Original Research Article

Knowledge Regarding Swine Flu among Adult in a Selected Urban Area, Nerchowk, Distt. Mandi. (H.P)

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Abstract

Introduction: Swine Flu Is a respiratory tract infection which is spread from the pigs. This kind of virus can kill the human race. This infection is a worldwide virus outbreak. Outbreaks are common in pigs year round and infection in humans is a result of close contact with infected animals. The present study was conducted to assess the knowledge regarding swine flu among adult

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 samples. The knowledge was assessed by the help of structured knowledge questionnaire tool and extraneous variables included in the study were age, educational status, religion, marital status, occupation, types of family, dietary habits, monthly income. Descriptive and inferential statistics were used to analyze the data. Bar, cylindrical, pyramid diagrams were used to depict the findings and to interpret data.

Result: The result of study depicts that more than half 66 (66%) of subjects have excellent knowledge, less than half 31 (31.3%) subjects have good knowledge, 2.7 (2.7%) subjects have average knowledge, and 0 (0%) subjects poor knowledge regarding swine flu. Hence, it was concluded that the maximum adult have excellent knowledge regarding swine flu. The results revealed that there was no association between age, gender, education status, religion and types of family, monthly income because the calculated chi square value was less than table value but in marital status the calculated chi square value was (13.03), in the occupation calculated chi square value was (0.01). Association was found significant at p<0.05 level.

Keywords: Knowledge. Adult, Swine Flu, Urban.

Background of the Study

“Infectious diseases will last as long as humanity itself.” –K. Park

Respiratory tract infections are actually a spectrum of diseases associated with infection of both the upper and lower respiratory tract and include the common cold, otitis media, influenza-like illness, croup, bronchiolitis, and pneumonia. Viruses are the most common cause of respiratory tract infection and the viruses associated are more diverse than the respiratory diseases they cause with influenza viruses, respiratory syncytial virus, human metapneumovirus, para influenza viruses, adenovirus, rhinoviruses, enter viruses, and human coronavirus having a major role. It is often difficult to clinically differentiate viral and bacterial etiologies for some respiratory diseases.¹
Swine Flu-Is a respiratory tract infection which is spread from the pigs. This kind of virus can kill the human race. This infection is a worldwide virus outbreak. This disease occurs when a new influenza virus emerges for which people have little or no immunity. As of the August 2015 world-wide more than 214 countries and overseas territories or communities reported 1849 deaths. The worst flu outbreak on record occurred in 2015, during which 56000 US citizen detected case of swine flu. In Australia 16384 cases were detected. In Mexico 32768 cases were detected of swine flu. In India 8192 cases detected. On the latest update of January30th 2019 in Himachal Pradesh 63 cases were found positive this year and state reported 9 deaths due to swine flu this year as two patients each died in kangra, Mandi, Una districts. And one each in Shimla, Bilaspur and Hamirpur districts. So far kangra district recorded about 24 cases of swine flu, in Shimla 21, with 3 new cases on January 30 2019, Chamba and Mandi have 4 cases each, Solan 3 cases, Bilaspur and Una 2 each and Kulu and Hamirpur 1 each case recorded.

Need For the Study
“Prevention is better than cure.”

Today the world is facing one of the dreadful diseases which is swine flu. Past research has indicated that all the countries are vulnerable to swine flu. Swine flu caused by H1N1 virus. The H1N1 virus is a new influenza virus causing illness in people. This was first detected in April 2009 in the United States and other countries, including Mexico, Canada etc. Now in India it is spreading very fast day by day and is increasing the affected cases and death. The virus is spreading from person to person, as much the same like regular seasonal influenza viruses spread. To be specific, swine flu is a respiratory disease caused by a type A .

In India the statistical data as of study done regarding swine flu is that number of confirmed case with swine flu 29303, and number of deaths were 1302.

The recent studies and statistics throw the light that swine flu is an important problem in this period and is mainly due to unhealthy environment and poor knowledge among people regarding disease condition

Objectives of study
1. To assess the knowledge regarding swine flu among adult.
2. To find out association between level of knowledge regarding swine flu with selected demographic variables

Assumptions
1. Adult may have less knowledge regarding swine flu.
2. Adult demographic variables may have association with their knowledge regarding swine flu and its prevention.
3. Adult may have their own beliefs regarding swine flu

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 samples. The knowledge was assessed by the help of structured knowledge questionnaire. This study includes those adults who are:-Between age group of 18-35.Willing to participate in study able to understand the Hindi or English language. Residing in the urban area Nerchowk. This study excluded those adults who are:-Not available at the time of data collection. Less than 18 years old and who are 35 years above. Not mentally and psychologically fit. Houses whose doors are locked at the time of data collection.

Development and Description Tools
A structured knowledge questionnaire tool was used to assess the knowledge of adult group regarding swine flu. Tool was prepared after
extensive review of literature, experts opinions and investigators own experience in community and questionnaires method was used to collect the data.  

**Section A:** Demographic variables, **Section B:** Structured Knowledge Questionnaire  
It consist of items for obtaining information about selected background factors such as Age(in years), Gender, Educational status, Religion, Marital status, Occupation, Types of family, Dietary habits, Monthly income, have they ever heard about swine flu, if yes then what was there source of information.  

**Section B:** Structured knowledge Questionnaire:  
This part consist of structured knowledge questionnaire tools to assess the knowledge regarding swine flu among adult. In questionnaire tool 20 items was set. The items were set according to Definition, Causes, Sign and symptoms, Investigation, Treatment and Prevention of swine flu. Scoring of the items carrying (1) mark for each correct response by respondent and incorrect response carries (0) mark.  
Minimum knowledge score: 0, Maximum knowledge score: 20  
Knowledge score categorized into four levels: Total score=20  
The *validity* was found to be 0.75 by split half correlation method and 0.85 by spearman Brown method. Hence the tool was found valid for the study.  
Pilot study was conducted in urban area at Mandi, in the first week of June 2019 to check the feasibility of the study. Formal permission was taken from the Sarpanch of the Mandi.  

**Data Collection Procedure**  
After completion of pilot study, final study was conducted in the month of May 2019. The purpose of the study was explained by investigator to adult and assured about confidentiality. The investigator took individual informed consent from adult who met the inclusion criteria. The sample was selected by using convenient sampling technique and total 150 samples were selected. The data was collected with the help of structured knowledge questionnaire tool. After the data collection procedure completed, the investigator thanks the respondents and concerned adult for their cooperation in their study.  

**Results**  
**Table No 1:** Frequency and percentage distribution of level of knowledge regarding swine flu among adult  

| Level of Scores | Percentage (%) | Frequency (f) |
|-----------------|----------------|---------------|
| EXCELLENT (16-20) | 66.0%          | 99            |
| GOOD (11-15)    | 31.3%          | 47            |
| AVERAGE (6-10)  | 2.7%           | 4             |
| POOR (0-5)      | 0.0%           | 0             |

Table- 1 Depicts that, more than half 66 (66%) of subjects had excellent knowledge, less than half 31 (31.3%) subjects had good knowledge, 2.7 (2.7%) subjects had average knowledge, and 0 (0%) subjects had poor knowledge regarding swine flu. Hence, it was concluded that the maximum number of adult had excellent knowledge regarding swine flu.  

Table 2: depicts the association between the levels of knowledge regarding swine flu with selected socio-demographic variables among adults. Regarding age (in years), the calculated value is 4.51 which was less than the table value (12.5). The association was found not significant at p <0.61 level. Hence, it was concluded that age (in years) of adults had no influence on the knowledge regarding swine flu. Regarding gender, the calculated value is 0.89 which was less than table value (5.99). The association was significant at p <0.64. Hence it was concluded that gender of adults had no influence on knowledge regarding swine flu. Regarding educational status, the
calculated value is 11.86 which were less than the table value (12.59). The association was not found significant at p <0.07 level. Hence, it was concluded that educational status of adults had no influence on the knowledge of regarding swine flu.

Regarding religion, the calculated value is 0.52 which were less than the table value (5.99). The association was not found significant at p <0.77 level. Hence, it was concluded that religion of adults had no influence on the knowledge of adults regarding swine flu.

Regarding marital status, the calculated value is 13.0 which were more than the table value (12.59). The association was found significant at p <0.04 level. Hence, it was concluded that marital status of adults had influence on the knowledge regarding swine flu.

Regarding occupation, the calculated value is 15.87 which were more than the table value (12.59). The association was found significant at p <0.01 level. Hence, it was concluded that occupation of adults had influence on the knowledge regarding swine flu.

Regarding type of family, the calculated value is 8.29 which was less than the table value (12.59). The association was not found significant at p <0.22 level. Hence, it was concluded that type of family of adults had no influence on the knowledge of adults regarding swine flu.

Regarding dietary habits, the calculated value is 4.24 which were less than table value (5.99). The association was found not significant at p <0.12 level. Hence, it was concluded that dietary habits of adults had no influence on the knowledge of adults regarding swine flu.

Regarding income, the calculated value is 15.45 which were less than the table value (15.51). The association was found not significant at p <0.05 level. Hence, it was concluded that the income of adults had no influence on the knowledge regarding swine flu.

Regarding heard about swine flu, the calculated value is 2.21 which were less than the table value (5.99). The association was found not significant at p <0.33 level. Hence, it was concluded that the heard about swine flu of adults had no influence on the knowledge regarding swine flu.

Regarding source of information of swine flu, the calculated value is 5.51 which were less than the table value (12.59). The association was found not significant at p <0.48 level. Hence, it was concluded that the source of information of swine flu of adults had no influence on the knowledge regarding swine flu.

Discussion

Objective 1- To assess the knowledge regarding swine flu among adults. The finding showed that, more than (80%) of subjects have Excellent knowledge, less than half (55-75%) subjects have good knowledge, less than (30-50%) subjects have average knowledge, and less than (25%) subjects have poor knowledge regarding swine flu. Hence, it was concluded that the maximum number of adults from the selected area Nerchowk had excellent knowledge regarding swine flu.

The study was similar with finding of Ramandeep Singh Gambhir (2012) “Knowledge and awareness regarding swine –influenza virus (H1N1) infection among dental professional in Rajasthan. The Objective of the study: To conduct a systematic review of observational studies. To assess the dental professionals knowledge and awareness regarding swine flu. Method: A cross-sectional observational studies were included in this study. The sample size consisted of 448 Dental students. Result: The study revealed that the majority of subjects 92.6% had heard about swine flu and 64.3% of have know about H1N1 virus and 50% were aware about H1N1 virus. Conclusion: They concluded that there was some knowledge gaps among dental professionals and is an urgent need for training and continuous education programs regarding swine flu.13

Objective 2- find out association between the levels of knowledge regarding swine flu with selected demographic variables the results reveals that there was no association between age, gender, education status, religion, type of family, dietary
habits, monthly income, heard about swine flu, source of information for swine flu because the calculated chi square value was less than the table value, but there was an association between the marital status (chi square value =13.03), occupation (chi square=15.87). Association was found significant at p<0.05 level.

The study was similar with the study was Prabhuswami Hiremath (2015).” A study to Assess the knowledge regarding prevention of swine flu among school children in selected school at karad.” Objectives of the study: To assess the knowledge regarding prevention of swine flu among school children and To associated the scores with selected demographic variables.

Method: A descriptive research design was used in this study. The sample size consisted of 60 samples. The sampling technique used for the study was convenient. Structured questionnaire tool is used. Result: The study revealed that mean knowledge score is 19 with standard deviation 2.5. Total 22 students were having good knowledge regarding prevention of swine flu. Maximum respondents are 91% Hindu followed by 5% respondent Muslim and only 3.3% Christians (p = 0.7052). Majority of the respondents (56.66%) belong to nuclear family and 43.33% of the respondent belong to joint family (p=0.0001). Place of residence is 58.33% where from urban area and 41.66% of respondent from rural area. Type of family and place of residence were statistically significant and rest of the variables are not associated.

Conclusion
The result of the study depicts that more than half (80%) of subjects have Excellent knowledge, less than half (55-75%) subjects have good knowledge, less than (30-50%) subjects have average knowledge, and less than (25%) subjects have poor knowledge regarding swine flu. Hence, it was concluded that the maximum number of adults from the selected area Nerchowk had excellent knowledge regarding swine flu. The results reveals that there was no association between age, gender education status, religion, type of family.

Implications
Flu season has ethical implication for nurses, who have a duty to keep patient safe from avoidable complications. Nurses are being asked to play a key role in the process of containment that is key to tackling the diseases.

1. Nursing planner/programmer
Nurse as a planner/programmer identifies priorities and problem of communicable diseases in individuals, families and community. Formulates nursing component of health plans, In doctorless area, she/he is responsible for the formulation of the health plan. Provide technical assistance to rural health midwives in health matters like communicable diseases swine flu.

2. Nursing manager/supervisor
Nursing manager formulate individual, family, group and community centered care plan. Nursing manager organize work force, resources, equipments supplies, records and delivery of health care at local level. Nursing manager conduct regular supervisory visits and meeting to different rural health midwife and give feedback on performance. Responsible for motivating and enhancing community participation in term of planning organizing and implementing and evaluating health programs. Initiate and participate in community development activities. Nursing educator/counselor.

3. Nursing statistician
Nursing statistician prepares and submits required reports and record. Maintains adequate, accurate and complete recording and reporting. Reviews, validates, consolidates, analyzes and interprets all records and reports. Prepare statistical data/charts and other data presentations for display and for presentation in staff meetings conferences and seminars/workshops.

Nursing researcher
Nursing researcher participate in the conduct of surveys studies and researches on nursing and
health related subjects. Coordinate with government and non–government organization in the implementation of studies/research. Selected topic helps to protect the peoples from swine flu diseases. It is a topic that requires further thorough well designed and implemental research.

**Recommendation**

Based on the finding of the present study the following recommendation are made:

The study can be replicated using a large sample to validate the findings and make generalizations.

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