

A Descriptive Study to Assess the Knowledge regarding Swine Flu among Adolescents in Selected School of District Sri Muktsar Sahib, Punjab

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Abstract: Globally, India was one among the most affected countries for cases and deaths of swine flu (influenza A H1N1) during 2009 influenza pandemic with lot of public hype and panic. A descriptive research design was used to assess the knowledge regarding swine flu among the adolescents in selected community area of Punjab. A total of 60 adolescents were taken from the selected school i.e. govt. Senior. Secondary School Lambi and Adarsh Senior Secondary School Kotbhai by using convenience technique. Semi structured questionnaire was used to assess their knowledge regarding Swine flu. It was found that 24 (40%) adolescents were in the age group of >15 years and 24 (40%) were in the age group of 16 years and 12 (20%) adolescents were in the age group of 17. It was found those 30 (50%) males adolescents and 30 (50%) female adolescents. Approximately 41 (68%) adolescents belonged to Sikh religion. It was found that 60 (100%) of adolescents were education in 11 Sciences. It was found that most of the adolescents 39 (65%) belong to joint family. Regarding monthly income of family 29 (48%) of adolescents family income was below 10000 and 12 (20%) of adolescents family income was 10001-20000 and 19 (32%) of adolescents family income was 20000 or above. It was found that majority of the adolescents 46 (77%) belong to rural area and 14 (23%) belong to urban area. Regarding the source of information about 26 (43%) adolescents obtained information from mass media. It was found that majority of the adolescents were 60 (100%) not previously affected with swine flu. The relationships of knowledge with selected socio-demographic variables were found to be statistically non-significant at 0.05 level of significance. It is found that 5% adolescents had poor knowledge, 78.3% had average knowledge and 16.7% had good knowledge regarding swine flu.

Keywords: Assess, Knowledge, Swine flu, adolescents.

1. Introduction

According to W. H. O, Adolescence is a transitional phase of growth and development between childhood and adulthood. Adolescent is a social concept. Adolescent period is a very difficult time for young people. Adolescent, the second decade of life, is a period of rapid growth and development, when young people acquire new capacities and faced with many new situations that create not only opportunities for progress, but also a risk to health and wellbeing. According to WHO in 2005, 50% of the world population were below the age of 25 years, i. e. ¼ of the population are adolescent, 160 million live in developing countries and 91.3 million in developed countries.

Swine flu is causing a massive havoc among the common people of India and has created fear across the various strata of the society. In April 2009, a new strain of influenza virus-A/H1N1, commonly referred to as "Swine flu", began to spread in several countries around the world. Evidence that this new strain could pass from human to human led the World Health Organization to quickly raise the risk level to Phase 6, indicating that a full global pandemic was under way.

According to W. H. O estimates, 1/3rd of the world's population will be affected with H1N1 flu within two years and India is no exception. It ranked 3rd most affected country for cases and deaths of swine flu globally. The no. of cases in various countries in subsequent three years has well established the reason why it is being considered as a major threat in emerging disease in global scenario. In context to India, the highest number was reported in 2009

(27, 236), followed by 2010 (20, 604) and 2012 (5, 054 cases). WHO 2009, World Wide Figures for H1N1, have at least brought out 1 consensus among experts. The youth is more affected by it 41.6% of the people who tested positive for H1N1, in India are from metros and are youth of the death in Bangalore from swine flu, mostly are from the late 21s. The outbreak of pandemic swine flu took thousands of lives in the year 2009, as part of the health care provider it is over role that play a major role in the awareness of the swine flu and its prevention among youths.

Swine flu is an infection by any one of several types of swine influenza virus. The H1N1 viral strain implicated in the 2009 flu pandemic among human after is called swine flu. Influenza A virus strain are Categorized according to protein found on the surface of the virus Hemagglutinin (H) & Neuraminidase (N) mode of transmission include air borne for mites incubation period ranges from 1 to 7 days.

Symptoms include fever, cough, sore throat, running nose, body ache, headache, chills, and fatigue, diarrhoea, vomiting have also been detected. The on-going H1N1 virus pandemic is expected to affected large portion of general population it mainly affects older children and youth early identification prompt treatment with antiviral drug in high risk individual with severe infection advice to prevent worsening of the disease and worth.

Statement of Problem:

"A descriptive study to assess the knowledge regarding swine flu among the adolescents in selected school of district Sri Muktsar Sahib, Punjab."

Aim of the Study:

To assess the knowledge regarding swine flu among the adolescents in selected school of district Sri Muktsar Sahib Punjab.

Objectives of the Study:

- 1) To assess the level of knowledge regarding swine flu among the adolescents.
- 2) To find out the association between the level of knowledge regarding swine flu among adolescents with selected socio-demographic variables.

Operational Definitions:

- 1) Assess-It refers to the statistical measurement of knowledge among adolescents regarding swine flu.
- 2) Knowledge-It refers to knowledge score achieved by adolescents on knowledge questionnaire regarding swine flu.
- 3) Swine flu – It refers to an acute respiratory infectious viral disease caused by H1N1 virus and manifested by fever, cough, sore throat, running nose, body ache, chills and fatigue.
- 4) Adolescents-It refers to male and female students with age between 13-19 years studying in selected school of district Sri Muktsar Sahib Punjab.

Assumptions:

- 1) Adolescents have some knowledge regarding swine flu.
- 2) Adolescent's knowledge may differ according to their socio demographical variables regarding swine flu.

Delimitations: This study was delimited to,

- 1) Sample size was 60.
- 2) The age group was 13-19 years in selected school of District Sri Muktsar Sahib, Punjab.

2. Methodology**Research Approach:**

According to nature and accomplish the objectives of the study, a quantitative research approach was used to assess the knowledge among the adolescents regarding swine flu in community area Punjab.

Research Design:

“The research design is the master plan specifying the methods and procedures for collecting and analysing the needed information on a research study. A descriptive research design was used to conduct the study to assess knowledge regarding swine flu among adolescents in selected schools of district Sri Muktsar Sahib.

Variables:

A) Research Variable: The research variables included in the study is knowledge related to swine flu among adolescents.

Independent variable: Knowledge

Dependent variable: Swine flu

B) Demographic Variables:-In this study the demographic variables are age of adolescents, gender, and educational status, religion, type of family, and place of living etc.

Research Setting:

The present study was conducted in selected school of district Sri Muktsar Sahib i.e. government Senior Secondary School, Lambi. This school was located within 5 km away from State Institute of Nursing and Paramedical Sciences, Badal. The purpose of selection of this school was the investigator's convenience, feasibility, proximity and expected co-operation from the authorities in getting permission for the research study.

Target Population: “The entire population in which the researchers are interested and to which they would like to generalize the research findings. “The target population includes adolescents of age group of 13-19 years from selected school of Dist. Shri Muktsar Sahib.

Sample Size: The sample size for the study comprised of 60 adolescents.

Sampling Technique: The non-probability convenience sampling technique was used for this study.

Inclusion Criteria:

- a) Adolescents studying in selected school of district Sri Muktsar Sahib.
- b) Adolescents who can read either Punjabi or English.

Exclusion Criteria:

- a) Adolescents who were absent at the time of data collection.
- b) Adolescents who were not willing to participate in the study.

Development and Description of Tools

A descriptive study to assess the knowledge regarding swine flu among the adolescents in selected school of District Sri Muktsar Sahib Punjab. Therefore, semi-structured questionnaire was prepared to assess knowledge of adolescents regarding the swine flu. The review of literature, experts opinion and investigators own experience provide the base for construction tool.

Tool consists of two parts:

Part 1: Socio demographic variables.

Part 2: Semi structured knowledge questionnaire.

Part 1: For assessing socio demographic profile of adolescents. It was divided into 9 items i. e. age, gender, religion, education status, type of family, place of living, source of health information, family monthly income, and previously affected with swine flu.

Part 2: To assess the knowledge regarding swine flu among adolescent. This part consists of 15 multiple choice questions. Each correct answer will be scored has 1 mark and 0 mark for wrong answer.

Criterion Measures:

Maximum score = 15

Minimum score = 0

Levels of Knowledge:

Poor knowledge = Below 05

Average knowledge = 06-10

Good knowledge = 11-15

Validity of Tool: According to Smith “Validity is defined as degree to which the researcher has measures what he has set out to measure.”

Content validity of tool was determined by expert’s opinion and suggestions on relevance of knowledge. Tool was given to experts from nursing field, community health nursing, and paediatric nursing. The expert’s suggestions were considered and modifications were made.

Pilot Study: “A pilot study is a small scale version or trail run, done preparation of major study. “The pilot study was conducted on 10 adolescents. The findings of pilot study revealed that questionnaire was reliable. It was found to be 0.9. Thus the tool was found to be highly reliable.

Reliability of Research Tool: Reliability of tool was determined by test retest method which included Karl Pearson’s co-relation co-efficient formula.

Data Collection Procedure: Data collection was carried out during last week of April. Before commencing the task of data collection permission was obtained from the Principal of selected school. Firstly investigator met the school teachers of the selected school, introduced her and explained the purpose and importance of the study to the school teacher and obtained complete information the adolescents. After that teacher accompanied the investigator and went to the hall where the school teacher introduced the investigator and explain the purpose of the study to adolescents. Verbal consent was obtained from the adolescents and questionnaire was distributed.

Ethical Consideration: The research study was approved by research and ethical committee of SINPMS Badal, further formal permission was taken from the Principal of selected school of district Sri Muksar Sahib to conduct research study among adolescents.

Plan of Data Analysis: Analysis of data collection was done in accordance with the objectives of the study. Data obtained had been analysed in terms of descriptive and inferential statistics. Chi square test was used to find out the relationship of knowledge with socio demographic variables.

Section 1:

Table 1: Frequency and percentage distribution of samples according to selected demographic variables, N=60

S no.	Demographic Variables	Frequency	Percentage
1	Age (in years)		
	Less than 15	24	40%
	16 years	24	40%
	17 years	12	20%
2	Gender		
	Male	30	50%
	Female	30	50%
3	Religion		
	Sikh	41	68%
	Hindu	19	32%
	Muslim	0	0
	Other	0	0
3	Education status		
	11 Science	60	100%
	Other	0	0
4	Family type		
	Joint Family	39	65%
	Nuclear Family	21	35%
5	Religion		
	Sikh	32	53.3
	Hindu	26	43.3
	Muslims	2	3.3
6	Family income (monthly)		
	Below 10, 000	29	48%
	10, 001-20, 000	12	20%
	Above 20, 000	19	32%
7	Place of living		
	Rural	46	77%
	Urban	14	23%
8	Source of Health information		
	TV	15	25%
	Newspaper	9	15%
	Internet	26	43%
	Other	10	17%
9	Previously affected with Swine flu		
	Yes	0	0
	No	60	100%

Section 2:

Objective 1: To assess the level of knowledge regarding swine flu among the adolescents.

Table 2: Criteria measure of knowledge score, N=60

Level of scores	Percentage (%)	Frequency (f)
Good Knowledge (11-15)	16.7%	10
Average Knowledge (6-10)	78.3%	47
Poor Knowledge (0-5)	5.0%	3

Maximum =15

Minimum=0

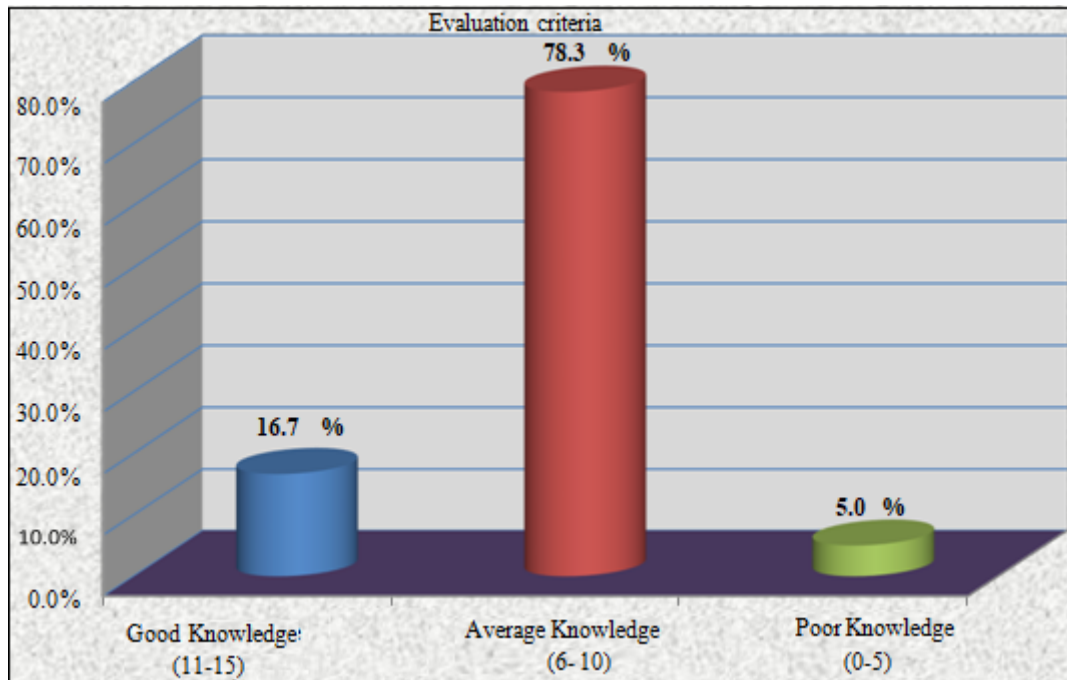


Figure 11: A bar diagram showing percentage distribution of adolescents according to their level of knowledge

It is found that 5% adolescents had poor knowledge, 78.3% had average knowledge and 16.7% had good knowledge regarding swine flu.

Objective 2: To find out the association between the level of knowledge regarding swine flu among adolescents with selected socio-demographic variables.

Table 3: Table showing Association of Level of knowledge with Demographic Variables

Demographic Variables		Levels of knowledge			Chi Square Test χ^2 (df)	P Value
		Good	Average	Poor		
Age (in years)	>15 Years	6	17	1	3.363 (4)	0.499NS
	16 Years	3	19	2		
	17 Years	1	11	0		
Gender	Male	5	22	3	3.191 (2)	0.203NS
	Female	5	25	0		
Religion	Sikh	5	33	3	3.020 (2)	0.221NS
	Hindu	5	14	0		
	Muslim	0	0	0		
	Other	0	0	0		
Education Status	11 Science	10	47	3	NA	
	Other	0	0	0		
Types of Family	Joint Family	5	32	2	1.189 (2)	0.552NS
	Nuclear Family	5	15	1		
Family Monthly Income (Rs.)	Below 10, 000	3	25	1	3.800 (4)	0.434NS
	10, 001-20, 000	3	9	0		
	Above 20, 000	4	13	2		
Place of Living	Rural	6	38	2	2.181 (2)	0.336NS
	Urban	4	9	1		
Source of Health information	TV	2	13	0	4.511 (6)	0.608NS
	Newspaper	2	7	0		
	Internet	4	19	3		
	Other	2	8	0		
Previously affected with Swine flu	Yes	0	0	0	NA	
	No	10	47	3		

3. Discussion

Present study was conducted to assess the knowledge regarding swine flu among adolescents of selected school at District Sri Muktsar Sahib. Total 60 adolescents were selected using convenient sampling technique. Semi Structured knowledge questionnaire was used to assess the

knowledge regarding swine flu. The analysis of data was done using descriptive and inferential statistics.

Objectives 1: To assess the level of knowledge regarding swine flu among the adolescents

The above finding is supported by the study done by Vidushi M, et. al (2010) 10 conducted a study on knowledge, attitude and practices regarding swine flu among paediatricians of

Chandigarh. A questionnaire based survey related to Novel H1N1swine origin influenza virus (S-OIV, swine flu) was administered to 134 paediatricians of Chandigarh city, to assess their knowledge, attitudes and practices. Only 52% was aware that swine flu predominantly occurs in young healthy individuals.90% were familiar with clinical symptoms and 70% with incubation period.

Objectives 2: To find out the association between the level of knowledge regarding swine flu among adolescents with selected socio-demographic variables

Kamate SK, et. al. (2009) conducted a study on public knowledge, attitude and behavioural changes in an Indian population during the Influenza A (H1N1) outbreak. A cross-sectional questionnaire survey was conducted in Udaipur (Rajasthan, India) among 791 individuals (57% males and 43% females) from 23 July to 27 August 2009. Results showed that Of 791 respondents, 83.1% had heard about H1N1, but 47.4% felt that they did not have enough information about the pandemic. Only 34.5% felt that their health would be seriously affected if they contracted H1N1. Over half of the respondents (59.6%) had no idea about the duration of the pandemic. Knowledge differed significantly according to gender, age groups, and educational status as well as working status. They concluded that in spite of having acceptable knowledge and

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