



Awareness on Viral Infection and Related Diseases among Children at Secondary Level

A. Selvan and P. Paul Devanesan

Faculty of Education,
Alagappa University,
Karaikudi – 630 003.

ABSTRACT

A viral infection occurs when a virus enters in the body through breathing contaminated air, eating contaminated food, or by having sexual contact with a person who is infected with a virus. The process of viral infection results in a variety of symptoms that vary character and severity depending on the type of viral infection and individual factors. Common symptoms of a viral infection include fatigue, flu-like symptoms and fever. Students studying in secondary schools must have knowledge about viruses and their related diseases. The major objectives of the study is the identify the awareness of viral infection and its related diseases and to enhance the same. Normative survey method is used to collect data. Simple random sampling technique is used to collect samples from target population. The reliability value is found to be 0.73. The percentage analysis and 't' test were used in the study. The awareness of viral infection and its related diseases is found to be at high level. There is no difference exist among various groups of students in awareness on viral infection and its related diseases. The study also suggested that special training for students must be carried out by the school authorities to enhance their knowledge level.

INTRODUCTION

A viral infection occurs when a virus enters in the body through breathing contaminated air, eating contaminated food, or by having sexual contact with a person who is infected with a virus. A viral infection may also be caused by an insect bite. In a viral infection, the virus invades the inside of the body's cells in order to reproduce. Then its spreads to other cells and repeats the process. This process of viral infection results in a variety of symptoms that vary character and severity depending on the type of viral infection and individual factors. Many types of viral infection, such as a cold are self limiting in generally healthy people. This means that the viral infection causes illness for period of time, then it resolves and symptoms disappear. There are many types of viruses that cause a wide variety of viral infections or viral diseases such as cold or an upper respiratory infection, influenza or the flu infectious mononucleosis shingles, and chickenpox, and AIDS etc. Therefore students studying in secondary schools must have knowledge about viruses and their related diseases. At the same time, they should also know, how viruses begins their infection in to human body and how to prevent them.

VIRUS INFECTION AND VIRAL DISEASES: MEANING

- Very simple sub microscopic organisms which can cause disease and infection and are only able to reproduce inside the living cells of a host.

NEED FOR THE STUDY

Human life is most valuable one. Human body is a gift of our life. Human body is more affected on viral infection and related diseases in our life. The present study is needed based on the following aspects.

- ❖ To study the level of awareness on viral infection and related diseases among secondary school students.
- ❖ To study the students knowledge on viral infection and related diseases.
- ❖ To study the general characteristics of virus.
- ❖ To study the physiological structure of virus.
- ❖ To study role of mass media and of increasing awareness on viral infection among higher secondary students.

SIGNIFICANCE OF THE STUDY

1. Secondary school students are having lack of knowledge on viral infection and related diseases. Once they are aware of viral disease, they may involve in community welfare service to prevent viral disease among people. In this context, the study has its own importance.

2. Virus cause many diseases in human being such as chicken pox, small pox, rabies, Aids, yellow fever, polio etc. In this context, the study has its own significance.
3. Viruses are very easily transmitted from one organism to another by biological vectors. Viruses cause agents of highly infectious diseases and they are wide variety of organisms. By considering this point, the study is an essential one in the present context.

SCOPE OF THE STUDY

1. The scope of present study aims to enhance level of awareness on viral infection and related diseases among secondary school students in and around Sivangangai.
2. By enhancing the awareness on viral infection among students. They may to prevent the viral infection in their life.

BACKGROUND LITERATURE

The studies conducted by one supporting the present research study (Harvey, *et al* (2010), Jacqueline, *et.al* (2010), Hesham, *et.al* (2010)) and its importance on students physical and mental health.

OBJECTIVES OF THE STUDY

1. To identify the diseases caused by virus and its effect from various sources.
2. To find the extend of awareness on viral diseases and their effects among secondary school students.
3. To find out the significant difference in any between the different groups of demographic variables such as gender, student resident, types of school, nature of school and parents educational qualification in awareness on viral diseases and their effects.
4. To give valuable suggestions to eradicate the diseases that is spreader by different types viruses and their effects.

HYPOTHESES OF THE STDUY

1. The level of awareness on viral infection among the school students is above the average level
2. There exists significant difference between the different groups of demographic variables such as sex, nature of school, student residence, types of school and parents educational qualification on viral infection and related diseases.
3. Students studying in various schools located in urban areas have more awareness on viral infection and related diseases than students in Rural school.

RESEARCH METHOD

The investigator preferred normative survey method for identifying the awareness on viral infection and related diseases.

CONSTRUCTION OF RESEARCH TOOLS

In the process of construction of research tool, the investigator gone through the internet and identified various sources from which relevant materials are collected. The collected information from teachers and students helped the investigator to frame the items for construction of research tools.

PILOT STUDY

The pilot study was conducted in two schools namely Raja HSS, Sivagangai and Government HSS, Keelakandani. The investigator collected 50 samples from the above said Higher Secondary Schools.

RESEARCH TOOL

The nomenclature the research tool is given below: "Identification of Awareness on Viral Infection among Secondary School Students".

DESCRIPTION OF RESEARCH TOOL AND SCORING PROCEDURE

The research tool framed for the present study has 30 items. All the items are closed types. The respondents of school students who would answer for the question items should be specifically indicate the responses of 'I Know' (or) 'I Don't know'. If they indicate the response of 'I know' which carries one frequency? If the school students indicate the response of 'I don't know' which carries zero frequencies?

Reliability

The investigator used the split half method in the present study. The reliability value is found to be 0.73.

Validity

In this study the investigator preferred content validity.

SAMPLING TECHNIQUE

The investigator employed simple random sampling technique in order to collect data from the students studying in secondary schools.

DATA COLLECTION

The investigator personally visited few schools located in Sivagangai district and collected responses from the school students by maintaining perfect supervision.

DATA ANALYSIS

The collected responses were taken for statistical analysis. The investigator used percentage analysis to identify the level of awareness on viral infection and related diseases and then the investigator used the test of significance to find out the significant differences of various groups of demographic variables on viral infection and related diseases.

DELIMITATION OF THE PRESENT STUDY

The following are some of the delimitation of the present study

- ❖ The study is confined to the area of Sivagangai District
- ❖ Only six schools located in Sivagangai district are considered for the present study
- ❖ The samples are collected only from 240 samples
- ❖ Viral infection and related diseases such as symptoms and prevention of diseases are alone considered in this study

PERCENTAGE ANALYSIS

Table 1: Distribution of percentage scores of various groups of Awareness on Viral Infection and related diseases

S.No.	Categories	Percentage %	
1	Overall categories	80	
2	Sex	Male	79
		Female	80
3	Student Resident	Rural	79
		Urban	81
4	Type of School	Govt. School	80
		Govt. Aided School	79
5	Nature of School	Co-Education School	79
		Girls School	81
6	Parents Educational Qualification	Primary Education	80
		Secondary Education	79
		Higher Secondary Education	78

FINDINGS

The secondary school students of Sivangangai district has highest level of awareness (i.e 80%) on viral infection and related diseases, Male and Female students (i.e 79% and 80%), Government and Government Aided students (i.e 80% and 79%), Rural and Urban secondary school students (i.e 81% and 79%), Co-Education and Girls secondary schools students (i.e 81% and 79%) and Students whose Parents educational qualification are primary education, secondary education, and higher secondary level (i.e 80%, 79%) are having highest level of awareness on viral infection and its related diseases.

DIFFERENTIAL ANALYSIS

Table 2 : Distribution of mean difference between difference groups of biographical variables of Awareness on Viral Infection and Related Diseases

Sl No.	Categories	N	df	't' Values	Level of Significance
1	Sex Female Vs Male	140	238	t = 1.73 M ₁ = 24.13 S ₁ = 2.67 M ₂ = 23.61 S ₂ = 2.16	Not Significant
		100			
2	Type of School Govt. School Vs Govt. Aided School	160	238	t = 0.7 M ₁ = 23.98 S ₁ = 2.66	Not Significant
		180			

					$M_2 = 23.77$	$S_2 = 2.05$		
3	Student Resident	Urban Vs	140	238	$t = 2.11$		Not Significant	
		Rural	100		$M_1 = 24.3$	$S_1 = 2.86$		
					$M_2 = 23.59$	$S_2 = 2.10$		
4	Nature of School	Govt. School Vs	200	238	$t = 1.65$		Not Significant	
		Co-Education School	40		$M_1 = 24.67$	$S_1 = 3.51$		
					$M_2 = 23.76$	$S_2 = 2.19$		
5	Parents Educational Qualification	Primary Education Vs	135	201	$t = 0.48$		Not Significant	
		Secondary Education	66		$M_1 = 24.04$	$S_1 = 2.58$		
					$M_2 = 23.86$	$S_2 = 2.42$		
		Secondary Education Vs	66	105	$t = 0.51$		Not Significant	
		Higher Secondary Education	39	$M_1 = 23.06$	$S_1 = 2.42$			
				$M_2 = 23.62$	$S_2 = 2.27$			
		Primary Education Vs	135	174	$t = 0.53$		Not Significant	
		Higher Secondary Education	39	$M_1 = 24.04$	$S_1 = 2.58$			
				$M_2 = 23.62$	$S_2 = 2.27$			

FINDINGS

Male and Female students, Government and Government Aided school students, Rural and Urban students, Co-education and Girls students, The students whose Parents educational qualification at primary education and secondary education, The students whose Parents educational qualification at secondary education and higher secondary education and The secondary schools students whose Parents educational qualification at primary education and higher secondary education have same level of awareness on viral infection and its related diseases.

SUGGESTION

The special innovative training must be offered to students studying in secondary schools related to viral infection and its diseases.

CONCLUSION

The study concluded that both male and female students have average level of awareness on viral infection and related disease. And at the same time, female students have more awareness than male students. Therefore special training programmes and other educational programmes may be offered for male students in order to enhance their level of awareness.

REFERENCES

1. Arunima Mukherjee (2009), Advances in microbiology Oxford book company.
2. Jacqueline firth et.al (2010), HIV -1 Sero prevalence and Awareness of mother-to-child transmission issues among women seeking antenatal care in Tamil Nadu, India.
3. Kamal Kapoor (2006), General microbiology Yash publication
4. Kathari (1999), "Research Methodology" Wishwa Prakasam, New Delhi.
5. Kokesh C.R (1989), "Methodology of Education Research" Vikas publishing house Pvt.Ltd Delhi.
6. Narayanan (2004), "Molecular Biology & Genetic Engineering" Saras publication, Nagercoil, Tamil Nadu.