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Original Research Article

Knowledge Regarding Prevention and Management of Swine Flu among Students of Selected Schools at Mandi. (H.P)

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Abstract

Introduction: *The disease is spread among pigs by direct and indirect contact, aerosols, and from pigs that are infected but do not have symptoms. The swine flu origin Influenza H^1N^1 Virus that appeared in 2009 and was first found in Mexico is a reassortant with at least three parents. Swine flu is a disease of pigs that can in rare cases can be passed to humans. It is a highly contagious respiratory disease caused by one of much Influenza viruses.*

Methodology: *A quantitative research approach and descriptive design was used for the study. The study sample size was 150 and the sampling technique used was convenient sampling technique for selecting the sample. The knowledge was assessed by the help of structured questionnaire tool and selected variables included in the study were age, gender, level of education, residence, type of family, family income, nutritional pattern, father education, mother education, heard about swine flu, source of information, swine flu vaccine. Descriptive and inferential statistics were used to analyze the data. Bar, cylindrical, pyramid diagrams were used to depict the finding and to interpret data.*

Result: *After pretest majority of 97(64.7%) students had average knowledge regarding prevention and management of swine flu .After posttest majority of 127(84.7%) students had good knowledge regarding prevention and management of swine flu. Knowledge regarding swine flu is associated with age of students (P-0.024), source of information (0.010) as calculated by chi-test and t value was significant at 0.05 level. Association of knowledge regarding swine flu with sex (0.611), level of education (0.665) residence (0.106), family (0.976), family income (0.124), nutritional pattern (0.488), father's education (0.488), mother's education (0.163), have you heard about swine flu (0.7143), have you taken swine flu vaccine (0.065) as calculated chi-test and t value was non-significant.*

Keyword: *Knowledge, Students, Swine flu, School.*

Need For the Study

"Prevention is better than cure".

The present study aim is to assess the knowledge regarding, prevention and management of swine flu among the student of school. Swine flu is a emerging viral infection that is present global public health problem. This infection can be seen around the world in present day .This infection is a kind of variant of H1N1 infection. Swine flu, also called as pig influenza, Hog flu, Pig flu. Influenza occurs in all countries and affects millions of people every year. The influenza viral strain implicated in 2009 flu pandemic in India was earlier refer to as swine flu because initial

testing showed many of gene in the virus. A cross sectional descriptive study was conducted to assess the knowledge and practices related to swine flu in school student of Bhavnagar Gujarat. Result showed that almost all school students have heard about swine flu disease and 66% knew about the causative agent. TV, friends, relatives were the most common source of information.

There is a strong felt need to conduct study to create awareness among students regarding swine flu and make contribution in reducing the spread of H1N1 influenza virus.

Objectives

1) To assess the knowledge regarding swine flu among school students.
2) To assess the effectiveness of video assisted teaching on knowledge regarding swine flu among students.
3) To determine the association between knowledge scores with selected demographic variables.

Assumptions

1) Students may have different knowledge regarding swine flu.
2) Structured questionnaire can be appropriate tool for measuring knowledge regarding swine flu.
3) Student will give honest responses on structured questionnaire.

Methodology

The research methodology includes strategies to be used to collect and analyzed the data to accomplish the research objectives. The methodology of research indicates the general pattern for organizing the procedure for gathering valid and reliable data for an investigation. The chapter deals with the methodology adopted for the study. It include research approach, research design, setting ,sample and sampling technique, development and description of tools, pilot study ,data collection and plan of data analysis.

The present study carried out to assess the effectiveness of video assisted teaching on knowledge regarding prevention and management of swine flu among students of selected school.

Development and description of tools

Section-A: Selected demographic variables of school students.

It consists of items regarding selected variables. The selected variables included in the study were age, gender, level of education, residence, type of family, family income, nutritional pattern, father education, mother education, heard about swine flu, source of information, swine flu vaccine.

Section-B: Structured questionnaire for swine flu. This part consists of structured knowledge questionnaire tools to assess the knowledge regarding swine flu among school students. In questionnaire tool 28 items was set.

Table- 3.1 Scoring Interpretation

Sr. no.	Response	Score
1.	Correct Answer	1
2.	Wrong Answer	0

Maximum score = 28

Minimum score = 00

Poor knowledge = 1-09

Average knowledge = 10-19

Good knowledge = 20-28

The validity was found to be o.70 by Split Half correlation method and 0.82 by Spearman Brown method. Hence the tool was found valid for the study.

Pilot study was conducted in School at Mandi, in the Month of March 2019 to check the feasibility of the study.

District Mandi

Procedure for data collection

Formal administrative approval was taken from the principal of various Schools from districts Mandi (H.P) for conducting final study. (ANNEXURE-B, C and D) The study was conducted from April 2019.

Data collection was done in Crescent Star Public School Ratti, Govt. Senior Secondary School Kehnwal Mandi, Govt. Senior Secondary School Knaid District Mandi (H.P).

It took two weeks to include all the study subjects based on total convenient sampling. The sample

included was 150 (50 Crescent Star Public School Mandi, 50Govt.Senior Secondary School Knaid Ratti, 50 Govt. Senior Secondary School Kehnwal

Table-1 Pretest Frequency and percentage distribution of students in terms level of knowledge regarding swine flu. (N= 150)

Level	Actual Range	Pretest Frequency (f)	Pretest Percentage (%)
Poor	0-9	53	35.3
Average	10-18	97	64.7
Good	19-28	0	0

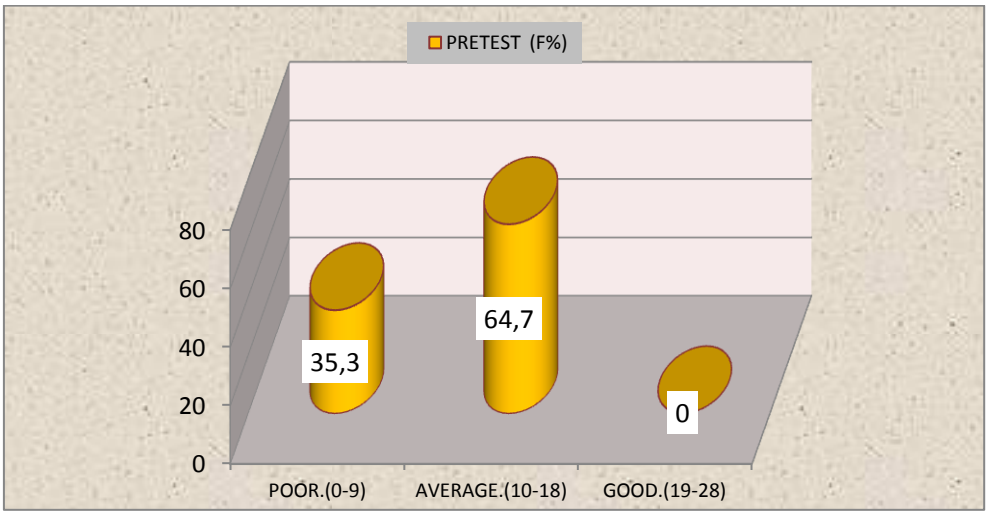

Figure-1 Bar graph showing pretest frequency and percentage distribution of students in terms level of knowledge regarding swine flu.

Table-2 Comparison between pre-test and Post-test Mean, mean percentage, SD and range of score of knowledge of school students regarding swine flu. N=150

Paired T Test	Mean	SD	Mean%	Range	Mean Diff.	Paired T Test	P value	Table Value at 0.05
Pretest Knowledge	10.29	2.031	36.70	6-16	10.500	40.781	<0.001*	1.98
Posttest Knowledge	20.79	2.112	74.30	14-26				

** Significance Level 0.05

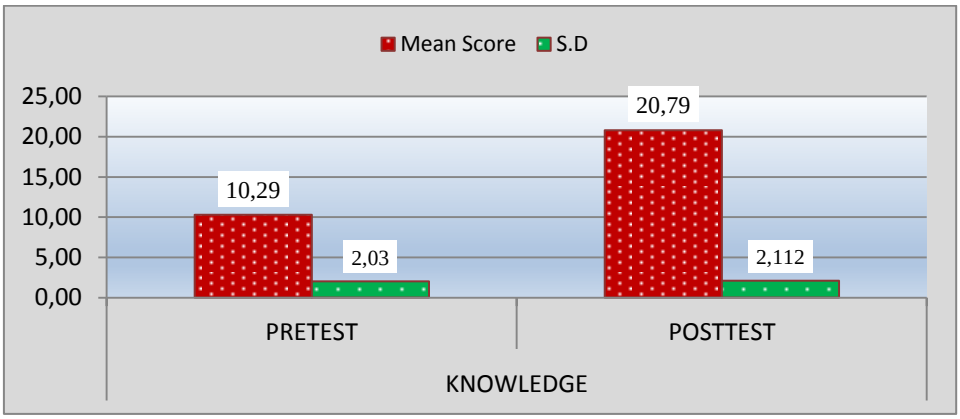

Figure-2 Bar graph showing the comparison between pre-test and Post-test Mean, mean percentage, SD and range of score of knowledge of school students

Table 3 Association between knowledge on swine flu and selected demographic variables among 11th and 12th class school's students. **N=150**

S. no	Selected Variables	Chi Test	Df	Table Value	p
1.	**Age of Student** 15-16 yrs 16-17 yrs >18 yrs	7.435	2	5.991	0.024*
2.	**Sex** Male Female	0.258	1	3.841	0.611^{NS}
3.	**Level of Education** 11th class 12th class	0.188	1	3.841	0.665^{NS}
4.	**Residence** Urban Rural	2.620	1	3.841	0.106^{NS}
5.	**Type of Family** Nuclear Joint	0.001	1	3.841	0.976^{NS}
6.	**Family Income** < 10,000 10,001 to 20,000 20,001-30,000 >30,000	5.758	3	7.815	0.124^{NS}
7.	**Nutritional Pattern** Vegetarian Non vegetarian	0.480	1	3.841	0.488^{NS}
8.	**Father's Education** No formal education Primary education Secondary education Graduate and above	6.770	3	7.815	0.488^{NS}
9.	**Mother's Education** No formal education Primary education Secondary education Graduate and above	5.123	3	7.815	0.163^{NS}
10.	**Have You Heard About Swine Flu** Yes No	0.134	1	3.841	0.7143^{NS}
11.	**Source of Information** Television Radio Newspaper Health care team Family member/friends	13.352	4	9.488	0.010*
12.	**Have You Taken Swine Flu Vaccine** Yes No	3.415	1	3.841	0.065^{NS}

***Significant (P<0.05)** **NS Non Significant**

Discussion

The present study was aimed to assess the knowledge regarding prevention and management of swine flu among 11th and 12th schools students in selected schools of District Mandi (H.P).

1. Understanding demographics

In the present study out of 150 student's majority (63.3%) of students were females and 36.7% were males selected for the study. From demographics we know the type of family and their educational standard and economical conditions. According to their demographics student's level of knowledge regarding swine flu is average. These finding are partially similar and contradictory to the study conducted by Ramesh Verma, Vinod Chayal, (2018) on Community perception about swine flu in an urban slum of Haryana: A cross-sectional study was found that there was no significant difference between gender and age with heard of swine flu while education wise (p= 0.002) and caste wise (p=0.011) awareness of swine flu was found to be statistically significant.

2. To Assessment knowledge regarding swine flu among school students.

In the present study out of 150 students, during pre test about (64.7%) students had average knowledge and (35.3%) students had poor knowledge regarding prevention and management of swine flu. After given a video assisted teaching to the students about (84.7%) of the students had good knowledge and (15.3%) students had average knowledge regarding prevention and management of swine flu. Similarly a cross sectional study was conducted by Harshal Kawanpure (2013) on Knowledge, Attitude and Practice Regarding Swine Flu among rural population of Kollam district, Kerala. Knowledge regarding the route of transmission was concerned 4.69% thought that swine flu spread by eating contaminated pork, 23.92% through food and water, 8.44% through mosquito bite and house flies. 56.33% were aware of the fact that swine flu could spread by inhaling infected aerosols. Availability of treatment and vaccine against swine flu were known to 56.80 % and 55.86% respectively. Mass media (TV, Radio, newspaper) was found to be the most common source of knowledge regarding swine flu for 74.18 % of the respondents.

Conclusion

Most of the 11th 12th school students had high positive knowledge regarding swine flu.

The present study concludes that after video assisting teaching. Hence it is most important for the educators to educate reinforce the school children regularly.

Implication:

The finding of study to assess the knowledge regarding swine flu in schools students has many implications in nursing education, nursing administration, nursing practice and nursing research.

Nursing Education:

- Support and mentoring of the students are required to identify early unfavorable attitudes and strategies to modify attitude of students
- Greater attention need to be paid to educational processes: teacher and their teaching must be valued and appropriate support systems should be provided for college students and trainees.
- Teaching plays vital role in nursing profession to orient students and to gain adequate knowledge regarding various scope of nursing. Hence it is necessary to motivate the students to seek knowledge regarding swine flu in nursing which may be provided with proper class room teaching.

Nursing Practice:

- The nurse can directly influence the care which has been provided by them. Hence more competent nurse is essential to be working in the hospital for better patient care. If the nurses have good knowledge regarding swine flu they can provide better nursing care for swine flu patients.

Nursing Administration

- The nurse administrator should take step in formulating polices and plans for modifying knowledge regarding swine flu. She should organize some preparation classes for school students to undergo smoothly.

- Nurse administrator should act as a role model for the students. Hence the budding students may change their perception by following him or her.
- Findings can be implicated to select and retain suitable students who have knowledge regarding swine flu to render quality patient care.

Nursing research

- The present study findings showed that school students had high positive perception regarding swine flu. Hence study findings can be implicated in nursing research to determine their motivating factor for swine flu and to undertake certain strategies support the nurse during their real transition phase and perception regarding swine flu among schools students in various settings can help to generalize the suitable perception regarding role transition which is essential for nursing profession.

Limitation

The present study was limited to small number of schools students (150 students) of crescent, kehnwal, kanaid schools of district Mandi (H.P). Thus this limits the generalization of the study.

Recommendation

- The similar study can be conducted with other schools.
- Qualitative study can be conducted with more sample size.

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