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KNOWLEDGE AND AWARENESS OF HIV/AIDS INFECTION AMONG FEMALE STUDENTS AT TAIF UNIVERSITY, SAUDI ARABIA

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ABSTRACT

The aim of this study was to investigate the students' knowledge, transmission awareness, attitude toward infected person and the source of information about HIV. The study performed among undergraduate female students at three department sat Taif University and showed that 67% of the respondents correctly mentioned the meaning of the HIV and 91% aware of the link between sharing drug needles and HIV. The lowest level for transmission awareness was related to transmission of HIV through coughing and spitting. Most common sources from which information was obtained were primarily mass media rather than family and friends. The study reveals that there is lack of vital information regarding certain aspects of HIV/AIDS among participants. Thus, education about HIV should be addressed in college to encourage premarital screenings and help reduce the risk of HIV infection in the Kingdom. Furthermore, HIV/AIDS prevention drives must move beyond education into enhancing voluntary counseling and testing services among students.

KEYWORDS

HIV, Awareness, Sexually Transmitted Diseases, Education, Knowledge and Saudi Arabia.

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INTRODUCTON

Human Immuno-deficiency Virus (HIV) was discovered in the early 1980s and since then it is considered to be one the most complex health issues threatening human life. Despite the progress made toward its prevention and treatment, no country in the world remains unaffected. In Saudi Arabia and other Islamic countries, the religion forbids sexual intimacy outside wedlock and homosexuality, which are considered to be the main routes for transmission of the disease¹. Thus, the incidence and prevalence of HIV/AIDS are low in these. Islamic Communities. However, the majority (46%) of HIV/AIDS cases reported in Saudi Arabia have

been found to be associated with sexual activity, 17% has been the result of blood transmission, while the mother to child transmission accounts for 5% and 29% of the affected population did not specify how they contracted it. The remaining HIV cases resulted from intravenous drug abuse (2%) and organ transplant (1%)².

Since, the effective vaccine to prevent HIV infection and complete treatment for HIV/AIDS are not available currently, the community's awareness levels, knowledge about HIV as well as individual's attitudes toward infected person are essential key factors in controlling the disease.

In 2009, Barss and colleagues revealed that the highest affected populations among Middle East countries are young people³. Therefore, young generation must be exposed to proper educational programs to improve their awareness and knowledge about HIV/AIDS transmissions ways and protections methods. A study on AIDS related knowledge, Showed lack of scientific knowledge regarding HIV/AIDS transmission and prevention among Saudi paramedical students². Another study performed at Kathmandu, Nepal for assessing HIV/AIDS knowledge among 150 adolescent students from private school has showed that the majority of the adolescents had an average knowledge of HIV/AIDS, yet they did not know much about mode of transmission and prevention of this disease⁴. In Yemen, a low level on awareness and serious misunderstandings about HIV/AIDS were observed among university students; more than 30% of participants believed that HIV virus infects only homosexuals⁵. More recent study (2014) performed at Taif University to assess the knowledge and awareness level about sexually transmitted diseases (STDs) among male students found that the majority of the participants were familiar with HIV more than other STDs⁶.

Positive attitude towards people living with HIV/AIDS was found to be very low in a number of several studies done in different countries⁷⁻⁹. In Italy, wrong behaviors and negative attitudes were seen among health workers¹⁰. A variation in the attitude toward HIV/AIDS individuals in Iran was reported, and the overall positive attitude was

higher within married teachers than unmarried teachers¹¹. Al-Badahdah and Sayem (2009), have estimated that the female university students expressed more positive attitudes towards HIV/AIDS individuals than male students⁵. They also observed that students who had greater knowledge about HIV had higher positive attitude scores⁵.

In Saudi society, discussion of sexual transmitted disease with parents or other family members is considered to be a taboo where ethical and social factors give rise to many obstacles¹². In addition, in Saudi high schools sex education is not included in the curriculum, thus family to a lesser extent and friends and media (e.g radio, television and magazine) are playing a crucial role in spreading the awareness and knowledge about HIV and its transmission ways. A study conducted among male and female students at health institutes and colleges in Saudi Arabia has showed that the friends were the main source of information regarding HIV/AIDS for male students while booklets were the main source of information among females². In India, it has been found that a majority of women had acquired information about HIV/AIDS from the mass media, especially television¹³. In 2011, a study done among secondary school students (aged 11-19 years) showed that more than 50% of respondents had heard about HIV/AIDS from television and 46.9% from radio¹⁴.

The purpose of this study was to assess knowledge, awareness of ways of transmission and attitudes toward HIV/AIDS patients as well as the source of information about HIV/AIDS among selected female university students at Taif University. This study also aimed to improve student's knowledge about protection from HIV through distributed educational material. Furthermore, it could be used to serve as a tool to convey the message to health educators about the importance of the integration of the reality of student's awareness and protection into the public consciousness.

Methods

A cross-sectional study was conducted for a period from February to March 2015 among 209 undergraduate female students aged between 18-25

years living in Taif, Saudi Arabia. A paper-based questionnaire of 20 statements was developed based on previous studies research^{7,15} to investigate students' knowledge (3 items), awareness of mode of transmission (10 items), their attitude toward infected person (6 items) and the source of their information regarding HIV (1 items). The questionnaire was prepared in Arabic and reviewed by two consultants and piloted on 5 students. Their recommendations and suggestions were taken in consideration. Data Analysis; the responses to the first part of the questionnaire, which was about knowledge was in the form of multiple choices, while the part of HIV transmission awareness was assessed by choosing yes or no. The last part was used to assess the student's attitude toward HIV/AIDS individuals and the respondents' answer with self-scale rating as agree or disagree was considered. The data was collected and analyzed statistically using SPSS version 19.

RESULTS AND DISCUSSION

A total of 209 undergraduate female students from Taif University studying at three different departments (computer science, economic and science) completed the survey. The range of respondents' age was between 18- 25 years. All the participants were Saudi nationals.

The survey investigated students' demonstration of the basic knowledge about HIV/AIDS with three statements. Our study has shown that the students showed limited understanding of the basic scientific knowledge with mean 307/627. Approximately 67% (140/209) of the students were aware of the full name of HIV (Figure No.1). However, 61% (128/209) did not know the relation between HIV and AIDS and 59% (86/209) of the respondents did not know the full form of AIDS (Figure No.1).

Regarding to the awareness of modes of HIV transmission the vast majority of participants were aware of the link between sharing drug needles and HIV 91% (190/209) (Figure No.2). The lowest level for transmission awareness that was observed among the participants was 28% (58/209) and it was related to transmission of HIV through coughing and spitting (Figure No.2). Only 40% (83/209) and

43% (89/209) were aware that HIV could not be transmitted through sharing toilet seats with HIV infected person and drinking from the same glass respectively (Figure No.2).

Negative attitude and discrimination towards patients living with HIV/AIDS was found to be very high and there were many items in this section, which needed attention, as is shown in Figure No.3. Only 21% (44/209) of participants had a viewpoint that HIV/AIDS person can work in places where food is handled by them. Surprisingly, 70% (147/209) of the respondents were willing to play sport with person affected with HIV (Figure No.3). However, more than 40% of the study participants revealed that they were not willing to have a colleague with HIV in their classroom or their work place, which could be basically due to the fear of discrimination from society (Figure No.3).

The media including television, radio, newspaper and magazines play an important role in educating people about HIV/AIDS transmission and prevention ways through their wide reach and ability to break taboos and misconceptions. Thus, this study asks the participants about their source of knowledge about HIV/AIDS and found that the media was a predominant one among all the students at the three different departments; computer science, economic and science with 61%, 80% and 68% respectively (Table No.1).

HIV/AIDS is recognized as a global health issue. Of all the various age groups affected by the pandemic, the adolescent age group is the one that is most at the risk of contracting HIV/AIDS and other STD's¹⁶. Consequently, it is of utmost importance to launch special initiatives to create awareness and sensitize the younger generation against this deadly disease. Against the background that more than half of newly infected HIV adolescents are female¹⁷, the knowledge and awareness of female adults on HIV/AIDS is of immense concern in developing countries with increasing number of HIV infections. It will be instrumental not only in preventing the spread of the virus but also in addressing the threats posed by HIV/AIDS to mankind. Keeping this in mind, the study aimed to focus undergraduate female students in three different colleges at Taif University for their

knowledge of what HIV and AIDS are and what kind of risky behavior can lead to potential infection by the virus.

The study concluded that although 67% of the respondents could correctly mention the meaning of the acronym HIV, only 41% knew the full form of AIDS. These results are in contradiction by the studies done earlier by Bauni and Jarabi (2000) that explain that AIDS is more often used to represent HIV/AIDS in most African societies¹⁸. It is worrisome to note that 61% of the female participants could not make a clear distinction between HIV and AIDS. This finding is in agreement with studies done previously¹⁹. It is obvious from these results that there is dearth of clear understanding as far as general knowledge of HIV/AIDS is concerned. This suggests that particular attention must be paid in increasing their level of awareness in demonstrating basic knowledge about HIV/AIDS.

Furthermore, our study revealed that a large proportion of students (91%) were aware of the association between shared drug needles and HIV infection. Though, their level of awareness was comparatively very low for another aspect of mode of transmission, that is, coughing and spitting, only 28% believed that HIV cannot be transmitted through this mode. Also alarming were the responses with regards to HIV transmission not by sharing toilet seats and drinking from the same glass (40% and 43% respectively).

Most of the females believed that hugging or holding (84%) and sharing clothes with AIDS patient (69%) did not transmit the virus. Also, 72% of the pupils

knew well the association between breast feeding by HIV infected mothers and its transmission. Sixty four percentages of the respondents knew about mother to child transmission of HIV during pregnancy. The knowledge regarding transmission through mosquito bite and sharing swimming pool with AIDS patients was disheartening (51% and 56% respectively).

Stigmatization of HIV and AIDS is a serious problem. Many people living with HIV/AIDS are afraid to tell anyone about their status. In this study, an overall negative and non-accommodating attitude was revealed among the 209 participants. The only point where majority (70%) showed an accepting attitude was playing sports with HIV infected person whereas only 21% believed that HIV/AIDS patients can work in places where food is handled by them. A number of other studies have also reported negative attitudes among the respondents^{2,5,7,9}.

Regarding from where the students learned about HIV/AIDS, 70% answered that media was responsible for this. The second most common answer was others (unspecified, 19%) followed by family (9%) and friends (2%). This finding is consistent with previous researches^{13,14}. This finding is consistent with previous researches (Chatterjee, 2010 and Srivastava *et al.*, 2011) where they have talked about the impact of social exposure to be more effective in all areas of awareness among males in comparison to females. They also recommend that programs should be undertaken with regard to HIV/AIDS to increase the awareness of adolescents especially for females as they are less aware as well as more vulnerable.

Table No.1: Modes of Hearing about AIDS/HIV among Female Students at Taif University

S.No	Way of Hearing about HIV	Computer science %	Economic %	Science %
1	Family	9	9	10
2	Friends	3	1	3
3	Media	61	80	68
4	Others	28	10	19

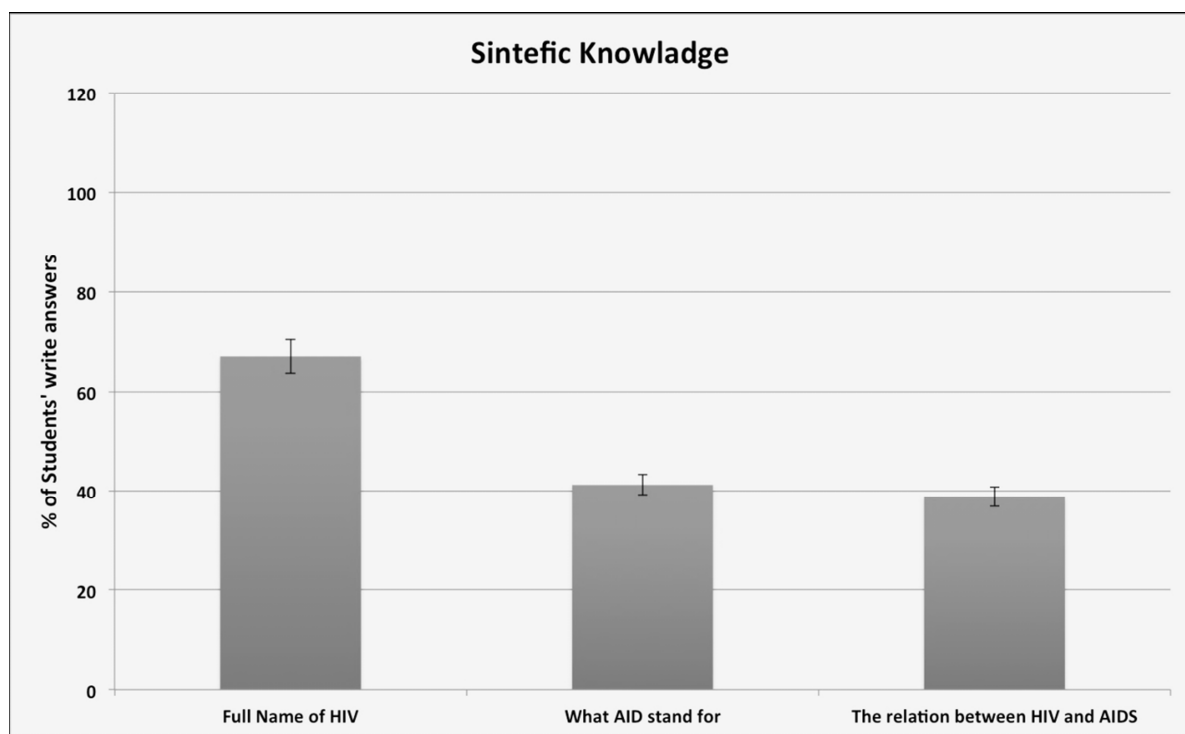


Figure No.1: Scientific knowledge of HIV/AIDS among female students at Taif University

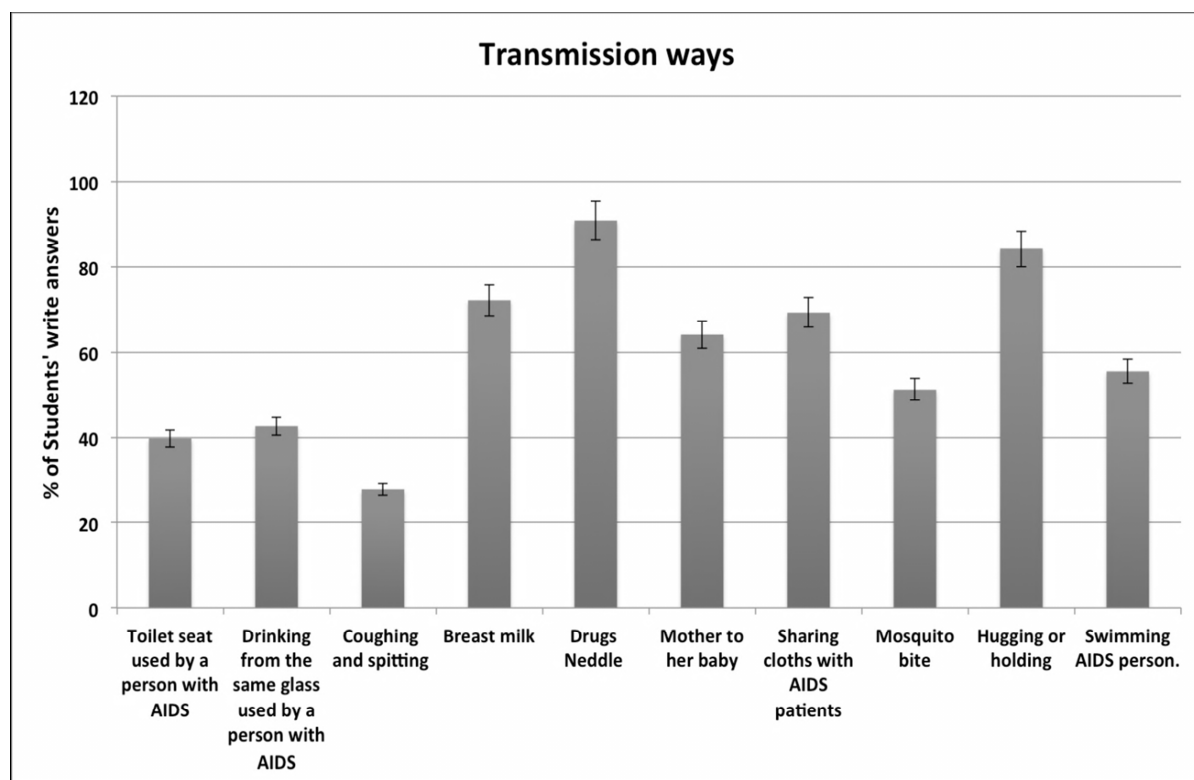


Figure No.2: Transmission awareness of HIV/AIDS among female students at Taif University

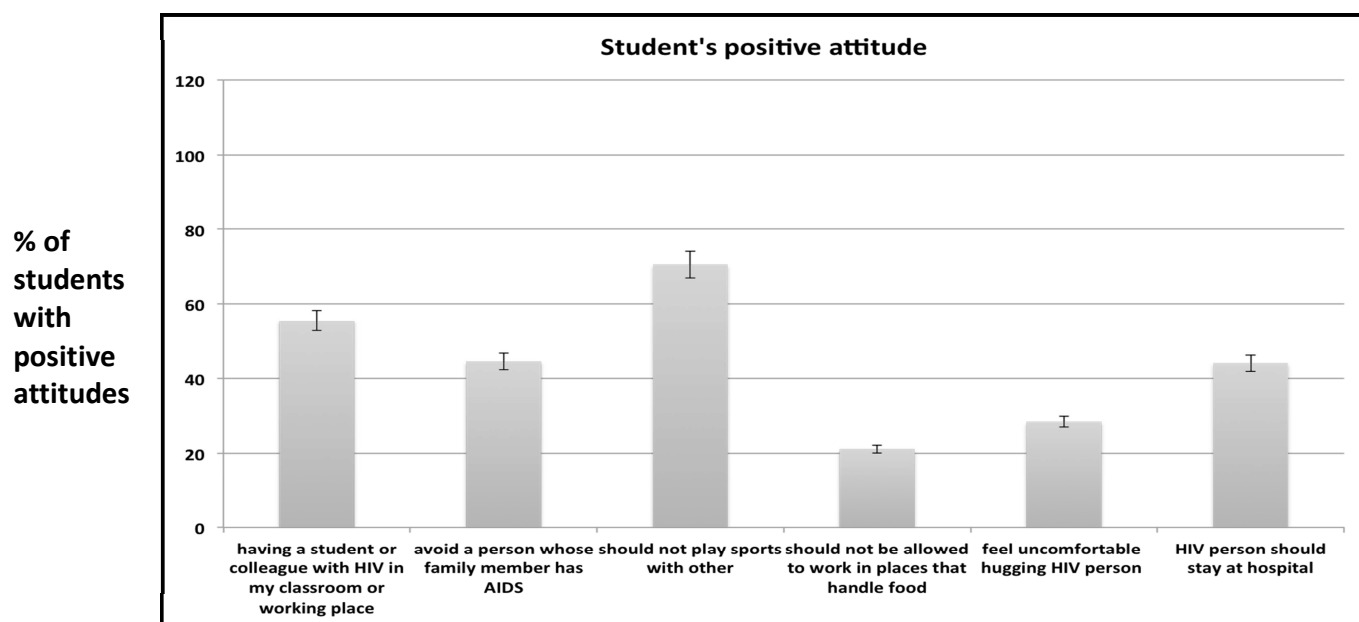


Figure No.3: Positive attitude toward HIV/AIDS patients among female students at Taif University

CONCLUSION

Although the students show adequate understanding of some basics of HIV/AIDS, the study reveals that there is lack of vital information regarding certain important aspects of HIV/AIDS among the female students. We conclude that HIV/AIDS awareness campaigns must be conducted frequently among college students especially among females and these must pay particular attention to specific issues on the knowledge, modes of transmission and management of HIV/AIDS. Furthermore, HIV/AIDS prevention drives must move beyond curriculum into encouraging and enhancing voluntary counseling and testing services among student population. This will not only help in fostering enhancement of their existing knowledge about the disease but will also help to reduce the stigma associated with the disease as well as the negative attitudes that is prevalent in the society for HIV infected patients.

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CONFLICT OF INTEREST

We declare that we have no conflict of interest.

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