Knowledge, Awareness and Attitude Towards HIV Among Women of Reproductive Age Group in a Public Sector Hospital

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ABSTRACT

Objective — *To analyse knowledge, awareness and attitude towards HIV in women of reproductive age group, in a tertiary care Hospital.*

Study design — *Cross sectional study.*

Place & Duration of study — *Department of Obstetrics and Gynaecology ward-9 Jinnah Postgraduate Medical centre Karachi, From June 2016 to August 2016.*

Methodology — *Women of reproductive age group attending outpatient department of Obstetrics and Gynaecology at Jinnah Postgraduate Medical centre Karachi were interviewed after taking informed consent. Questions regarding various aspects of HIV were asked. Reponses were entered into pre defined form. Data was analysed using SPSS-16.*

Results — *A total of 310 women participated. Greater number of responders belonged to age group 26-35 years (77%). Of the total 42.6% (n=132) and 29.0% (n=90) women had knowledge about spread of the disease and its symptoms respectively. Prevention of the disease was known to 47.1% (n= 146) women. Most of the study participants (n= 197 - 63.5%) showed positive attitude toward patients living with HIV/AIDS. Of the total 87.7% (n=272) women showed willingness for screening of HIV. Television was the main source of information in*

Conclusion — *Lack of knowledge was observed in relation to HIV symptoms, spread and preventive measures, while women of reproductive age group demonstrated more positive attitude towards patients living with HIV/AIDS.*

Key words — *HIV, Reproductive age group, KAP study.*

INTRODUCTION:

Acquired immunodeficiency syndrome (AIDS) is a fatal disease caused by Human Immune Deficiency virus called lentivirus, a sub class of retrovirus, that cause HIV infection and over the time it leads to AIDS. AIDS is a condition in the humans which causes progressive failure of the immune system which in turns leads to life threatening opportunistic infections and malignancies. The mode of transmission for HIV is through blood, semen, vaginal fluid, breast milk and through vertical transmission.[1] Around 90% of the patients with AIDS are living in developing countries. The reason behind high prevalence is poverty and illiteracy. According to the joint united program on HIV (UN AID), HIV is one of the leading causes of mortality across the globe.[2]

HIV/AIDS is a major and one of the most serious public health challenges. Sub Saharan Africa (the region most affected by HIV epidemic) accounts for 70% of global total new HIV person.[3] In Canada in 2011, 23 % women were HIV positive among them 87.6% were women of reproductive age group.[4-6] Pakistan is identified as a low prevalence, high risk

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country for the spread of HIV infection.[7,8] There are multiple biological, socio cultural and economic factors which make women more vulnerable to get HIV infection as compared to men.[9]

Women can play a very important role in the prevention of HIV. By having knowledge about HIV/AIDS, specially married women, can protect themselves and their children against it.[1] HIV prevention is the only way to reduce the incidence of HIV. There is no vaccine to prevent HIV infection, but it is possible to protect ourselves and others by education and awareness of its spread. This study was conducted to assess the knowledge, awareness and attitude of child bearing age woman's towards HIV/AIDS at a public sector hospital.

METHODOLOGY:

This cross sectional survey was conducted in the Department of Obstetrics & Gynaecology, Jinnah Postgraduate Medical Centre Karachi, from June 2016 to August 2016. Sample size calculation was done by taking 80% response rate, 95% confidence interval and 5% margin of error, the sample size was 310.[10] Patients of reproductive age group, attending outpatient department were interviewed after taking informed consent. Specially developed form was filled. Results were analysed on SPSS version 16. Frequencies and percentages were calculated for categorical variables and mean and standard deviation was calculated for continuous variables. Chi square test was used to find association of different categorical variables. To measure the effect of demographic variables, logistic regression model was run. Results are reported with crude and adjusted odds ratio. Those variables with p value of less than 0.10, a univariate stage was proceeded to multivariable analysis and significant results were reported at 0.05%.

RESULTS:

Majority of responders (n=239 - 77%) belonged to age group 26-35 years. Mean parity was 2.39 ± 1.46. Of the total, (n=251 -48%) responders belonged to Korangi district of Karachi. Majority of responders were having education up to school level *(n=173* - 55.8%) while 25.5% *(n=79)* did not have formal education. 92% *(n=288)* of responders were from joint family. In 80% *(n=249)* of the responders, TV was the main source of providing information. 67% *(n=207)* women belonged to fair and 33% *(n=103)* to poor socioeconomic status.

In analysis at least two yes answers were classified as having positive score, and 42% *(n=132)* of responders have knowledge of spread, 47% *(n=146)* had knowledge about prevention and 29% *(n=90)* had knowledge about symptoms of HIV. Majority of responders *(n=270* - 87%) had no idea about availability of treatment of HIV and 86% *(n=266)* believed that it is a non-curable disease. 87% *(n=271)* had no idea about survival of patients with HIV.

If two answers were yes about attitude we classified it as a positive attitude. 63% *(n=197)* responders had positive attitude towards HIV patients, 87% *(n= 272)* were willing for screening and 99% *(n=307)* were willing to seek medical advice if they get positive screening test for HIV.

In age group of 26-35 years 37%*(n=88)* had knowledge about spread but the knowledge was 61% *(n=22)* in age group of less than 25 years. Responders of more than 35 years had 1.07 folds more knowledge as compared to less than 25 years. Residential area and responder's education had no effect on knowledge about spread of HIV, while husband's education affected the knowledge about spread and logistic regression revealed that husband with school education had 1.19 times high knowledge as compared to no knowledge and with higher education knowledge increased to 2.3 folds.

40% *(n= 117)* of joint family and 68% *(n=15)* of nuclear family had knowledge about spread and nuclear families had 3.132 folds more knowledge than responders from joint families. Family status was only found significant about knowledge of symptoms, 50% *(n=11)* of nuclear family responders had knowledge and 2.6 folds more knowledge as compared to joint family.

Table I: Knowledge about Spread of HIV

		n	%
Spread by breast feeding	No	286	92.3
	Yes	24	7.7
Spread by blood transfusion	No	208	67.1
	Yes	102	32.9
Spread by needle stick injury	No	251	81.0
	Yes	59	19.0
Spread by shaving blades	No	242	78.1
	Yes	68	21.9
Spread by IV drugs	No	236	76.1
	Yes	74	23.9
Spread by intercourse	No	158	51.0
	Yes	152	49.0
Knowledge about Spread of HIV	No	178	57.4
	Yes	132	42.6

Table II: Knowledge about Prevention from HIV			
		n	%
Prevention by unprotected or protected intercourse	Unprotected	179	57.7
	Protected	131	42.3
Prevention by condoms	No	178	57.4
	Yes	132	42.6
Prevention by avoiding non-screened blood transfusion	No	257	82.9
	Yes	53	17.1
Prevention by use of disposable blades	No	255	82.3
	Yes	55	17.7
Prevention by use of disposable syringes	No	244	78.7
	Yes	66	21.3
Knowledge about prevention from HIV	No	164	52.9
	Yes	146	47.1

Table III: Knowledge about Symptoms of HIV			
		n	%
Anorexia	No	283	91.3
	Yes	27	8.7
Weight loss	No	233	75.2
	Yes	77	24.8
Fever	No	155	50.0
	Yes	155	50.0
Vomiting	No	281	90.6
	Yes	29	9.4
Loose motions	No	305	98.4
	Yes	5	1.6
Enlarge lymph nodes	No	308	99.4
	Yes	2	.6
Swelling	No	308	99.4
	Yes	2	.6
Knowledge about symptoms of HIV	No	220	71.0
	Yes	90	29.0

Responders with more than one media availability had 2.47 time higher knowledge about spread as compared to no media availability. Responder and husbands higher education was associated with 2.8 and 3.2 folds increase in knowledge respectively about prevention as compared to no education. There was 5.3 folds increase knowledge in a group of responders with more than one media available. Those who belonged to poor socioeconomic status had 40% less knowledge as compared to non-poor.

Majority of patients from all age groups had no knowledge about treatment availability. Husbands higher education was associated with 2.8 folds increased knowledge about treatment while 8.9 folds increased knowledge was seen in nuclear families and more than one media availability was associated with 12 folds higher knowledge and 60%

responder from poor socioeconomic group had less knowledge about treatment.

Overall majority of responder from different age groups had said that it is a non - curable disease. 90% *(n=216)* from 26-35 age groups said it is non-curable disease and they had 85% less knowledge about curability as compared to less than 25 years responders. Responder and husband school education was associated with 2.8 and 3.2 folds increase in knowledge as compared to no education. Women from nuclear family had 7.7 times more knowledge and 92% *(n=95)* of responders from poor socioeconomic group had less knowledge about disease curability.

Age group of more than 35years had 85% positive attitude and 3.8 folds more positive attitude than less than 25 years age group, with more than one media availability 71% *(n=27)* showed positive attitude but they showed 85% less positive attitude towards HIV patients as compared to no media group.

(n=215) 90% of 26-35 years age group agreed for screening and showed 2.9 times positive attitude. More than 90% with school education of responder and husband were willing for screening and positive attitude was noted 1.5 and 2.8 times more respectively as compared to no education and higher education group. Both of the later were 50% less in willing for screening. 88% *(n=256)* of joint family women were willing for screening and 27.3% *(n= 6)* of nuclear family responders showed less positive attitude towards screening.

DISCUSSION:

Pakistan's bordering country India has seen a sharp increase in the estimated number of HIV infection. It is estimated that India has the second largest population of people living with HIV/AIDS, next to South Africa.[10] This is in recognition of the fact that the best approach to addressing the HIV/AIDS pandemic remains prevention through awareness creation and sensitization since neither treatment nor vaccine is readily available.[11] In this study majority of responder (n=239 - 77%) were of younger age group. This is consistent with the findings of the study in which 59.8% women were between 19 to 29 years of age.[1] In our study majority of the responders had education up to school level which is comparable to another study.[12] Televisions turn out to be the main source of information in 80% *(n=49)* patients in our study. Similar finding observed in the study done in India.[13] 29% *(n=90)* women in our study had knowledge regarding symptoms of HIV. This is similar to the study conducted in Karnataka where 21% women knew about signs and symptoms of HIV/AIDS.

In this study 49%*(n=152)* responders quoted unprotected sexual intercourse, 32.9% *(n=102)* blood transfusion, as mean of spread of HIV. Similar findings were observed in a study done amongst secondary school students from Mumbai in which 50% students knew about sexual route of transmission and 31.1% cited blood transfusion.[14]. In another study done at Ghana among the students it was noted that 31% cited sexual intercourse, 14.4% blood transfusion and 8% intravenous drug use as mode of transmission which is less than our study.[15]

In our study 42.16% *(n=132)* responders believed that AIDS can be prevented by the use of condoms while 21.3% *(n=66)* knew that prevention can be achieved by the use of disposable syringes. This is fairly low as compared to other study.[1]

In our study majority of women had positive attitude towards HIV patients. 83.9% *(n=260)* were willing to shake hands with infected patients. 99% *(n=307)* respondents cited that they will seek medical treatment if they turned out to be positive after screening. Education is found to have a direct relation to the awareness level of the respondents which is consistent with the study done at New Dehli.[2]

CONCLUSIONS:

The level of knowledge about HIV was variable among child bearing age women. Most of them exhibited more positive attitude towards HIV positive people and they agreed to undergo screening for HIV.

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Received for publication: 23-06-2017

Accepted after revision: 20-09-2017

Author's Contributions:

Nasreen Fatima:	Conception, design of study, interpretation & drafting of work, critically revising the manuscript & Final approval of the manuscript.
Merib Emmunal:	Data collection.
Sofa Butt:	Design of study, Data Analysis.

Conflict of Interest:

The authors declare that they have no conflict of interest.

Source of Funding:

None

How to cite this article:

Fatima N, Emmannual M, Butt S: Knowledge, awareness and attitude towards HIV among women of reproductive age group in a public sector hospital. J Surg Pakistan. 2017;22(3):92-6. doi:http://-dx.doi.org/10.21699/jsp.22.3.6.