

DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE AND ATTITUDE OF HIGHER SECONDARY STUDENTS REGARDING PREVENTION OF HIV/AIDS IN SELECTED SCHOOLS OF VADODARA

Jaimini Patel¹, Ruhi Varghese²

1. Student, Sumandeep Nursing College, Sumandeep Vidyapeeth, Piparia, Vadodara, Gujarat
2. Assistant Professor, Sumandeep College of Nursing, Piparia, Vadodara-391760, Gujarat

Address for Correspondence: Mrs. Ruhi Varghese, Assistant Professor, Sumandeep College of Nursing, Piparia, Vadodara-391760, Gujarat

ABSTRACT

Introduction: Acquired immunodeficiency syndrome (AIDS) is an on major health problem worldwide. The numbers of infected people are on an increase. Knowledge and attitude toward prevention of the disease is necessary among higher secondary student. This study is aimed at assessing the knowledge and attitude about human immunodeficiency virus (HIV)/AIDS among higher secondary studying in selected school of Vadodara district and correlation between knowledge and attitude. **Objectives:** To assess the level of knowledge and attitude regarding prevention of HIV/AIDS among higher secondary students. To find out co-relation between knowledge and attitude of higher secondary student regarding prevention of HIV/AIDS. To find association between the knowledge and attitude level of higher secondary students and selected demographic variables. **Method:** Non experimental research was conducted among higher secondary student aged 15-19 years studying in a 12th stander student. Data were collected using a semi structured questionnaire and checklist developed with the help of existing literature, from 60 participants (students). **Results:** To assess the knowledge score of higher secondary students was 83.3% showed that had average knowledge and attitude scale of higher secondary students was 90% showed that had favorable attitude. The knowledge and attitude co-relation between negative co-relation. Chi-square was used to determine the association between the knowledge score and selected demographic variables and attitude scale and selected demographic variables. It is found that from the all variable significantly not associated with knowledge of higher secondary students so (H_{01}) accepted and all demographic variables significantly not associated with attitude scale of higher secondary students so (H_{02}) accepted. There were several misconceptions about the modes of transmission of the HIV/AIDS Prevention. **Conclusion:** The research approach adopted in the present study is an evaluative research approach with a view to measure the knowledge and attitude on prevention of HIV/AIDS in higher secondary students. The knowledge and attitude scores The data were interpreted by suitable and appropriate statistical method.

Key words: Knowledge, attitude, prevention of HIV/AIDS, higher secondary students.

Introduction

“Keep safe the next generation, work for prevention of transmission”

Acquired Immune Deficiency Syndrome (AIDS) is caused by a human immunodeficiency virus (HIV) that weakens the immune system and makes the body susceptible to various diseases and thus makes the person unable to recover from the effect of the disease. HIV/AIDS is one of the most complex health problems in 21st century and has become a pandemic disease that threatens the world population. Since there is no treatment or cure in sight, the disease continues to spread at an alarming rate.¹

HIV/AIDS has emerged as the single most formidable challenge to public health, human rights and development in the new millennium. UNAIDS estimates 38 million people across the world are living with HIV/AIDS. HIV (Human Immunodeficiency Virus) mainly affects sexually active young people. Young adults aged 15–29 years, account for 32% of AIDS cases reported in India and the number of young women living with HIV/AIDS is twice that of young men. The aim of the study was to higher secondary students knowledge, perceptions and attitudes towards HIV/AIDS.²

In India, young people in the age group 15 - 24 years comprise almost 25% of the country's population, however, they account for 31% of the AIDS burden in 2009. Well known factors such as peer pressure, increasing levels of social interaction with the opposite sex, and even household factors like broken families and poverty, contribute to increased sexual activity and promiscuity. In a conservative society where sex-related issues constitute a taboo for discussion, young people are hindered from actively seeking counselling regarding sexual health. Social ostracism and disease-associated stigma have created an attitude of negativity and shame in the minds of especially young people. This results in lack of knowledge about self-protection measures, leading to a silent spread of the disease. Despite these

worrisome statistics, some Indian states have banned sex education in schools, following protests from legislators that it would have a negative impact on the vulnerable minds of school students. Widespread ignorance about the disease is still prevalent, even among youth belonging to the affluent sections of society.³

Material and Method:

Methodology of research organizes all the components of the study in a way that is most likely to lead to valid answers to the sub-problem that have been posed.

Research approach: Evaluative approach was used for the study

Research design: Non-experimental descriptive research design.

Variables under study: Variables are qualities, properties or characteristics of person, things or situation than change or vary.

- **Independent variables:** Independent variables are the variable that stands alone and does not depend on any other.
- **Demographic variables:** Consist of demographic variables such as age, sex, education, stream, father occupation, and religion.

Research setting: Settings are the more specific places where data occurs, based on the research question and type of information needed to address it. The setting of the present study was Faiz Higher Secondary School Vasna Road in Vadodara District.

Target population: Population is a group whose members possess specific attributes that researcher is interested in studying. The population of this study comprising higher secondary student of Faiz higher secondary school in Vadodara district.

Sample and Sampling Technique: The sample of the study comprised of 60 higher secondary school students studying in Faiz Higher Secondary School in Vadodara.

Purposive sampling will be used for this study. Who were easily accessible to the researcher and who needs the criteria of the study.

Criteria for selection of sample

The criteria for the sample selection are:

- Students studying in higher secondary school.
- Students who are willing to participate in the study.
- Students aged between 15-19 years.
- Students of Gujarati medium.
- Instrument Intended to be used:

Questionnaire, Checklist

Data collection instrument: The Data collection tool is the instrument i. e. the written device that the researcher uses to collect the knowledge data questionnaire and attitude testing was done through checklist.

Development of the tool: After an experience review of literature and discussion with the experts, a knowledge questionnaire and attitude scale was prepared to assess the knowledge and attitude on prevention of HIV/AIDS in higher secondary student.

The following steps were carried out in preparing the tool:

- Literature review
- Validity of tool
- Reliability

Description of the tool: The final tool comprised of two parts.

Part 1: Consist of demographic variables such as age, sex, stream, parent's occupation, residence, family income, habit and type of family.

Part 2: Questionnaire will be used to assess the knowledge and attitude will be used to assess the checklist.

Content validity: Validity refers to the degree to which an instrument measures what it is supposed to measure. Content validity refers to the degree to which the items in and instrument adequately represent the universe of content.

Content validity was established by 07 experts comprising of 06 nursing experts from community health nursing department and mental health nursing department, 01 biostatistician. 100 % agreement on all items of the tool except the correction made in the tool and content. The final content was prepared as per the suggestions and advice given by the experts.

Reliability: Reliability is the degree of consistency or dependability with which an instrument measures the attribute it is designed to measure. The tool after validation was subjected to test for its reliability. The questionnaire was administered to six students. The reliability was established by using split half technique and spearman's brown prophecy formula. So tool was found to be highly reliable for data collection.

Pilot study: Pilot study is a trial run study conducted before the actual study in a different population with similar characteristics. Pilot study was conducted on 6 students 12th standard of Saraswati higher secondary school Vadodara 3th September 2014 2014 with the purpose of testing the proficiency of the instrument to be used for data collection for the main study.

On the pre knowledge test (O₁) was administered the use questionnaire to assess the knowledge and Checklist to assess the attitude.

The finding of the data reveals that the study is feasible.

Process of data collection

- **Permission from concern authority:** The research investigator obtained the ethical clearance and formal permission from the selected higher secondary school Vadodara district and approval was obtained to conduct the study.
- **Period of data collection:** The data collection procedure was carried out from 17-09-2014 for the period of one day. The investigator himself collected pretest.
- **Knowledge test:** Knowledge test was conducted on the day 60 students 12th standard. Knowledge questionnaire was administered. They were instructed to go through the instruction before proceeding to answer the questionnaire.
- **Attitude scale:** Attitude scale was conducted on the day for 60 students 12th standard. Checklist was administered. They were instructed to go through the instruction before proceeding to answer the checklist.

Plan for data analysis

Data analysis is the systematic organization and synthesis of the research data and testing of research hypothesis using the data.

For the present study, the data obtained were analyzed in respect to the objectives of the study by using descriptive and inferential statistics. The plan of data analysis was worked out with the experts in the field of statistics and nursing.

The plan of data analysis is as follows:

- Organize data in master sheet / computer.
- Frequency and percentage for the analysis of demographic data.
- Association of knowledge with selected demographic variable and attitude scale with selected demographic variable was using chi-Square test.
- Correlation for the knowledge and attitude scale.

Results :

Description of the demographic variables. This section deals with the description of the demographic characteristics of adolescents and has been presented in the form of frequency and percentage.

This section reveals the knowledge and attitude score of higher secondary student regarding prevention of HIV/AIDS.

This section also deals with the analysis and the interpretation of the data of the knowledge test and attitude scale of the prevention of HIV/AIDS.

Table-1: Demographic profile of the respondents (n=60)

Variables		No.	%
Age	15-16	01	1.7
	16-17	22	36.7
	17-18	20	33.3
	18-19	17	28.3
Gender	Male	27	45.0
	Female	33	55.0
Course of Study	Science	37	61.7
	Arts	04	6.7
	Commerce	19	31.6
Type of Family	Nuclear	23	38.3
	Joint	37	61.7
Place of residence	Urban Area	55	91.6
	Rural Area	05	8.4
Parents Occupation Status	Farmer	07	11.6
	Worker	23	38.4
	Teacher	20	33.4
	Other	10	16.6
Family Income	Up to 5000	05	8.4
	5000-10000	22	36.6
	10000-20000	25	41.6
	20000 above	08	13.4
Habit of student	Alcoholism	00	0.0
	Smoking	01	1.7
	Pan chewing	01	1.7
	None	58	96.6

A total of 60 study subjects were enrolled in the study. Table 1 shows the socio-demographic profile of study subjects. All of them included in this study belongs to age group of 15-19 years and were divided into four groups i.e, 15-16; 16-17;17-18 yrs and 18-19 yrs for the purpose of analysis.

Study subjects were predominantly female i.e. 33 (55.0%) and most of the student holding the science subject (61.7%). Area wise analysis shows that about most of the study subjects belong to urban area (6.1%). With regard to parents' occupational status of study subjects, most of the subjects belong to workers (38.4%) in comparison to teacher (33.4%).

Economic class wise analysis shows that most of the study subjects belong to 10000-2000 (41.6%) and 5000- 10000 (36.6%) only 8.4% of income in the range group of Upto 5000. Percentage in habit of student non-using any kind substance 96.6% the use of pan chewing and smoking was 1.7% respectively.

The total knowledge score obtained by the subjects are arbitrarily graded as follows.

Table- 2: Description of knowledge score of the students

Range of score	% score	Level of knowledge	No.	%
0 -10	0-33.33	Poor	08	13.33
10-20	33.33-66.66	Average	50	83.33
20-30	66.66-100	Good	02	3.33
Total			60	100.0

Table-2 depicting classification of respondent's by knowledge score of prevention of HIV/AIDS

Table-3: Description of attitude scale and level of attitude

Range of score	% score	Level of Attitude	No.	%
0-26	0 - 32.5	Unfavorable	02	3.33
27-52	32.5-65	Favorable	54	90.0
53-80	65-100	Most favorable	04	6.67
Total			60	100.0

Table-3 depicting classification of respondent's by attitude scale of prevention of HIV/AIDS. The total Attitude obtained by the subjects is arbitrarily graded as follows.

Table-4 : Correlation of knowledge and attitude regarding prevention of HIV/AIDS.

Variables	Value	Std. error	Approx. t value	Correlation value
Knowledge	60	0.099	-0.790	-0.10999
Attitude	60	0.112	-0.863	

Table- 5: Association between the knowledge score and selected demographic variables.

Characteristic		No.	Level of knowledge			Degree of Freedom	χ^2 value	Table value	Significant
			Good	Average	Poor				
Age	15-16	1	0	1	0	6	0.519	12.59	NS
	16-17	22	3	17	1				
	17-18	20	2	17	1				
	18-19	17	3	15	0				
Gender	Male	27	4	20	0	2	0.64	5.99	NS
	Female	33	4	30	2				
Course of Study	Science	37	7	29	1	4	3.38	9.49	NS
	Arts	4	0	4	0				
	Commerce	19	1	17	1				
Type of Family	Nuclear	23	2	20	2	2	1.78	5.99	NS
	Joint	37	6	30	0				
Place of residence	Urban Area	55	7	46	2	2	0.192	5.99	NS
	Rural Area	5	1	4	0				
Parents Occupation status	Farmer	7	3	4	0	4	5.0093	9.49	NS
	Worker	23	2	19	2				
	Teacher	20	1	19	0				
	Other	10	1	9	0				
Family Income	Up to 5000	5	1	4	0	4	1.634	9.49	NS
	5000-10000	22	3	18	1				
	10000-20000	25	2	22	1				
	20000 above	8	2	6	0				
Habit of student	Alcoholism	0	0	0	0	4	0.05	9.49	NS
	Smoking	1	0	1	0				
	Pan chewing	1	0	1	0				
	None	58	8	48	2				

All demographic variables were not significantly associated with knowledge score regarding prevention of HIV/ AIDS in higher secondary students.

Table - 6. Association between the attitude score and selected demographic variables.

Characteristic		Frequency	Level of knowledge			Degree of Freedom	χ^2 value	Table value	Significant
			Unfavorable (0-26)	Favorable (27-52)	Most favorable (53-80)				
Age	15-16	1	0	1	0	6	0.619	12.59	NS
	16-17	22	1	20	1				
	17-18	20	1	17	2				
	18-19	17	0	16	1				
Gender	Male	27	1	24	2	2	0.66	5.99	NS
	Female	33	1	30	2				
Course of Study	Science	37	1	34	2	4	0.97	9.49	NS
	Arts	4	0	3	1				
	Commerce	19	1	17	1				
Type of Family	Nuclear	23	1	21	1	2	0.46	5.99	NS
	Joint	37	1	33	3				
Place of residence	Urban Area	55	2	49	4	2	0.192	5.99	NS
	Rural Area	5	0	5	0				
Parents Occupation status	Farmer	7	0	7	0	4	1.25	9.49	NS
	Worker	23	1	19	3				
	Teacher	20	1	18	1				
	Other	10	0	10	0				
Family Income	Up to 5000	5	0	5	0	4	1.85	9.49	NS
	5000-10000	22	1	20	1				
	10000-20000	25	1	23	1				
	20000 above	8	0	6	2				
Habit of student	Alcoholism	0	0	0	0	4	0.026	9.49	NS
	Smoking	1	0	1	0				
	Pan chewing	1	0	1	0				
	None	58	2	52	4				

All demographic variable were not significantly associated with attitude scale regarding prevention of HIV/ AIDS in higher secondary student (**Table-6**).

Discussion:

The overall knowledge score of higher secondary students of 83.3% showed that had average score and attitude scale of higher secondary students of 90% showed that had favorable attitude. The knowledge score is no significant and attitude scale is no significant.

Analysis of variance (SPSS) was used instead of chi-square to determine the

association between the knowledge score and selected demographic variables and attitude scale and selected demographic variable. It is found that from the all variable significantly not associated with knowledge of higher secondary students so (H_{01}) accepted and all variables significantly not associated with attitude scale of higher secondary students so (H_{02}) accepted.

Summary:

This study deals with research methodology indicates consent of evaluative research approach using one group knowledge research design. This study describes variables, sample and sampling technique, development of an instrument.

Acknowledgement

I owe a deep sense of gratitude to each and every person who contributed to the accomplishment of this study. At the very outset, I wish to acknowledge my gratitude to the Dr. Mansukh, Founder of

Sumandeep Vidyapeeth, who has given me an opportunity to undertake this course in this esteemed institute.

I express my sincere gratitude to Mr. Ravindra HN Professor, my Principal. I take this opportunity to express my deep sense of gratitude and respect to my esteemed guide, Mrs. Ruhi Varghese Department of community Health Nursing, for being a source of inspiration in every phase of this dissertation. I am grateful to all of them who have directly or indirectly helped in successful completion of the thesis.

References:

1. Topical overview. HIV AIDS. WHO; 2008 Mar. www.msn.com/discussion/.
2. Park K. preventive and social medicine. 18th ed. Jabalpur: Bhanarsidas Bhanot Publishers, New Delhi; 2005.
3. Aghanwa. HS HIV AIDS and Indian youth. Journal of social aspects of HIV AIDS, 2009 Mar. 6(1)
4. Lal.S.S, Vasan.R.S, Thankappan.K.R. Knowledge and attitude of students in Kerala towards HIV AID. Sexually transmitted disease and sexuality,National medical journal of India: 2000:13 (9)p. 231-6.
5. Wesley Y. Nursing clinics North America. Saunders publications; London, 2006. Volume 41 No 3. p. 339-340.
6. Anand, Pandav, Nath. Study on impact of AIDS on economy of India, National Medical journal of India. 1999. p. 377-381.
7. Priyadharshi Thakur. status of HIV AIDS an executive summary. NACO's HIV estimates, 2003 Oct. 5(4).
8. M. C. Angermeyer. HIV sentinel surveillance and HIV estimation in India – a technical brief: NACO; 2007.
9. Uniting World against AIDS. 2008. <http://data.unaids.org>
10. Susan Kippax. Social Policy Research Centre: The University of New South Wales; Sydney (s.kippax@unsw.edu.au)
11. Yadav SB¹, Makwana NR, Vadera BN, Dhaduk KM, Gandha KM. J Infect Dev Ctries. 2011 Oct. 13-5 (10):711-6.
12. J Acquir, Holtgrave DR. Immune Defic Syndr. 2002 Jul. 1;30. Suppl 1:S130-3.
13. Sogolow E¹, Peersman G, Semaan S, Strouse D, Lyles CM. HIV/AIDS Prevention Research Synthesis Project Team. J Acquir Immune Defic Syndr; 2002 Jul. 1;30 Suppl 1:S15-29.
14. Quinn TC¹, Zacarias FR, St John RK. Medicine (Baltimore). 1989 Jul. 68(4):p.189-209.
15. Coulaud JP¹, Pradinaud R, Liautaud B. Med Trop (Mars). 1987; 47(3):p. 279-85.

