female college students in 3 Arab countries: Kuwait, Bahrain and Jordan. Only in Bahrain was knowledge about HIV and AIDS inversely related to negative attitudes toward people with HIV/AIDS. AIDS-related shame, however, was a strong predictor of AIDS stigma in all 3 countries. HIV education is needed for young people in Arab countries, especially women, both for their own health and to reduce the problem of AIDS stigma.

**Rôle de la honte dans la stigmatisation des personnes atteintes du virus de l'immunodéficience humaine : étude réalisée sur des lycéennes dans trois pays arabes**

**RÉSUMÉ** La stigmatisation du sida constitue un obstacle en matière de lutte contre l'épidémie de VIH/sida, en particulier au sein des cultures conservatrices. Cette étude portait sur les conséquences du niveau de connaissance sur le VIH et le sida et de la honte suscitée par la maladie, sur la stigmatisation des personnes vivant avec le VIH/sida dans le monde arabe. Les données de cette étude ont été recueillies auprès de 277 étudiantes dans trois pays arabes : Bahreïn, la Jordanie et le Koweït. Bahreïn s'est révélé le seul pays où le niveau de connaissance sur le VIH/sida est inversement proportionnel aux attitudes négatives à l'égard des personnes vivant avec le virus. La honte associée au sida constitue toutefois un facteur prédictif important de la stigmatisation de la maladie dans les trois pays. L'éducation en matière de VIH est nécessaire auprès des jeunes des pays arabes, notamment des femmes, tant pour préserver leur propre santé que pour réduire le problème de la stigmatisation du sida.

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## Introduction

Deeply held cultural values, such as disapproval of nonmarital sex and of drug use, have been accredited with slowing the spread of HIV infection in Arab societies until now. Yet, more recently, these same cultural values have been blamed for the increase of HIV cases which is being seen in these societies. This seemingly contradictory view rests on the idea that the intense disapproval of such behaviour will discourage people from being tested for HIV or pursuing adequate care or treatment when they need it [1–4]. These factors have led to a growing awareness that reducing AIDS stigma is critical to effective HIV prevention and treatment [5].

In the Arab world, women are at heightened risk for HIV infection because of their socially disadvantaged position in society. Lack of independent income and low literacy curtails women's ability to access HIV information, to ward off unwanted sexual advances and to negotiate safe sexual practices [6,7]. Indeed, Arab women now represent half the total number of people carrying the virus in the region and nearly 80% of affected women contracted the virus from their husbands [8].

Although genuine attempts have been made to raise AIDS awareness by authorities in the Arab region, they are comparatively meagre [1,9]. In particular, they fail to address the population's continued lack of access to good HIV information. Young adults are likely to be the most negatively affected because they are at the life stage where risky behaviour, such as having unprotected sex or experimenting with drugs, is most likely to take place [1]. Studies of college students in Jordan and United Arab Emirates (UAE) found alarming gaps in HIV and AIDS knowledge and negative attitudes towards people with HIV/AIDS [10–12]. All 3 studies found that male students had greater knowledge than female students. However, these and other studies in Saudi Arabia,

Yemen and Kuwait [13–16] focused largely on the impact of knowledge about HIV and AIDS on AIDS stigma; none paid close attention to the role of emotion in AIDS stigma.

Some researchers have suggested that certain emotions are triggered at the introduction of the topic of AIDS, and that these emotional responses remain among the most challenging barriers to reducing stigmatization [17]. One of these emotions is shame, which was found in to be a significant factor that caused HIV-positive individuals to hide their health status from their caregivers and to withdraw from social interactions [3,18,19]. Two recent studies from Saudi Arabia and Yemen suggest that the emotion of shame may be particularly salient in understanding the stigmatization of people with HIV/AIDS in the Arab world and that feeling ashamed that a friend or family member has HIV may be among the strongest predictors of stigmatization [16,18].

In view of the lack of AIDS research in the Arab region and the increasing vulnerability of Arab women to HIV, the present study sought to assess gaps in younger Arab women's HIV/AIDS knowledge, along with their conceptions of shame, and their reactions toward people with HIV/AIDS. To this end we collected and compared data from female college students from Kuwait, Bahrain and Jordan. Specifically, we wanted to investigate whether knowledge about HIV and AIDS, on the one hand, and shame on the other, had any effect on tolerance towards persons with HIV/AIDS.

## Methods

### Sample

Three convenience samples of female undergraduate students from colleges in Kuwait, Bahrain and Jordan completed a self-administered questionnaire written in Arabic. Participation in the research was voluntary and no

payment or curricular credit was given for participation. The samples consisted of 83 students from Kuwait, 108 from Bahrain and 86 from Jordan.

### Data collection

A questionnaire consisting of 13 items was used to gauge participants' knowledge of HIV transmission and AIDS (Table 1). These items were adapted from the Attitudes Towards AIDS Knowledge Scale [20] which has been used for college students. The items covered 3 areas: behavioural and situational risk factors (5 items); fluids that carry HIV and risk reduction steps (4 items); and misconceptions about HIV and AIDS (4 items). Each item had 3 choices: "true," "false" and "don't know": a score of 1 was assigned to the correct answer and 0 to an incorrect or "don't know" answer. Therefore, the higher the score a respondent received, the greater that participant's knowledge about HIV and AIDS.

In the AIDS literature there are 2 items that have been frequently used in assessing the expression of shame associated with AIDS [21]: being ashamed of having a family member with HIV/AIDS and the belief that people with HIV/AIDS should be ashamed of themselves. In this study we added a third item that assessed shame at the national level by asking the participants if they would be ashamed of having a fellow citizen with HIV/AIDS. Again, responses were recorded on a 5-point Likert scale and the higher the score a respondent received, the greater the respondent's expression of AIDS-related shame.

We measured the dependent variable, AIDS stigma, with 7 items [21]. These included: people with HIV/AIDS should be fired from their jobs; people with HIV/AIDS should be quarantined; I am sympathetic toward people with HIV/AIDS; I have no objection to marrying into a family with HIV/AIDS; I do not mind being touched by someone with HIV/AIDS; all people with

**Table 1** Frequency of correct answers on AIDS-knowledge index of female college students in 3 Arab countries

Knowledge item	Kuwait ( <i>n</i> = 83)		Bahrain ( <i>n</i> = 108)		Jordan ( <i>n</i> = 86)	
	No. correct	%	No. correct	%	No. correct	%
One can get HIV by having sex with an HIV-positive person	83	100	108	100	83	97
One can get HIV by sharing HIV-contaminated needles	81	98	105	97	80	93
An infected mother can transmit HIV during pregnancy	73	88	98	91	77	90
One can get HIV by touching someone with AIDS	59	71	92	85	41	48
Only homosexuals get AIDS	62	75	82	76	51	59
HIV can live in the human body for years before symptoms appear	54	65	75	69	30	35
There is a cure for AIDS	53	64	74	69	53	62
You can tell if someone has AIDS by looking at him/her	49	59	71	66	40	47
Unsafe anal sex is the most risky sexual act for contracting HIV	37	45	59	55	45	52
An infected mother can transmit HIV through breastfeeding	43	52	34	31	44	51
A mosquito bite can transmit HIV	13	16	29	27	15	17
HIV can be transmitted through semen	22	27	24	22	44	51
Condoms help reduce the probability of HIV transmission	18	22	20	19	15	17

HIV are responsible for their infection; and if a friend of mine got infected with HIV, I would continue being a friend with him/her.

Responses were recorded on a 5-point Likert scale that ranged from “strongly disagree” to “strongly agree”. After reversing the score values for those statements that read sympathetically toward people with AIDS, the scores were tallied as before. The higher the score, the more negative attitudes students held toward people with AIDS.

### Analysis

SPSS, version 17, was used for both descriptive and inferential statistics. A *P*-value of < 0.05 was considered statistically significant.

## Results

### Demographic data

The ages of the Kuwaiti women (*n* = 83) ranged from 18 to 26 years, with a mean

age of 20.6 [standard deviation (SD) 1.4] years, while the Bahraini (*n* = 108) and Jordanian women (*n* = 86) ranged from 18 to 28 years, with mean ages of 21.4 (SD 1.9) years and 19.8 (SD = 1.9) years respectively. Most of the women were single: 90% of the Kuwaitis, 79% of the Bahrainis and 97% of the Jordanians. Overall a total of 33 women were married and 1 was divorced.

### HIV and AIDS knowledge

Table 1 reports the frequency of correct answers to the HIV and AIDS knowledge items of the respondents by country. Nearly all the students correctly identified the main behaviours or situations that place people at risk for HIV, i.e. sex with an HIV-positive person, intravenous drug use with a contaminated needle and being carried to term by an infected pregnant woman (range 88%–100% answered correctly). However, while most students could correctly identify the behavioural risks of transmission, they were much less

knowledgeable about the fluids that carry HIV. A large proportion of the women were unaware that HIV could be transmitted through semen (only 23% of Bahraini, 27% of Kuwaiti and 51% of Jordanian women answered correctly) or through mother's breast milk (32% of Bahraini, 52% of Kuwaiti and 51% of Jordanian women answered correctly).

A number of other misconceptions about HIV and AIDS were also evident. About 30% of the women in each country believed there was a cure for AIDS, 63%–73% believed one could get HIV from a mosquito bite and a striking 78%–83% were unaware that condoms could help reduce the chance of HIV infection.

Assigning a “correct score” for each question answered correctly by at least half of participants in each sample yielded the following pattern. The sample of Bahraini women answered 9/13 questions correctly (69%), the Kuwaitis 7/13 (54%) and the Jordanians 6/13

(46%). These variations in HIV and AIDS knowledge among the samples were statistically significant (ANOVA,  $F(2, 278) = 4.78, P = 0.009$ ). The Tukey test revealed that Bahraini students had significantly higher knowledge [mean score 8.06 (SD 1.88)] than the Kuwaiti and Jordanian students [mean scores 7.79 (SD 2.20) and 7.18 (SD 1.89) respectively].

### HIV shame and stigma measures

Table 2 shows the means scores for the shame and stigma items from the 3 countries. Looking at the stigma items the highest mean scores for the Kuwaiti and Bahraini students was for the item about isolating HIV-positive people from society. For the Jordanian students, the highest mean score was for having no objection to marrying into a family with HIV/AIDS. For the shame items, the highest mean score for all 3 groups was agreement with the statement "I would be ashamed of having people with HIV/AIDS in my country".

Cronbach alpha values for the shame measure for the 3 countries were acceptable (0.74, 0.62 and 0.77 for the Kuwaiti, Bahraini and Jordanian students respectively). There were no statistically significant differences between the 3 samples in the shame measure [ANOVA,  $F(2, 274) = 1.30, P = 0.23$ ].

For the stigma measure, the reliabilities for all samples were acceptable and comparable (Cronbach alpha values were 0.72, 0.72 and 0.75 for the Kuwaitis, the Bahrainis and the Jordanians respectively). There were no statistically significant differences among the samples [ $F(2, 274) = 0.92, P = 0.40$ ].

### Correlations between measures

For the Bahraini students, the knowledge index was negatively correlated with the AIDS stigma scale ( $r = -0.38$ ) but was unrelated to the AIDS-related shame items ( $r = -0.08$ ). In the women from Kuwait and Jordan, the knowledge index was uncorrelated with the AIDS stigma scale ( $r = -0.09, r = -0.15$

respectively) and AIDS-related shame scale ( $r = -0.08, r = -0.12$  respectively). However, the AIDS stigma scale and the AIDS-related shame scale were positively correlated for all 3 samples (Bahrainis  $r = 0.49$ , Kuwaitis  $r = 0.59$ , Jordanians  $r = 0.59$ ).

### Multiple regression analysis

Multiple regression analysis was performed to predict participants' level of tolerance towards people with HIV/AIDS based on their knowledge of HIV and AIDS and AIDS-related shame for each sample (Table 3).

For the Kuwaiti students AIDS-related shame was the only predictor of stigmatization of people with HIV/AIDS ( $\beta = 0.59, P < 0.001$ ). For the Bahraini women AIDS-related shame was the best predictor of AIDS stigma ( $\beta = 0.46, P < 0.001$ ). Students who perceived AIDS to be a shameful disease expressed more negative attitudes toward people with HIV/AIDS. Knowledge of HIV and AIDS was also a good predictor ( $\beta = -0.34, P < 0.001$ ): students

Table 2 Mean scores of stigma and shame items of female college students in 3 Arab countries

Item	Kuwait (n = 83)		Bahrain (n = 108)		Jordan (n = 86)	
	Mean score	SD	Mean score	SD	Mean score	SD
<b>Stigma</b>						
People with HIV/AIDS should be fired from their jobs	3.53	1.27	3.24	1.18	3.15	1.28
People with HIV/AIDS should be quarantined	4.09	1.03	3.88	1.07	3.52	1.29
I am sympathetic toward people with HIV/AIDS	2.54	1.15	3.02	1.16	2.82	1.19
I have no objection to marrying into a family with HIV/AIDS	3.81	1.22	3.58	1.29	4.29	1.01
I do not mind being touched by someone with HIV/AIDS	3.97	1.21	3.73	1.23	4.17	1.07
All people with HIV are responsible for their infection	2.50	1.36	2.30	1.27	2.08	1.40
If a friend of mine got infected with HIV I would being a friend with him/her	2.89	1.33	3.23	1.19	3.18	1.21
<b>Shame</b>						
Ashamed of having a relative with HIV/AIDS	3.61	1.18	3.53	1.19	3.26	1.44
People with HIV/AIDS should be ashamed of themselves	3.32	1.31	3.23	1.18	3.17	1.31
Ashamed of having people with HIV/AIDS in my country	3.69	1.18	3.58	1.17	3.46	1.41

SD = standard deviation.



**Table 3 Multiple regression analysis of AIDS stigma of female college students in 3 Arab countries**

Predictor	B	SE B	$\beta$
<b>Kuwait</b>			
AIDS-related shame	0.432	0.067	0.587**
Knowledge of AIDS	-0.014	0.030	-0.043
<b>Bahrain</b>			
AIDS-related shame	0.380	0.064	0.464**
Knowledge of AIDS	-0.133	0.031	-0.341**
<b>Jordan</b>			
AIDS-related shame	0.385	0.060	0.576**
Knowledge of AIDS	-0.034	0.036	-0.083

$R^2 = 0.35$  for Kuwait,  $0.36$  for Bahrain and  $0.35$  for Jordan.

\*\* $P < 0.001$ .

SE = standard error.

with greater knowledge about HIV and AIDS tended to view individuals with HIV/AIDS less negatively. In Jordanian students, AIDS-related shame was a significant predictor of AIDS stigma ( $\beta = 0.58, P < 0.001$ ) (Table 3).

## Discussion

Our results suggest that participants had inaccurate knowledge of the kinds of behaviours that could transmit HIV. Bahraini participants were more knowledgeable than the participants from both Kuwait and Jordan. However, the majority of participants from all 3 countries were unable to identify the correct answers to several items. Their lack of knowledge about 2 items in particular is alarming. All 3 groups had trouble providing the correct answers to the items on condom use and the possible transmission of HIV in semen. More specifically, more than 75% of the participants in each sample did not know or gave the wrong answer about the role of condoms in minimizing the risk of HIV infection. Similarly, 73% of Kuwaiti, 78% of Bahraini and 49% of Jordanian female students did not know that HIV can be carried in semen.

One possible explanation for these results is the taboos regarding the topic of sexuality in the Arab world. Women are discouraged from seeking

information about sex and about the proper way to protect themselves from sexually transmitted infections [7]. In addition, there is almost no education about sex in the schools [9]. Another plausible reason for these specific gaps in knowledge about HIV and AIDS is that HIV prevention efforts in the Arab world focus strongly on abstinence, and place little if any emphasis on the role of condoms [22].

Knowledge about HIV and AIDS played an influential role in the Bahraini women's reactions toward people with HIV/AIDS, but not in those of the other 2 groups. This is not surprising since the Bahraini women in this study had greater knowledge about HIV and AIDS. The findings therefore indicate that accurate knowledge about HIV and AIDS can play a powerful role in minimizing the stigmatization of people with HIV/AIDS. Therefore, as shown elsewhere [23,24], improving HIV and AIDS-related knowledge is one way to decrease AIDS stigma in the Arab region.

The most intriguing and unique feature of this study was the role of shame in predicting the negative attitudes towards people with HIV/AIDS. Whereas the HIV and AIDS-related knowledge was predictive of negative attitudes toward persons with HIV/AIDS only among the Bahraini women, shame related to AIDS was predictive across all 3 samples. The link between

shame and AIDS may be due to the association between HIV/AIDS and such socially undesirable activities such as unlawful sex and drugs in the Arab world. If so, people with HIV/AIDS are considered a source of shame and should be avoided for the sake of one's reputation.

Studies about AIDS stigma have reported that family and caregivers of people with HIV/AIDS suffer from courtesy stigma (stigma by association) and have been the target of ridicule and discrimination [25,26].

Courtesy stigma may be particularly detrimental in Arab culture because shame is an especially powerful emotion that plays a major role in this society. Indeed, Arab culture has been labelled a shame-oriented culture because shame is an intensely feared emotion and often results in the social isolation of the shamed individual, if not their murder [27]. Thus, it seems that fear of shame, not for one's wrongdoing, but for being associated with someone with HIV/AIDS, is the main reason women in this study stigmatized people with HIV/AIDS.

Because our study focused on young college women with small convenience samples, The ability to generalize from it is limited. The findings of this study, however, point to a need for more studies that examine the role of shame in the stigmatization of people with HIV/AIDS. Studies with bigger samples of both males and females and from other countries in the Arab world are needed.

## Conclusion

This study provides evidence of an urgent need to provide HIV education to young people in Arab countries, especially women, for their own sake and to reduce AIDS stigma. Reducing the shame associated with HIV/AIDS may prove to be one of the key strategies towards improving the situation of people with HIV/AIDS in the Arab world.

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