

# Stigma towards People Living with HIV/AIDS (PLWAs) among Adolescents of Riyadh, Kingdom of Saudi Arabia

Hafsa Raheel\*

College of Medicine, King Saud University, Saudi Arabia

## Abstract

**Background:** After three decades of fight with HIV/AIDS in the Kingdom of Saudi Arabia (KSA), its control remains a challenge. Stigma against PLWAs is a major barrier to its control.

**Objective:** To assess the stigma and associated factors, towards PLWAs in Riyadh, Saudi Arabia.

**Materials and methodology:** Cross-sectional study using a structured self-administered questionnaire was conducted among 713 adolescents (15–20 years). Descriptive analysis and adjusted odds ratio (OR) was calculated using SPSS.

**Results:** More males were of the view of, ending friendship with people infected with HIV, they should be isolated; kept out of school and moved out of the house. Females were willing to work with PLWAs. These stigmatizing attitudes were significantly related to lack of knowledge regarding HIV/AIDS.

**Conclusion and recommendations:** Educated adolescents in Riyadh have stigmatizing attitudes towards PLWAs. There is a great need to formulate interventions providing in depth knowledge regarding HIV transmission and prevention and to focus on changing people's negative attitudes against PLWAs.

**Keywords:** Adolescents; HIV/AIDS; PLWAs; Saudi Arabia

## Introduction

The first case of HIV/AIDS in KSA was reported in 1984, and even after about three decades of fight against the disease, reports have shown that the actual number of people living with HIV/AIDS (PLWA) in the Kingdom remains high. About 80% of infected are between the ages of 15–49 years and 4% of the infected are children [1]. While the main route of transmission of the virus is heterosexual, a large number of newly diagnosed cases have been among young men who have undergone the pre-marital mandatory blood testing, introduced recently in the Kingdom. Religious and cultural factors have helped in keeping the infection low in the country, however changing cultural situation, urbanization, changing family structures, conflicts and war situations are a few factors that pose a risk for the generalization of the infection in Saudi Arabia.

One of the major barriers in addressing the epidemic of HIV is in reaching those who are at risk or infected with HIV/AIDS and is related with the existence of stigma [2]. People deny and are afraid to disclose their disease status because of Stigma which plays as a catalyst for HIV transmission [3]. HIV/AIDS stigma negatively affects seeking HIV testing, seeking care after diagnosis, quality of care given to HIV patients and finally the negative perception and treatment of PLWAs by their communities and families, including partners [4,5]. It is said to isolate people from the community and affect the overall quality of life of HIV patients [2,3,6,7]. Stigma is a social construct, which has significant impact on the life experiences of individuals both infected and affected by HIV [8]. Stigma includes prejudice and can lead to active discrimination directed toward persons either perceived to be or actually infected with HIV and people with whom they are associated [9].

The Kingdom of Saudi Arabia has identified the need of prevention and control of the infection. Establishment of voluntary and counseling testing centers (VCTs) and public awareness programs have been

initiated. However, it is being increasingly acknowledged, that effective preventive strategies require an understanding of the cultural context [6,8] in which stigma exists. The aim of this study is to determine the existing stigmatizing attitudes among Saudi adolescents, towards PLWA. This study aims to highlight the stigmatizing attitudes and factors determining stigma prevailing in the Saudi community among the new generation.

## Materials and Methodology

A cross-sectional study was conducted to explore the attitudes of Saudi adolescents regarding HIV/AIDS, and factors related with their attitudes. A pre-tested structured questionnaire was circulated among 715 participants, male and females who were studying in the preparatory year of a public University in Riyadh city.

Riyadh is the capital of the Kingdom of Saudi Arabia (KSA) and has a population of about 7 million people. It is the center of education for the country with one of the best educational opportunities available. The educational system of the country has separate schools and universities for males and females, from primary to higher secondary and University level. Before the start of University, there is a year of formal studies, which is compulsory pre-requisite to admissions to universities in the Kingdom. Keeping in mind that the males and females in this

**\*Corresponding author:** Hafsa Raheel, Assistant Professor, Department of Family and Community medicine, College of Medicine, King Saud University, PO Box 2925 Department 34, Riyadh 11461, Saudi Arabia, Tel: 00966556972926; Fax: 00966114671967; E-mail: [hafsaraheel@yahoo.com](mailto:hafsaraheel@yahoo.com)

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year are adolescents (between 15–20 years), we considered that they will be a good representative of both private and public schools. The questionnaire was developed after a thorough literature review and in consultation with the local consultants in the field of sexual health and HIV prevention.

For study purpose, “stigmatizing attitudes” were defined as: Those showing personal rejection and denial to have friendship and family associations with people living with HIV/AIDS (PLWA). The attitude of the adolescents were recorded via 8 items, the response was recorded on a scale from 1=strongly disagree to 5=strongly agree. The items asked are displayed in Table 1.

The second part consisted of potential factors related with attitudes of adolescents. It consisted of knowledge items regarding HIV/AIDS which had 26 items. The answers were recorded on a scale from 1=strongly disagree, to 5=strongly agree. The higher scores were taken as more knowledge. Knowledge was assessed on modes of transmission and prevention of HIV/AIDS.

The questionnaire was developed in English and then translated into Arabic by two separate language experts in order to maintain the consistency of Arabic phrases and words used. It was pre-tested among 10% of the sample in a similar setting. The questionnaire was finalized considering the pre-test, and was distributed randomly, in classrooms and in the cafeteria, among the students. Questionnaires were distributed in the male and female campuses. Participation in the survey was voluntary. The questionnaire was self-administered and the respondents were not required to provide their name or any other contact details in order to maintain confidentiality. A total sample of 713 adolescent males and females were selected for the survey.

A consent form was signed without specifying the name of the respondent. The questionnaire was given a code number and all information was entered into the data file using this number. In this way confidentiality regarding the respondents was maintained. Ethical approval was taken from the King Saud University College Ethical Board. Data were entered and analyzed in the Statistical Package for Social Sciences (SPSS), version 22. Descriptive and Bivariate analysis was carried out.

## Results

The response rate was 85%. Table 2 shows the sociodemographic characteristics of the study participants.

Table 1 shows the bivariate analysis. Stigmatizing attitudes of the respondents was significantly related to the lack of knowledge regarding HIV/AIDS modes of transmission.

More males were in the favor of; ending friendship if their friend

Variable	Males (225)	Females (488)	Chi sq.	P value
People with HIV should be kept out of school	108 (48)	227 (47)	0.14	0.71
I will end friendship if friend had HIV/AIDS	85 (38)	113 (23)	16.41	0.000*
Willing to do volunteer work with AIDS patients	103 (46)	289 (59)	11.24	0.001*
If family member contracts HIV he/she should move out	71 (32)	134 (28)	1.26	0.151
People with HIV should stay home or in a hospital	115 (51)	238 (49)	0.33	0.308
If a person tests +ve for HIV they will have to tell all his/her partners	134 (60)	373 (76)	21.35	0.000*

Table 1: Table showing stigmatizing attitudes by gender.

Variables	n=715 (%)
<b>Gender</b>	
Males	225 (32)
Females	488 (68)
Participant's mean age	19 years
<b>Marital status</b>	
Single	698 (98)
Ever married	15 (2)
<b>Average monthly household income (SR*)</b>	
≤ 10,000	280 (39)
10,001- 20,000	311 (44)
20,000+	122 (17)
<b>Father's education level</b>	
<12 <sup>th</sup> grade	279 (42)
Graduate and post graduate	416 (58)
<b>Father's occupation</b>	
Professional (skilled)	97 (43)
Non- professional	128 (57)
<b>Mother's education level</b>	
<12 <sup>th</sup> grade	422 (59)
Graduate and post graduate	291 (41)
<b>Mother's occupation</b>	
Professional/working	267 (37)
House-wife	446 (63)

1 US \$=3.75 SR\*

Table 2: Table showing the socio demographic data of the study participants.

was found out to be infected, HIV infected person should be isolated; kept out of school and moved out of the house (Figure 1). More females were willing to do work with HIV infected people, however were of the view that the infection status of an HIV person should be disclosed to immediate family.

We found great gaps in the knowledge of the respondents regarding HIV/AIDS. 33% had the opinion that HIV can spread through cough and sneezing. About 39% stated swimming pools as a source of spread, 48% said cigarettes can cause spread. About 20% of the respondents did not know if air can transmit the virus while 12% had the opinion that air can be the transmitter. 54% and 56% were of the opinion that HIV can be transmitted through toilet seats and mosquito bites respectively. 17% and 34% had the opinion that HIV can be transmitted through hugging and sharing a glass of water with someone respectively. 40% of the adolescents said AIDS could be contracted through sharing of spoons and forks, while 37% were of the opinion that it can be transmitted via saliva, tear and sweat. 30% didn't know there was a treatment available for AIDS. While 47% did not know if condoms could protect from disease transmission. 52% were of the opinion that Arabs are less susceptible of contracting AIDS.

## Discussion

Our study has explored stigmatizing attitudes of both educated males and females towards PLWA in Riyadh city. We also explored the factors related with the attitudes of these young generations. Considering the fact that our participants were educated adolescents, city dwellers, our findings are surprising.

The study participants were ready to end their friendships with PLWA, of the opinion of isolating the effected, keeping them out of school and at large out of the community. Only a few were willing to do volunteer work with the effected, and were eager to have their identity disclosed to their family. These stigmatizing attitudes were seen more in

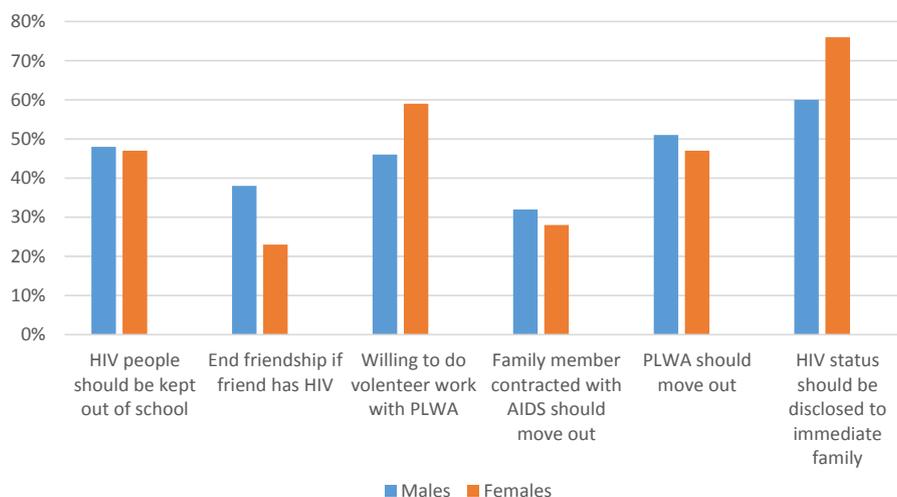


Figure 1: Comparison of stigmatizing attitudes among males and females.

males as compared to the females. It may not be wrong to say that these findings are a reflection of Saudi male adolescents' mind set. The Saudi society is recognized as a male dominant society. Decision making is mainly done by the males of the society and at many places; women are not involved nor informed. Males are said to be less socially flexible and having a fixed mind set. Hence this cultural structure puts forward many challenges while implementing new laws and policies. Having said this, existence of stigma has been reported by other countries worldwide also [10,11]. Maznah et al. in his survey among Nigerian population found that young men, with lower education level and who were from a lower socioeconomic status, were possessing more negative attitudes towards PLWA compared to their female counterparts [12]. Lack of formal education among males regarding HIV/AIDS has been significantly related to stigmatizing attitudes towards PLWA among the male youth [13].

Dealing with PLWA is not only a challenge in the Saudi community, literature has reported that stigma against PLWA has played as a major contributor to de-celerate the global efforts against the war against HIV/AIDS [2,3,6,7]. Stigma leads to people adopting rejection against PLWA leading to social discrimination and isolation. Health seeking behavior by the PLWA is hampered. People refrain from going for VCTs and even those who go for VCTs, do not disclose their HIV status to their partners, They are also likely to engage in risky behaviors, posing a risk for spread of diseases like HIV [2,14,15]. This is what has been in the case of KSA, as the ministry of health reported the main route of transmission of the virus still remains to be from males to their wives [16]. The wives who were infected from their seropositive husbands were not only unaware of their husbands' infective status but also did not know of their own status of infection. Further more, people who are at risk for infection, will not come for the VCTs, because of the fear of social and cultural rejection will also not seek treatment. This will not only lead to the circulation of the virus in the communities, but will also be responsible for the increasing prevalence of the infected in the country.

Looking at the factors related with these negative attitudes among the adolescents, we found that these stigmatizing attitudes were significantly related with lack of knowledge regarding disease transmission and prevention.

Fifty six percent of our participants were of the opinion that HIV can be transmitted through mosquito bites, while 25% were not sure if of this mode of transmission. These figures are high compared to Kuwaiti (16%), Bahraini (27%), Jordanian (17%), Yameni (30%) and even compared to another study conducted in Riyadh on male students [17,18].

Only 40% of the respondents knew that HIV could be transmitted from mother to child through breast milk. Kuwaiti and Jordanian students were seen more knowledgeable (51%) respectively about mode of transmission of HIV [19]. While another study in KSA reported that 46% of the male participants, and 48% of Yemeni students knew about this mode of transmission [17,18].

About 47% of the respondents did not know if condoms could decrease the risk of the transmission of infection, while 14% stated that condoms could not decrease disease transmission at all. Surprisingly this is high compared to the regional figures in Kuwait (22%, Bahrain (19%), and Jordan (17%) (19). About 33 % of our participants stated that HIV could be transmitted via coughing and sneezing, while 14% had no knowledge about this. Swimming pools (40%), cigerrete sharing (48%) and sharing toilet seats (54%) were other modes of transmission of the virus mentioned. Only 19% know that there is a treatment for the HIV infection. These findings point to great deficiency with regard to knowledge about the modes of transmission and prevention of HIV.

We were also surprised to find out that more than half the participants (51%) were of the opinion that Arabs were at a lower risk of getting the disease. One possibility could be the belief that as the country has strong Islamic laws, of forbidding multiple sexual partners, extra marital sexual intercourse, so the Arabs refrain from such acts and hence are naturally at lower risk of the infection. However, recent evidence has reported existence of extramarital sexual activity among educated young men in Riyadh [20]. The Ministry of health of Saudi Arabia in 2014, published the HIV status update report which reports, that increasing number of HIV infected have been seen in 2008, which can be related to the the introduction of the mandatory HIV testing before marriage for all couples. Other routes of the infection are by men having sex with men, commercial sex workers and intravenous drug users [21].

Our study highlights a very important aspect. Our findings have

shown that even the educated class new generation is holding negative attitudes towards PLWA. The situation of the general population needs to be explored as they may show a different picture than the education youth. Knowledge needs to be raised regarding prevention and transmission of the infection as great misconceptions exists regarding the disease. Raising the general knowledge regarding the disease will help in reducing the prevailing stigma among the masses. If the Kingdom aims to keep the low prevalence of disease, there is a need to address the prevailing stigma against PLWA at the National policy level.

Evidence suggests that in order to address stigma towards PLWA, multiple avenues of interventions need to be utilized [11,22-24]. Promising results and positive attitudes have been seen by raising awareness, and National level advocacy [23,24]. Stigma is a complex phenomenon, existing even in high prevalence areas.

Mass media campaigns, graduate and postgraduate curricular, health education talks, need to be developed for the community and health care providers. However, respecting the cultural and the religious norms of the country. Addressing the stigma will create a positive attitude towards the disease, correct knowledge, and behavior change of the public towards PLWA will lead to a better and accurate prevalence estimate and control of infection spread.

## Limitations

Despite the fact that we have tried to explore the adolescent's perspective in KSA on a large scale, we cannot generalize our findings to the rural adolescents, neither the adult population. Who may have a different attitude towards PWLAs. Similar large scale studies focusing on other regions of the Kingdom need to be conducted to estimate the magnitude of stigma towards the disease. Facilitating larger scale interventions.

## Conclusion

Educated adolescents in KSA have negative attitudes towards PLWAs, this is mainly related to lack of knowledge regarding transmission and prevention of the disease. Collection of accurate national level data regarding the affected and treatment seeking, will continue to be a problem for KSA, if the negative attitudes are not removed and the knowledge of the masses regarding HIV transmission and prevention is not raised. Being an Islamic state is not enough to halt the spread of infection within the country. There seems to be lack of accurate knowledge, which requires strategic intervention at the policy level.

## Recommendation

There is a great need to formulate interventions providing in-depth knowledge regarding HIV transmission and prevention and to focus on changing people's negative attitudes against PLWAs, as one of the major strategies to address the increasing numbers of HIV infected in the country.

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