



RESEARCH ARTICLE

EVALUATION OF KNOWLEDGE, ATTITUDE AND PRACTICE OF HIV/AIDS IN THE STUDENTS AT TAIBAH UNIVERSITY

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Abstract

Introduction: Acquired immunodeficiency syndrome (AIDS) caused by the human immunodeficiency virus (HIV) is a major health problem in many parts of the world, and is considered as a pandemic disease [1, 2].

Aim: To find out the knowledge, attitudes and Practice among Taibah university students toward HIV/AIDS.

Material and Method: A cross sectional analytic study using an online anonymous self-administered structured questionnaire was used to collect information, there were 484 respondents to the questionnaire from students of both genders from the various colleges

Results: From the total of 484 respondents there were 139 (28.7%) males and 345 (71.3 %) females, The majority of the respondents 442 (97.4%) have heard About HIV/AIDS, the respondents shows an average level of KAP regarding HIV/AIDS, Positive attitudes towards HIV/AIDS were observed among 53.3% of respondents, However 82.9% said they heard condoms.

Conclusion: It is recommended to start HIV/AIDS Prevention Programs at Taibah University giving attention to changing attitudes and practices among students...

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Introduction:-

Acquired immunodeficiency syndrome (AIDS) caused by the human immunodeficiency virus (HIV) is a major health problem in many parts of the world, and is considered as a pandemic disease [1, 2]

HIV/AIDS is one of the fastest-spreading epidemics in the world. There are 42 million people living with HIV/AIDS worldwide, and more than half of them are adolescents. [3]

Sexual contact remains the main mode of transmission of the disease worldwide followed by intravenous drug use and perinatal transmission [4]

HIV/AIDS, Its mode of transmission is known and is easily preventable, but because of the lack of knowledge and practices about HIV/AIDS in general population causes its rapid spread. So, this study was conducted to assess and compare the knowledge, attitude and practices about HIV/AIDS among the students at Taibah University [5]

Study objectives:-

- To find out the knowledge, attitudes and Practice among Taibah university students toward HIV/AIDS.
- WE will share the results and try to contact with the responsible members in Taibah University to explain to them the results so they can take measures to increase the student awareness toward HIV/AIDS.

Study Design:-

A cross sectional analytic study using an online anonymous self-administered structured questionnaire was used to collect information using google form sent to the emails and cell phones of the students at Taibah University in El-Madinah El-Munawarah through the Deanship of Student affairs.

The sample size is using the Roasoft¹ sample size calculator, based on the estimate that 50% of students may have enough knowledge on HIV/AIDS. Margin of error was set at 5%, 95% confidence, and an estimated 10% drop out, our expected sample size is 415 students.

Data entry and analyses of results will be done using the Statistical Package for Social Sciences (SPSS) ver 21 for Windows software². Descriptive statistics such as mean and standard deviation (SD) for continuous variables, and frequency and percentage for categorical variables will be determined. Inferential statistics will then be followed using parametric and non-parametric test for univariate analysis followed by multivariate analysis using logistic regression. The level of significance is set at $p < 0.05$.

Sample size:-

- 70 students of each gender from the scientific colleges at Taibah University.
- 70 students of each gender from the humanities colleges at Taibah University.
- 70 students of each gender from the different health colleges at Taibah University

Inclusion criteria:-

The students of the different colleges (Scientific, humanities and health) at Taibah university in El-Madinah El-Munawarah

Exclusion criteria:-

1. Non Taibah University Students.
2. Students of Taibah University branches (outside El-Madinah El-Munawarah)

Ethical clearance form:-

1. Ethical clearance will be sought before the start of the study from the Taibah University College of Dentistry Research Ethics Committee (TUCD REC)
2. Data will be collected coded and locked in a password-protected computer at the principal investigator office to ensure confidentiality and privacy of patient data.

Statistical Analysis:-

For the statistical analysis, the data will be used for descriptive parameters in the form of frequency, percentage means and standard deviations. Chi-square and one-way ANOVA will be used to determine the significant differences in the frequency of subjects with other variables. Pearson Correlation will be used to correlate the variables using SPSS version 21³ to analyse the data. The level of significance was set at $p < 0.05$ or $p < 0.001$.

Results:-

There were 484 respondents to the questionnaire from students of both genders from the various colleges at Taibah University

From the total of 484 respondents there were 139 (28.7%) males and 345 (71.3 %) females (Table 1)

¹<http://www.raosoft.com/samplesize.html>

². www.ibm.com/software/analytics/spss/

³IBM SPSS Statistics IBM North America, 590 Madison Avenue, New York, NY 10022. United States, E-mail: www.ibm.com

The age of the respondents ranged between 16-39 years of age. The respondents were grouped into 5 age groups. The 16-20 years formed (27.5%) and the 21-25 years of the respondents formed the largest age group comprising of 57.9%, the 26-30 years age group formed (10.8%), the 31-35 years formed the smallest age groups consisting of (1.4%). The 36-40 years age group formed (2.5%). (Table 1)

The respondents came from three types of colleges, the Health and medical colleges, the Literary & humanitarian colleges and the scientific colleges. From the Health and medical colleges there were 123 (25.5%) respondents, while from the Literary & humanitarian colleges were 205 (42.5%) respondents and from the Scientific colleges there were 154 (31.9%) respondents (Table 1)

The respondents represented the various academic years, from the 1st of college to the 6th year of college. The first academic year students comprised of 46(10.6%) of respondents were in, the 2nd academic year were 91(20.9%), 63(14.4%) were in the 3rd year, 79(18.1%) were in 4th year, 43(9.9%) were in the 5th year, and 114(26.1%) were in the 6th year (Table 1)

The respondents who have traveled outside Saudi Arabia comprised of 200(43.9%), while the majority of the respondents 256(56.1%) respondents have not traveled outside Saudi Arabia (Table 2).

The majority of the respondents 245(53.6%) rated their health as excellent, 166(36.3%) rated their health as very good, 39(8.5%) rated their health as good, 4(0.9%) rated their health as acceptable, 2(0.4%) rated their health as poor, and 1(0.2%) rated their health as very poor (Table 2)

The majority of the respondents were not smokers, comprising of 381(83.2%) while only 77(16.8%) were smokers (Table 2)

The majority of the respondents 442(97.4%) have heard About HIV/AIDS, (Figure 1).

The majority of the respondents heard of HIV/AIDS from the TV 291(60%), this is followed by 278(57.4%) respondents who heard of HIV/AIDS from Internet, 67(13.8%) heard about HIV/AIDS from Public health officials, , 212(43.8%) have heard about HIV/AIDS from their studying, while 137(28.3%) heard about HIV/AIDS from Magazines & Newspapers , 63(13%) have heard about HIV/AIDS from the radio and 4(0.8) have heard about HIV/AIDS from Friends. Table (3)

When asked about the symptoms of HIV/AIDS, the majority of the respondents 189(39%) think that persistent fever is a of the symptoms of HIV, 173(35.7%) think loss of weight and appetite is one of the symptoms of HIV, 99(20.5%) think acute diarrhea is one of the symptoms of HIV and 199(41.1%) of them don't Know. Table (4)

When asked about the organisms that causes HIV/AIDS, the majority of the respondents 279(57.6%) think it's a virus is the causative organism of HIV , 11(2.3%) think it's bacteria, 9(1.9%) think it's a fungi , 4(0.8%) think it's a parasite and 181(37.4%) don't know. (Table 5)

When asked have heard of a condom, most of the respondents 401 (82.9%) claimed to have heard of Condoms (Table 5) When asked that a Condom is a way to prevent the spread of AIDS 87(18%) of the respondents totally agree 109(22.5%) only agree with that, 83(17.1%) neither agree nor disagree, 28(5.8%) disagreed and 177(36.6%) don't know. (Table 6)

When the respondents were asked if their knowledge of AIDS is far better when they entered the college or university" 62(12.8%) totally agree 132(27.3%) agree, 206(42.6%) disagree and 84(17.4%) said that they totally disagree (Table 7).

When asked to what extent you wish to obtain additional information and education about the basic information about AIDS, 47(9.7%) of the respondents think that there is no need for them to get more knowledge, 214 (44.2%) think that there is some need, 126(26%) think that there is only a slight need and 97(20%) think that there is a great need. (Table 7)

When asked if they think their knowledge is sufficient 23(4.8%) of the respondents believe strongly that their knowledge about HIV is sufficient, 89(18.4%) thinks it's enough, 192(39.7%) don't think it's enough, 77(15.9%) don't think strongly it's enough and 103(21.3%) answer with I don't know. (Table8)

In answer to the question "does the term HIV means the term AIDS,the vast majority 308 (63.6%) don't know, 126(26%) of the respondents think that it does, and 50(10.3%) don't think so. (Table 9).

When asked if there is a cure for AIDS the majority 272(56.2%) think there is no cure for AIDS, 43(8.9%) of the respondents think there is and 169(34.9%) said they don't know. (Table 9)

In response a question whether coughing and/or sneezing transmit HIV/AIDS, the majority 215(44.4%) answered I don't know, 200(41.3%) of the respondents said no, while 69(14.3%) said yes, (Table 9).

In response a question that pregnant women with AIDS give birth to infected child, the majority 230(47.5%) don't know, 191(39.5%) said yes while only 63(13%) said no. (Table 9)

When asked if with AIDS / HIV (AIDS) look and feel healthy, the bulk of the respondents 248(51.2%) did not think so, 189(39%) did not know and 47(9.7%) of the respondents said yes (Table9)

In response to a question can infected with HIV could show no signs or symptoms for a period of five years or more, the majority 228(47.1%) of respondents don't agree, 225(46.5%) don't know while 31(6.4%) of the respondents think that the person who is infected with HIV could show no signs or symptoms for a period of five years or more, with that and. (Table 9)

Is there a vaccine to immunize adults from AIDS, the majority 291(60.1%) don't know, 152(31.4%) think there is no vaccine and 41(8.5%) of the respondents think that there is a vaccine against HIV (Table 10)

In response to a question do you think that people with AIDS can live with their families without the spread of AIDS? 182(37.6%) don't know, 169(34.9%) of the respondents believe that the people with AIDS can live with their families without spreading AIDS, and 133(27.5%) think they can't live with their families without spreading AIDS (Table 10)

In response to a question do you think that people with AIDS can continue their education and mingle with their colleagues in schools and universities? The majority 258(53.3%) of the respondents think that people with AIDS can continue their education and mingle with their colleagues while 226(46.7%) think they couldnot (Table10)

The was majority 410(84.7%) haven't been checked for HIV/AIDS while 74(15.3%) of the respondents have been checked for HIV (Table 10)

Table 1:- Personal information

<u>Gender</u>	Frequency	%
Female	345	71.3
Male	139	28.7
<u>Age group</u>		
16-20	122	27.5
21-25	257	57.9
26-30	48	10.8
31-35	6	1.4
36-40	11	2.5
<u>Type of College</u>		
Health and medical colleges	123	25.4
Literary & humanitarian colleges	205	42.4
Scientific colleges	154	31.8
<u>Academic Year</u>		
1	46	10.6
2	91	20.9
3	63	14.4
4	79	18.1
5	43	9.9
6	114	26.1

Table 2:- Health Related information

<u>Travelled outside KSA</u>	Frequency	%
Yes	200	43.9
No	256	56.1
<u>Rate your health</u>		
Excellent	245	53.6
Very good	166	36.3
Good	39	8.5
Acceptable	4	0.9
Poor	2	0.4
Very poor	1	0.2
<u>Do you smoke</u>		
Yes	77	16.8
No	381	83.2

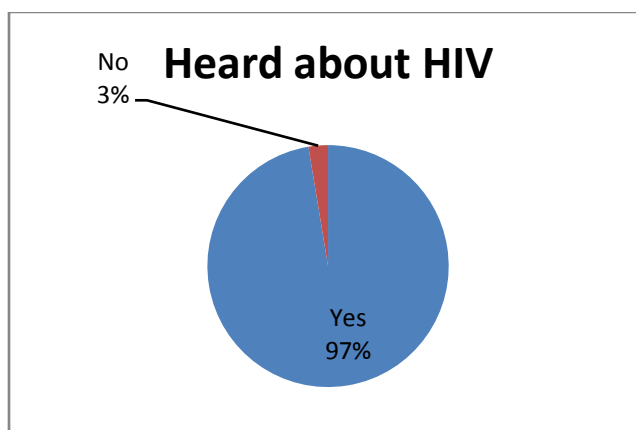
**Figure 1:-** Heard about HIV

Table 3:- The way respondents heard about HIV

How did you hear about AIDS	Yes		No	
	N	%	N	%
Internet	278	57.4	206	42.6
Public health official	67	13.8	417	86.2
TV	291	60.1	193	39.9
Studying	212	43.8	272	56.2
Newspapers and magazines	137	28.3	347	71.7
Radio	63	13	421	87
Friends	4	0.8	480	99.2

Table4:- Symptoms of AIDS.

What are the symptoms of AIDS?	Yes		No	
	N	%	N	%
Persistent fever	189	39.0	295	61.0
loss of weight and apatite	173	35.7	311	64.3
Acute diarrhea	99	20.5	385	79.5
I don't know	199	41.3	275	57.1

Table 5:-Cause of AIDS

Cause of AIDS	Frequency	%
virus	279	57.6
bacteria	11	2.3
Fungi	9	1.9
parasites	4	0.8
I don't know	181	37.4

Table 6:- Condoms info.
Heard about condom.

Yes	401	82.9
No	83	17.1
Condoms prevent AIDS		
Totally agree	87	18
Agree	109	22.5
Neither agree nor disagree	83	17.1
Disagree	28	5.8
I don't know	177	36.6

Table 7:- Need for more information about AIDS

Need for basic information about AIDS?	Frequency	%
No need	47	9.7
Some need	214	44.2
Slight need	126	26.0
Great need	97	20.0

Table 8:-Amount of respondent's information about AIDS.

Do you think that your knowledge about AIDS is sufficient?	Frequency	%
I believe strongly	23	4.8
I think it's enough	89	18.4
I don't know	103	21.3
I don't think it's enough	192	39.7
I strongly don't think it's enough	77	15.9

Table 9:-AIDS Knowledge.

Term HIV means the term AIDS?	Frequency	%	Is there a cure for AIDS?	Frequency	%
Yes	126	26	Yes	43	8.9
No	50	10.3	No	272	56.2
Idon't know	308	63.6	I don't know	169	34.9
Transition of HIV could be through coughing?			Pregnant women with AIDS will have children with AIDS?		
yes	69	14.3	yes	191	39.5
No	200	41.3	No	63	13
Idon't know	215	44.4	I don't know	230	47.5
Are those infected with AIDS look and feel healthy?	Frequency	%	Can someone infect with AIDS show no signs for a period of 5 years or more?	Frequency	%
Yes	47	9.7	yes	31	6.4
No	248	51.2	No	228	47.1
Idon't know	189	39	I don't know	225	46.5

Table 10:- AIDS Attitude

Is there a vaccine against AIDS?	Frequency	%	people with AIDS can live with their families without the spread of AIDS?	Frequency	%
Yes	41	8.5	Yes	169	34.9
No	152	31.4	No	133	27.5
I don't	291	60.1	I don't know	182	37.6

know					
people with AIDS can continue their education and mingle with their colleagues	Frequency	%	Checked for AIDS before	Frequency	%
Yes	258	53.3	yes	74	15.3
No	226	46.7	No	410	84.7

Discussion

This is the first study on Knowledge, Attitude and Practice of HIV/AIDS in students at Taibah University in Medina, Saudi Arabia, This study reports an average level of knowledge relating to HIV/AIDS among students of Taibah University.

The majority of the respondents were female (71%), similar findings have also been reported in similar study done in South Africa. [6]

Almost All respondents had heard about HIV/AIDS (97%), similar findings have also been reported in study done in Lao People's Democratic Republic. [7]

Only 10% of the respondents differentiate between HIV and AIDS, This is lower than similar study 81.9% done in Ethiopia. [8]

Majority of respondents 272 (56.2%) knew there is no cure for AIDS and 169 (34.9%) said they don't know, While in a similar study done in Ethiopia 90.3% of respondents knew there is no cure for AIDS.[8]

Most of the students knew that the use of condoms during sexual intercourse could prevent HIV, Similar findings have also been reported in study done in Lao People's Democratic Republic. [8]

The majority of the respondents heard of HIV/AIDS from the TV 291(60%), this is followed by 278 (57.4%) respondents who heard of HIV/AIDS from Internet, 67(13.8%) heard about HIV/AIDS from Public health officials, , 212 (43.8%) have heard about HIV/AIDS from their studying, while 137 (28.3%) heard about HIV/AIDS from Magazines & Newspapers , 63(13%) have heard about HIV/AIDS from the radio and 4 (0.8) have heard about HIV/AIDS from Friends, While in a different study conducted in Lao People's Democratic Republic their findings were (61.3%) source of information was the television, followed by the radio (25.3%). Less than one-fifth of the respondents were aware about HIV/AIDS from friends (7.7%), brochures (3.7%), newspapers (1.3%) and magazines (0.7%). [8]

Limitations:-

Because of the restricted cultures here in Saudi Arabia, it was difficult to ask the participants about their sex activates and related question to that. Also because of that most of the student will not respond to sex related questions. However, the anonymity of the questionnaires hopefully encouraged students to be honest in their responses.

Conclusion:-

In conclusion, the surveyed university students had an average KAPs about HIV/AIDS. The students need more information about AIDS symptoms, transmittion and how to prevent its infection. It is recommended to start HIV/AIDS Prevention Programs at Taibah University giving attention to changing attitudes and practices among students. The study reveals that most of student get their information from the TV, so there should be more TV programs about AIDS.

Recommendations:-

It is recommended to start HIV/AIDS Prevention Programs at Taibah University giving attention to changing attitudes and practices among students.

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