A Study to Assess the Knowledge Regarding Prevention of Swine Flu among School Children in Selected School at Karad

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ABSTRACT

Swine influenza is a highly contagious respiratory track disease of pigs caused by one of several swine influenza A viruses. Outbreaks are common in pigs year round and infection in humans is a result of close contact with infected animals. The aim of this study was to assess students awareness level among the school children and help them to prevent this dangerous contagious disease.

OBJECTIVES OF STUDY: To assess the knowledge regarding prevention of swine flu among school children and associate the scores with selected demographic variables.

MATERIAL AND METHOD: The descriptive research design was selected for the study. Structured questionnaire including 30 questions are used to assess the knowledge. 60 samples were taken by convenient sampling technique in primary school.

RESULTS: Total 22 students were having good knowledge regarding prevention of seine flue followed by 25 students with average knowledge and only 13 students with poor knowledge. Maximum respondents are (91%) Hindus followed by 5% respondents Muslims and only 3.3% Christians. Type of family and place of residence were statistically significant and rest of the variables is not associated.

CONCLUSION: The knowledge of swine flu should be imparted through health education, as their level of understanding is quite good, so the investigator felt that school children should have awareness regarding cause, symptoms, and preventive strategies through health education.

Key words: Children, Infection, Knowledge, Prevention, Swine flu, School.

INTRODUCTION

A flu deadly disease occurs when a new influenza virus emerges for which people have little or no immunity and for which there is no vaccine. The disease spreads easily person-to-person, and can be cause serious illness, and can spread out across the country and even worldwide in a very short span of time. Many countries have taken precautionary measures and education to reduce the chances of this happening. Fever, lethargy, lack of appetite, runny nose, sore throat, nausea, vomiting, diarrhea and coughing are some of the following symptoms of swine flu in people. The effects of a pandemic can be lessened if preparation is made ahead of time. Planning and preparation information
and checklists are being prepared for various sectors of society, including information for individuals and families. \[1\]

Swine influenza is a highly contagious respiratory disease of pigs caused by one of several swine influenza A viruses. Outbreaks are common in pigs year round and infection in humans is a result of close contact with infected animals. \[2\] Since Swine flu is emerging disease and spreads very fast and simple preventive measures at an early stage will be very useful in containment of the disease which could only be achieved by raising the level of awareness. \[3\] The best we citizens can do is keep ourselves informed about the happenings and the steps we can take to prevent the spread of the flu. \[4\]

Turkey seems to be reporting new deaths at an alarming rate. 83 new deaths were reported this week, increasing the death toll in Turkey by 74%. Mexico also confirmed 83 new deaths, upping their total death count by a less significant 14.5%. H1N1 deaths are also on the rise in Canada, who confirmed 78 new deaths - resulting in a 31% increase in their total deaths in just a week. Russia has been experiencing a significant surge in swine flu deaths as well, with 40 new ones reported this week - a 64% rise in total deaths. China reported 51 new deaths, nearly doubling their tally. Total deaths in Iran increased by 40% with the addition of 40 new deaths. The United Kingdom saw a 15.7% increase from the 34 new deaths they reported. Italy and France both reported 30 new deaths - total rises of 42% respectively. \[5\]

According to health department, India had reported 566 death tolls. New cases were reported in the country taking the total numbers of people suffering from the contagious virus are 16,328. \[6\]

The country had reported the following confirmed swine flu cases in India. Maharashtra still continues to place on top among other places that have many confirmed swine flu cases. Its last death made its toll climbed up to 197 deaths. The place also has approximately about 3600 people who were infected by the swine flu. Kerala reported 27 confirmed swine flu cases were reported in this place. New Delhi had recorded 13 cases of swine flu. Eight native folks of Tamil Nadu had raised the number of cases of swine flu in India. One case of swine flu infection was recent discovered in Haryana. Karnataka reported 5 deaths due to swine flu were last recorded rising its total death toll to 117. Bangalore reported 38 swine flu deaths so far. \[7\]

Since children are at more risk being involved in groups and possessing less immunity need for educating the children about flu complications, hand hygiene, respiratory etiquette using proper educational materials enhance compliance and to prevent the occurrence of Influenza. Hence the aim of this study was to create an awareness of swine flu among the school children and help them to prevent this dangerous contagious disease.

**Objectives of study:**
- To assess the knowledge regarding prevention of swine flu among school children.
- To find the association between knowledge scores with selected demographic variables.

**MATERIALS AND METHODS**

Knowledge assessment was done as appropriate to describe knowledge of swine flu in school going children. The descriptive research design was selected for the study. Structured questionnaire including 30 questions are used to assess the knowledge. 60 samples were taken for the study. The questionnaire consists of 2 sections. Section A consists of socio demographic variables. Section B consists of questions that assess the knowledge of school children regarding
swine flu. School children who are present at the time of data collection, who are willing to participate in the study were included.

The investigator obtained permission from authority & principal, consent was taken from subject to conduct the study. Investigator explains the aims and objectives of the study and its knowledge was assessed. The data were analyzed using descriptive statistics and inferential statistics. Descriptive statistics, frequency, percentage was used for analysis of demographic data. Chi square test was used to find out the association between Knowledge and selected demographic variables.

RESULTS
ANALYSIS & INTERPRETATION OF DATA

<table>
<thead>
<tr>
<th>Knowledge level</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>22</td>
<td>36%</td>
</tr>
<tr>
<td>Average</td>
<td>25</td>
<td>41%</td>
</tr>
<tr>
<td>Poor</td>
<td>13</td>
<td>21%</td>
</tr>
</tbody>
</table>

The Mean knowledge score is 19 with standard deviation 2.5. Total 22 students were having good knowledge regarding prevention of swine flu and 25 students with average knowledge and only 13 students poor knowledge.

Table1 Shows the frequency & percentage distribution of the respondents based on religion, type of family and residential area. Maximum respondents are (91%) Hindus followed by 5% respondents Muslims and only 3.3% Christians. Majority of the respondents (56.66%) belonged to nuclear family and 43.33% of the respondents belonged to joint family. Regarding Place of residence is concern, 58.33% where from urban area and 41.66% of the respondents were from rural area.

Table 2: Demographic variables and association of results:

<table>
<thead>
<tr>
<th>Sr no.</th>
<th>Demographic variable</th>
<th>Good</th>
<th>Average</th>
<th>Poor</th>
<th>Total</th>
<th>Statistical analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender of the children</td>
<td>Male</td>
<td>11</td>
<td>10</td>
<td>5</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>11</td>
<td>15</td>
<td>8</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Religion</td>
<td>Hindu</td>
<td>19</td>
<td>23</td>
<td>13</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>Christian</td>
<td>01</td>
<td>01</td>
<td>00</td>
<td>02</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Muslim</td>
<td>02</td>
<td>01</td>
<td>00</td>
<td>03</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Family type</td>
<td>Joint</td>
<td>20</td>
<td>4</td>
<td>2</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Nuclear</td>
<td>02</td>
<td>21</td>
<td>11</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Place of residence</td>
<td>Urban</td>
<td>18</td>
<td>05</td>
<td>02</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>04</td>
<td>20</td>
<td>11</td>
<td>35</td>
<td></td>
</tr>
</tbody>
</table>

Instat software is used to check association of results with the Sociodemographic variables which shows Type of family and place of residence were statistically significant and rest of the variables are not associated.

DISCUSSION

Harshal Kawanpure et al found in their study that Knowledge regarding swine flu was average 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. [8]

Nandkumar R. Kakade conducted experimental study which shows 18 (20%) student are had poor knowledge, the majority 31(62%) had average knowledge and 9(18%) had good knowledge regarding knowledge of swine flu and its protective measures. [9] Shilpa K et al shows in their study that Knowledge regarding swine flu pandemic was low among urban community of Belgaum, Karnataka. [10]

A study in Saudi Arabia conducted at the very beginning of Phase 6 (WHO pandemic alert status) regarding swine influenza, reported that only 5.2% of them had high level of knowledge, 54.3% had a high level of concern, and only 17.2% had preventive practices for H1N1. [11]

CONCLUSION
Comparing with other study our research results are supporting. The Mean knowledge score was 19 with standard deviation 2.5. Total 22 students were having good knowledge regarding prevention of swine flu followed by 25 students with average knowledge and only 13 students had poor knowledge. Type of family and place of residence were statistically significant and rests of the variables are not associated. The knowledge of swine flu should be imparted through health education, as their level of understanding is quite good, so the investigator felt that school children should have awareness regarding cause, symptoms, and preventive strategies through health education.

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