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Awareness about HIV/Aids among Patients Visiting A Tertiary Care Hospital in the UT Of Pondicherry.

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ABSTRACT

To find out the awareness about HIV/AIDS among patients visiting a tertiary care hospital in the UT of Pondicherry. A cross sectional study was conducted for a period of three months on 225 patients who visited a tertiary care hospital in the Karaikal District in the UT of Pondicherry. The survey was conducted through interview on 225 patients with a five part questionnaire with 5 items on basic awareness about HIV/AIDS, 10 items on the knowledge about mode of transmission, 5 items on the knowledge about prevention, 5 items on the attitude of the patients towards HIV/AIDS and five items on the knowledge about the measures taken by the government and NGOs in prevention of HIV/AIDS. It was observed from the results that the awareness and knowledge about HIV/AIDS was more among the literates when comparison was made on the lines of education and among the business class and students with respect to occupation. The attitude part had an average number of positive responses with about 45% willing to take care of a HIV infected child or spouse, 46.2% were willing to share a meal with a HIV infected person and about 41.8% prefer out casting an AIDS person. Despite the vigorous outreach programmes, which the government and other organizations had carried out in the city, many people had several misconceptions about HIV or about people living with HIV/AIDS. As it was observed that awareness was more among the literates, and among students and business class people. The Government and Health educators should provide tailor-made education programmes for those at the lower education levels.

Keywords: - HIV/AIDS, survey, questionnaire.

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INTRODUCTION

The HIV/AIDS epidemic, virtually unknown 30 years back, is spreading rapidly across the world. An important factor fuelling the continued spread of HIV/AIDS in these countries is believed to be poor knowledge about its modes of transmission and prevention. Since the late 1980s, governments worldwide have initiated various information, education and communication campaigns to slow the spread of the disease. Yet, significant knowledge gaps persist, and misconceptions about how the disease is transmitted are widespread.

AIDS is considered a dreaded disease as no effective vaccine or drug therapy is available. In the absence of a vaccine - or an effective chemotherapeutic agent, only weapon available for combating this dreadful infection is prevention by community awareness and health education.

However varied cultural characteristic with reference to the sex related risk behaviors makes the estimation of HIV prevalence difficult. Further AIDS epidemic in India is shifting from bridge population (clients of sex workers, STD patients and partners of drug users) to the general population which further complicates the issue.

AIDS is spreading in India at an alarming rate, fueled by an increasingly casual attitude towards sex, coupled with a tradition of public silence and reluctance to grasp the issues. The year 2011 marked 30 years since the discovery of AIDS, which has claimed more than 25 million lives. More than 60 million people have been infected with HIV, and more than 90% of the cases occurred in developing countries [4]. The stigma around the disease could be attributed to cultural or religious beliefs or a lack of education. Increasing number of people are infected with growing drug abuse problems, prostitution, low levels of awareness towards the infection, etc. Information, education, and communication (IEC) are the major steps in HIV prevention. They help in fighting fear, prejudice, and myths. Ignorance about the disease and how the virus is transmitted can generate fear and prejudice towards those who are infected. The focus on HIV brought the need to assess the awareness levels of the general population and the society's perception towards HIV/AIDS and also for the evaluation of government's measures. The estimated prevalence of HIV/AIDS in India in 2010 was INDIA 0.36% among males and 0.25% among females and 0.33% among males and 0.22% among females in Pondichery [1].

Keeping this in mind the present study was carried out among the patients visiting a tertiary care hospital which serves the rural population of Karaikal in the UT of Pondicherry to assess their knowledge and attitude towards HIV/AIDS. The objectives of the study were: [1] To study the awareness of HIV/AIDS among patients visiting the hospital [2]. To assess the knowledge of HIV transmission and prevention among the study population [3]. To assess the attitude of the study population towards HIV/AIDS [4]. To assess the knowledge of the study population regarding NGOs and government services available with respect to prevention of AIDS/HIV.

ISSN: 0975-8585

MATERIALS AND METHODS

Data Collection

The survey questionnaire used had a 5-part, 30-item questionnaire eliciting information about the Awareness of HIV (5 items), modes of transmission (10 items), ways of prevention (5 items), society's attitude towards HIV (5 items), and finally knowledge about the role government's and NGO's in preventing the same (5 items). The questionnaire was constructed by combining the questions or statements from the General Population Behavioral Surveillance Survey questionnaire[2] and the Voluntary Counseling and Testing Center (VCTC)[3] questionnaire, both pretested and validated by the National AIDS Control Organization (NACO). Each day about two or three patients were picked up at random from the out patient department counter itself. Each and every part of the questionnaire was explained in detail to the patient before answering. The questionnaire was translated by the interviewer into the local languages, i.e., Tamil, for those individuals who did not know English. Care was taken to see that no one missed out from answering any item. Anonymity and confidentiality was maintained and ethical clearance was already obtained from the institute's ethical committee.

HIV/AIDS SURVEY QUESTIONAIRE

	Awareness about HIV/AIDS in general public			
1	Have you heard of HIV/AIDS	Yes	No	Do not know
2	Just by looking can you say a person has AIDS	Yes	No	Do not know
3	HIV infected individual looks very weak and dies within a year or two.	Yes	No	Do not know
4	Possibility that a HIV affected individual does not know he has the disease	Yes	No	Do not know
5	HIV infected person can easily get other diseases like TB, diarrhea	Yes	No	Do not know
	Knowledge about HIV transmission in general public			
1	AIDS is caused by HIV virus	Yes	No	Do not know
2	HIV can be transmitted through blood transfusion	Yes	No	Do not know
3	HIV can be transmitted from infected mother to unborn child	Yes	No	Do not know
4	HIV can be transmitted through unprotected sexual contact	Yes	No	Do not know
5	HIV can be transmitted by kissing, shaking hand, drinking in common cups and glasses and sharing utensils	Yes	No	Do not know
6	HIV can be transmitted through mosquito bite	Yes	No	Do not know
7	Healthy looking HIV patients can transmit HIV to others	Yes	No	Do not know
8	HIV can be transmitted by hair saloons	Yes	No	Do not know
9	HIV can be transmitted through infected needles	Yes	No	Do not know
10	HIV can be transmitted by looking at others	Yes	No	Do not know
	Knowledge about HIV prevention in the general public			
1	HIV can be prevented by condom use	Yes	No	Do not know
2	There is complete cure for HIV	Yes	No	Do not know
3	Early therapy can cure HIV/AIDS	Yes	No	Do not know
4	Can HIV be prevented by having one faithful partner?	Yes	No	Do not know
5	Are there any medicines to prevent HIV from spreading to the child during pregnancy?			
	Society's attitude towards AIDS			
1	Will you be willing to take care of HIV infected child or spouse.	Agree	Disagree	Do not know
2	Should HIV/AIDS be discussed on TV, radio and schools	Agree	Disagree	Do not know
3	Should AIDS infected people be avoided in the society?	Agree	Disagree	Do not know
4	Will you be comfortable sharing a meal with a HIV infected person.	Agree	Disagree	Do not know

ISSN: 0975-8585

5	Should a HIV infected student allowed to attend school	Agree	Disagree	Do not know
	Knowledge of government's and NGO preventive measures			
1	Do you know December 1st is AIDS day	Yes	No	Do not know
2	How do you come to know about HIV-Mass media such as TV/Radio or interpersonal communication such as doctor/friends	Yes	No	Do not know
3	Do you hear about any NGOs in your local area spread the information about AIDS effectively?	Yes	No	Do not know
4	Have you seen posters or information regarding AIDS at public places or anywhere else?	Yes	No	Do not know
5	Do you think govt intervention programmes being done are enough to create AIDS awareness.	Yes	No	Do not know

DATA ANALYSIS INCLUDING STATISTICAL ANALYSIS

Each part of the questionnaire consisted of Yes, No, Do not know answers, except for the attitude part were grading was done as agree, disagree, and do not know. For statistical analysis the number of Yes, No, Do not know responses for each question was taken into account and fed into the software for analysis after taking into account the correct answer for all the questions. For the attitude part alone score was given while feeding them, score 0 was given for the answer do not know, score 1 was given for the answer agree and score -1 was given for the answer disagree. Statistical techniques such as frequencies, percentage, mean, and chi square test have been applied. Kruskall Wallis test was used to calculate the P value.

RESULTS

The demographic detail of the study population is given in table 1.

Table 1: Demographic details

Variables	Number	%
Age		
<20	66	29.33
21-40	118	52.44
41-60	36	16.00
>60	5	2.23
Sex		
Male	78	34.7
Female	147	65.3
Residence		
Rural	140	62.2
Urban	85	37.8
Literacy		
Illiterate	45	20.0
Primary education	70	31.1
Secondary education	56	24.9
Graduates/PG	54	24.0

ISSN: 0975-8585

Table-2 Awareness regarding HIV/AIDS

	Mean	S.D	Kruskal Wallis	p-value
Age			5.50	.063
<20	2.92	1.01		
21-40	2.60	0.92		
>41	2.68	1.01		
Gender			7.27	**.007**
Male	2.50	0.96		
Female	2.82	0.96		
Residence			0.77	.381
Rural	2.67	1.01		
Urban	2.78	0.89		
Literacy			22.99	**.000**
Illiterate	2.22	0.82		
Primary	2.83	1.02		
Secondary	2.63	0.95		
Graduates	3.06	0.88		

Table 2 shows the mean awareness about HIV/AIDS among the study population according to various demographic factors. It was found that females had statistically significant more awareness than males. Also, graduates had statistically significant more awareness than their counterparts.

Table 3: Knowledge of transmission regarding HIV/AIDS

	Mean	S.D	Kruskall Wallis	p-value
Age			2.18	.336
<20	7.26	1.46		
21-40	6.55	2.19		
>41	6.68	2.57		
Gender			0.26	.613
Male	6.62	2.20		
Female	6.87	2.04		
Residence			1.28	.257
Rural	6.93	1.96		
Urban	6.54	2.29		
Literacy			22.13	**.000**
Illiterate	5.80	2.57		
Primary	6.53	2.18		
Secondary	6.88	1.67		
Graduates	7.83	1.40		

Table 3 shows the mean knowledge about transmission of HIV/AIDS among the study population according to various demographic factors. Again, it was seen that graduates had higher knowledge about HIV transmission than illiterates which was statistically significant.

ISSN: 0975-8585

Table 4: Knowledge regarding Prevention of HIV/AIDS

	Mean	S.D	Kruskall Wallis	p-value
Age			10.80	**.005**
<20	2.88	1.13		
21-40	2.25	1.28		
>41	2.44	1.16		
Gender			2.05	.343
Male	2.31	1.25		
Female	2.56	1.23		
Residence			0.67	.413
Rural	2.42	1.28		
Urban	2.55	1.18		
Literacy			40.79	**.000**
Illiterate	1.62	1.03		
Primary	2.24	1.22		
Secondary	2.98	1.07		
Graduation	2.94	1.14		

Table 4 shows the mean knowledge about prevention of HIV/AIDS among the study population according to various demographic factors. It was seen that subjects <20 years had better knowledge about prevention than subjects of 21-40 years and >41 years age group, which was statistically significant ($p<0.05$). When compared according to their literacy status, subjects with secondary education had more knowledge about prevention.

Table 5: Knowledge regarding measures taken NGOs and government to prevent HIV/AIDS

	Mean	S.D	Kruskall Wallis	p-value
Age			8.32	**.016**
<20	3.64	1.10		
21-40	3.07	1.36		
>41	3.00	1.52		
Sex			0.34	.558
Male	3.15	1.38		
Female	3.26	1.32		
Residence			0.10	.753
Rural	3.26	1.26		
Urban	3.15	1.47		
Literacy			28.75	**.000**
Illiterate	2.42	1.25		
Primary	3.06	1.34		
Secondary	3.64	1.29		
Graduates	3.67	1.13		

Table 5 shows the mean knowledge regarding measures taken by NGOs and government to prevent HIV/AIDS among the study population according to various demographic factors. It was seen that subjects of <20 years and graduates had significantly higher knowledge regarding measures taken NGOs and government to prevent HIV/AIDS when compared with other groups in their respective demographic factor.

ISSN: 0975-8585

Table 6: Will you be willing to take care of HIV infected child or spouse

		Disagree		Do not know		Agree		p-value
		N	%	N	%	N	%	
Will you be willing to take care of HIV infected child or Spouse	**Age**							
	< 20	21	31.8	5	7.6	40	60.6	**0.005**
	21 to 40	42	35.6	28	23.7	48	40.7	
	> 41	21	51.2	7	17.1	13	31.7	
	Sex							0.401
	Males	30	38.5	17	21.8	31	39.7	
	Females	54	36.7	23	15.6	70	47.6	
	Residence							.052
	Rural	60	42.9	20	14.3	60	42.9	
	Urban	24	28.2	20	23.5	41	48.2	
	Literacy							.209
	Illiterate	18	40.0	12	26.7	15	33.3	
	Primary education	29	41.4	14	20	27	38.6	
	Secondary education	19	33.9	7	12.5	30	53.6	
	Graduates	18	33.3	7	13.0	29	53.7	

Table 7: Should HIV/AIDS discussed on TV/Schools

		Disagree		Do not know		Agree		p-value
		N	%	N	%	N	%	
Should HIV/AIDS discussed on TV/Schools	**Age**							**.002**
	< 20	4	6.1	2	3.0	60	90.9	
	21 to 40	25	21.2	16	13.6	77	65.3	
	> 41	9	22.0	7	17.1	25	61.0	
	Sex							**0.001**
	Male	22	28.2	11	14.1	45	57.7	
	Female	16	10.9	14	9.5	117	79.6	
	Residence							**0.001**
	Rural	17	12.1	10	7.1	113	80.7	
	Urban	21	24.7	15	17.6	49	57.6	
	Literacy							**0.013**
	Illiterate	3	6.7	9	20.0	33	73.3	
	Primary education	18	25.7	10	14.3	42	60.0	
	Secondary education	7	12.5	4	7.1	45	80.4	
	Graduates	10	18.5	2	3.7	42	77.8	

ISSN: 0975-8585

Table 8: Will you be comfortable sharing a meal with a HIV infected person

		Disagree		Do not know		Agree		p-value
		N	%	N	%	N	%	
Will you be comfortable sharing a meal with a HIV infected person	**Age**							**0.002**
	< 20	16	24.2	7	10.6	43	65.2	
	21 to 40	42	35.6	30	25.4	46	39.0	
	> 41	20	48.8	6	14.6	15	36.6	
	Sex							0.640
	Male	30	38.5	15	19.2	33	42.3	
	Female	48	32.7	28	19.0	71	48.3	
	Residence							0.442
	Rural	47	33.6	24	17.1	69	49.3	
	Urban	31	36.5	19	22.4	35	41.2	
	Literacy							**0.014**
	Illiterate	20	44.4	11	24.4	14	31.1	
	Primary education	30	42.9	13	18.6	27	38.6	
	Secondary education	36	64.3	6	10.7	14	25.0	
	Graduates	27	50	13	24.1	14	25.9	

Table 9: Should a HIV infected student allowed to attend school

		Disagree		Do not know		Agree		p-value
		N	%	N	%	N	%	
Should a HIV infected student allowed to attend school	Total	61	27.1	45	20	119	52.9	
	Age							**0.028**
	<20	21	31.8	5	7.6	40	60.6	
	21 to 40	33	28.0	29	24.6	56	47.5	
	>41	7	17.1	11	26.8	23	56.1	
	Sex							0.077
	Male	20	25.6	22	28.2	36	46.2	
	Female	41	27.9	23	15.6	83	56.5	
	Residence							0.479
	Rural	37	26.4	25	17.9	78	55.7	
	Urban	24	28.2	20	23.5	41	48.2	
	Literacy							**0.000**
	Illiterate	10	22.2	13	28.9	22	48.9	
	Primary education	23	32.9	20	28.6	27	38.6	
	Secondary education	21	37.5	9	16.1	26	46.4	
	Graduates	7	13	3	5.6	44	81.5	

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Table 10: Should HIV infected people be avoided in society

		Disagree		Do not know		Agree		p-value
		N	%	N	%	N	%	
Should HIV infected people be avoided in society	**Age**							**0.015**
	<20	37	56.1	4	6.1	25	37.9	
	21 to 40	44	37.3	26	22.0	48	40.7	
	> 41	15	36.6	5	12.2	21	51.2	
	Sex							0.183
	Male	27	34.6	15	19.2	36	46.2	
	Female	69	46.9	20	13.6	58	39.5	
	Residence							**0.000**
	Rural	72	51.4	11	7.9	57	40.7	
	Urban	24	28.2	24	28.2	37	43.5	
	Literacy							**0.001**
	Illiterate	20	44.4	10	22.2	15	33.3	
	Primary education	21	30.0	14	20	35	50	
	Secondary education	37	66.1	4	7.1	15	26.8	
	Graduates	18	33.3	7	13	29	53.7	

DISCUSSION

In the present study population, the younger generation i.e. age <20 years were willing to take care of HIV infected child or spouse which was statistically significant suggestive of a very positive approach of the younger generation. (Table 6)

In response to whether HIV/AIDS should be discussed on TV/schools, the younger generation i.e. <20 years, females, rural population and subjects with secondary education agreed which was statistically significant. This may be because of the craving for authentic knowledge among the younger generation. The female population may also want to know the reliable information rather than the information acquired by hearsay. Similarly the people from rural areas may want to increase their knowledge about the facts rather than unfounded information. (Table 7)

In response to whether they will be comfortable in sharing a meal with a HIV infected person, subjects less than 20 years agreed illustrating a positive approach. Surprisingly, subjects with primary education agreed in sharing meal with HIV infected person which was statistically significant. (Table 8)

In response to whether a HIV infected student should be allowed to attend school, subjects <20 years and graduates agreed which was statistically significant. This shows that they have good knowledge about the transmission of the disease and also know the importance of education. (Table 9). In the present study, more than half of the study population (52.9%) agreed that HIV infected student should be allowed to attend the school, which is in contrast to the study done by Tavoosi A et al5, Agrawal HK et al6 and Nur N7.

In response to whether HIV infected people should be avoided in society, the younger population i.e. <20 years disagreed but >41 years age group agreed which was

statistically significant. This tells us about the generation gap in the attitude of the people towards HIV infected persons. This may also be due to lack of adequate knowledge about transmission among >41years age-group. Surprisingly, the populations residing in urban areas were not able to decide whether to agree or disagree with the statement. (Table 10)

CONCLUSIONS AND RECOMMENDATIONS

Our study here has observed a significant good level of awareness towards HIV, but more sustained efforts are needed to make the people fully aware of the modes of transmission and prevention of HIV/AIDS. Though the study subjects had some factual knowledge about HIV/AIDS, certain misconceptions and myths persisted. They were also found to have a biased and negative attitude towards people with AIDS. Open discussions about HIV are still rare in Karaikal. Unfortunately at present, even in most of the urban population, the complete awareness about this dreaded disease is low. Stigma and discrimination towards patients living with HIV/AIDS is seen not only in common public but also in health care workers and social servicing agencies. Specific recommendations which may be made with respect to keeping in mind the objectives of the study include.

- Sustain an emphasis on routes of transmission, particularly mother-to-child transmission, and undertake further efforts to tackle misconceptions about routes of transmission as part of a broader strategy to reduce stigma.
- Encourage condom use by seeking to reduce embarrassment and to develop a positive association to normalize their use.
- Strengthen messaging on the care and treatment of those living with HIV/AIDS.
- Increase messaging about HIV testing, such as by providing information on who should get tested and the benefits of testing.
- Inclusion of sex education and family life education in school/college curriculum.
- Mass education using television, radio, newspaper etc for propagating safe sex and dispelling the myths.

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