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Research article

A study to assess the effectiveness of structured teaching programme regarding knowledge and prevention of swine flu among patients at bollineni super specialty hospital in Nellore

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Abstract

Background: Swine flu viruses do not normally infect humans. But, randomly, the human race got infected with swine flu. Most frequently, these cases occur in persons with direct exposure to pigs. Human-to-human transmission of swine flu can also occur.
Aims: To assess knowledge regarding prevention of swine flu through pretest scores. To develop and implementation of structured teaching programme on knowledge and prevention of swine flu through post-test scores. Association between pretest level and post level of knowledge regarding prevention of swine flu with selected variables.
Methodology: Sample collection is gathering information needed to address a research problem. Bollineni Super specialty Hospital of Nellore was selected for this study. Formal administrative approval was obtained from the Medical officer.
Results: The demographic variables gender (0.3<3.84), family income (3.75<7.81) has not shown statistically significant association at p<0.05 level and hence it is lower than values. The other demographic variables age (15.19>7.81), education (8.02>7.81), and occupation (12.7>12.6) have shown significant association with the pre-test level of knowledge. The association of pre-test level of knowledge on prevention of swine flu with their demographic variables age (2.58<7.81), gender (0.36<3.84), education (4.91<7.81), occupation (7.6 <12.6), family income (2.81<7.81) has not shown statistically significant association at p<0.05 level.
Conclusion: Currently nursing practice based on evidence-based practice. This research to equip the Medical health nurses to be an independent practitioner in various healthcare settings. In order to plan health education programme to improve knowledge of clients regarding knowledge and prevention of swine flu.

Key words: Teaching Programme, Swine Flu, Education, Demographic Variables

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1. Introduction

Swine flu is a respiratory tract infection from the hogs. This kind of virus can kill the human race. This infection is a worldwide virus outbreak. 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. Those whom their hospitals are more than 10 miles from their community can easily infect with the swine flu. The diseases spread 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. An influenza pandemic may be caused by either swine (pig) or avian (bird) flu viruses. [1] Some think that swine flu can also get from foods we eat. Take note that influenza viruses are not transmitted by food. You cannot get the influenza virus by means of eating pork products. Eating properly handled and cooked pork is safe. Proper cooking of pork or pork products with an internal temperature of 160 degrees Fahrenheit will kill the swine flu viruses. There are a number of things that you can do to prepare yourself and those around you for a flu pandemic. It is important to think about the challenges that you might face, particularly if an epidemic is rigorous. The effects of a pandemic can be lessened if preparation is made ahead of time including information for individuals and families. [2]

In World Health Organization (WHO) announced that the world is in a "post-pandemic" period with respect to H1N1 swine flu, but the virus is still circulating. H1N1 was included in the 2011-2012 seasonal flu vaccines in the US, the UK, and many other countries. Seasonal flu kills between 250,000 and 500,000 people worldwide every year, according to WHO. [3] Some Vital Statistics Given By PIB (Press Information Bureau) In 2011. Total confirmed cases in India – 4, 4101. Total deaths in India – 2679. Total confirmed cases worldwide – 6, 22,482. Total deaths worldwide – at least 1, 8366. According to health ministry (2010), [4] both Maharashtra and Kerala reported eight deaths each while one was reported from Andhra Pradesh (AP). Kerala had the highest number of 178 confirmed reports of swine flu. Maharashtra follows 91 cases while Karnataka has 19 cases. Andhra Pradesh 18 cases and Tamil Nadu 13 cases were reported. [5]

"Pandemic H1N1 2009 influenza vaccination was associated with protection against pandemic influenza and a reduction in hospital admissions from influenza-related disorders in Scotland during the 2009-10 pandemic. Most diseases are the result of medicine which has been prescribed to relieve and take away a beneficent and warning symptom on the part of nature. Alarm bells are ringing all over the world over the unprecedented outbreak of swine flu caused by influenza-A virus [6]. The origin of swine flu is unknown but it easily gets transmitted from person to person. The number of individuals running flu is increasing at an alarming rate. The worldwide statistics is 6,22,482. The infected individual shows symptoms such as fever, cough, cold, chills, severe headache, sore throat, body ache, and fatigue. In stray cases, vomiting and diarrhea could be seen [7]. As matter of fact, these symptoms are not specific to swine flu. So a differential diagnosis is essential. Antiviral drugs are available in the market which by the proper administration within two days of the infection will bring an end to the flu and prevent further complications. Experts say that there is no need to panic and swine flu is fatal very rarely. So if a person is infected with it on your chin and tries antiviral drugs and other methods to bring down the temperature and maintain fluid balance. So that it will make a go of it for sure.

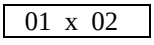
The virus preferentially infects young people under 25 years of age, although the more severe disease has mainly been detected in children under 5 years, adults over 65 years, those with underlying chronic medical conditions especially respiratory diseases. Swine flu has unfortunately now reached India out of 1,121 specimens tested in India 837 specimens are confirmed the proportion of outpatient visit for influenza-like was 2.5% India has seen over 40 confirmed cases of swine flu and the threat of a full-blown epidemic in India is very real. The best we citizens can do is keeping ourselves informed about the happening and the steps we can take to prevent the spread of the flu [8].

Hence the incidence of swine flu is constantly increasing the investigator planned to do a study on prevention of swine flu to create awareness among the people to improve the quality of life. The present study to assess the effectiveness of structured teaching programme regarding knowledge and prevention of swine flu among patients at Bollineni Super specialty hospital in Nellore. And also to assess the level of knowledge regarding prevention of swine flu through pretest scores. To develop and implementation of structured teaching programme on knowledge and prevention of swine flu. To assess the effectiveness of structured teaching programme on knowledge and prevention of swine flu through post-test scores. To determine the association between pretest levels of knowledge regarding prevention of swine flu with selected variables. To determine the association between post levels knowledge regarding knowledge and prevention of swine flu with selected variables.

2. Methodology

Research methodology involves the systematic procedure by which the researcher starts from the time of initial identification of the problem to its final conclusion. Setting refers to the physical location and condition in which data collection takes place. For the present study, the setting is in Bollineni super specialty Hospital, Nellore, Andhra Pradesh.

In this chapter, the researcher discusses the methodology adopted for the study. It presents the research approach, research design, setting of the study, population, sample and sampling technique, inclusion criteria, exclusion criteria, a method of data collection, development and description of the tool, content validity, the reliability of the tool, pilot study, procedure of data collection and plans for data analysis. This study is conducted to evaluate the effectiveness of structured teaching programme on management of side effects of chemotherapy among clients with cancer. The selection of research approach is a basic procedure for conducting a study. The research approach aids the researcher, what data to collect and how to analyze them. The research approach adopted for the present study was an evaluative approach to evaluate the effectiveness of structured teaching programme on knowledge and prevention of swine flu. The research design is a blue print to conduct a study that maximizes control factors that could interfere with study's desired outcome. Type of design directs the selection of a population, sampling procedure, data collection and plan for data analysis. After considering the entire factors related to the selected problem, the investigator has selected the pre experimental study design to be specific, one group pre test and post test was considered as an appropriate one. The research design was represented diagrammatically as follows,



01 - Pretest.

X – Structured teaching programme on management of side effects of chemotherapy

02 – Post-test.

Sample and sampling technique: Sample size for the present study was 6o Clients who are the (IP) patients of Bollineni Super specialty Hospital for pretest and same subjects for post-test subjects for the sample were selected using convenient sampling technique. The study includes the patients who are: willing to participate in the study. They are able to understand and speak Telugu or English. Available at the time of data collection. Patients whose age group falls under 20 to 60 years of age and patients who are admitted (IP) in the hospital the study excludes patients who are: Not willing to participate in the study. Unable to understand and speak Telugu or English. Not available at the time of data collection. Patients who belong to outpatient (OP) department

Method of data collection: Method of data collection includes the development of the tool, testing of validity and reliability and data collection procedure. A structured Interview schedule was developed and used for collecting the data. The questionnaire consists of two parts, A and B.

Part-A Consists of 5 items on personal demographic characteristics of the participants in relation to their age, gender, Educational status, the income of the family per month, Occupation.

Part-B Consists of two section A and section B

Section A: consist of Structured 10 questions related to knowledge regarding swine flu. All the questions put together carry a total of 10 marks. Ten questions were designed with multiple choices with one correct answer. Each question carries one mark. A scoring system is developed based on knowledge scores were ranged as follows; Mild knowledge - <40%, Moderate knowledge - 41- 70%, Good knowledge - above 71%.

Section B: consists of rating scale structured of 20 questions regarding prevention of swine flu. Twenty questions were designed with four categories for the scales were 'disagree', 'Mildly agree 'Moderately agree', and 'strongly agree' with the score of 0,1,2,3 respectively for the positive statements. The negative statements scored in a reverse fashion i.e; 'Strongly agree', 'Moderately agree', 'Mildly agree', and 'Disagree' with the score of 0,1,2,3. Scoring system is developed for the items, based on the knowledge scores were ranged as follows;

Mild knowledge- <15%, Moderate knowledge - 16 – 35%, Good knowledge - 36 – 45% and Very good knowledge - >45%.

The validity of tool: Content validity is concerned with the scope or range of items used to measure the variable. For examining the content validity, the questionnaire was validated by a panel of five experts in Medical-Surgical Nursing and two medical experts. After obtaining their suggestions necessary modifications were made in the tool.

Reliability of the tool: Reliability of the research instrument is defined as the extent to which the instrument yields the same result on repeated measures. It is then concerned with consistency, accuracy, precision, stability, equivalence, and homogeneity. The tool after validation was subjected to test for its reliability. The reliability of the tool was established by testing the stability and internal consistency. Stability was assessed by test and retest method. Internal consistency was assessed by Spearman brown prophesy formula.

Spearmen brown prophesy formula for reliability.

$$r = 2r /1+ r$$

Where 'r' is the estimated reliability of the item. The reliability of the tool was found to be 0.8 which indicated the tool is reliable.

Development of structured teaching programme; A structured teaching schedule was developed by the investigator based on a review of literature and consultation with experts. The structured teaching programme was aimed to improve the knowledge regarding swine flu and also to improve the knowledge regarding prevention of swine flu.

The content includes definition, mode of transmission o swine flu, etiology, signs and symptoms, diagnostic evaluation, treatment, and preventive aspects of swine flu. Subject experts in the nursing field validated the prepared structured teaching programme. After obtaining experts suggestions and advice, the final draft of teaching programme was prepared. Visual aids were prepared which included charts, Handouts, Flashcards.

Collection of data: Data collection is gathering information needed to address a research problem. Bollineni Super specialty Hospital of Nellore was selected for this study. Formal administrative approval was obtained from the Medical officer. Data was collected from 11-5-2013 to 21-5-2013.On day one that is on 16-5-2013 the structured questionnaire and rating scale were administered to the 60 clients as a pre-test and structured teaching was given on the same day. Post-test was conducted on 21-5-2013 with the same structured questionnaire and rating scale.

The plan for data analysis was as follows: The response to an item in Demographic profile was planned to be summarized in frequency and percentage. Pre and Post-test knowledge scores of the clients were planned to

be summarized in Mean and Standard Deviation. The chi-square test was planned to test the hypothesis of an association between Pretest and Posttest knowledge score and the selected demographic variables. 't'-test was planned to assess the effectiveness of structured teaching programme.

3. Results and findings

The present data deals with the results, which were obtained after organization and analysis and interpretation of data, obtained from 60 participants in Bollineni super specialty Hospital, Nellore in Andhra Pradesh. The data were processed and analyzed on the basis of the objectives and hypothesis formulated for the present study. The analysis is a process of organizing and synthesizing the data in such a way that research questions may be answered and the hypothesis is tested. The results were computed using descriptive and inferential statistics based on the following objectives of the study.

The study findings were organized and presented under the following headings.

Section I: Description of demographic variables.

Section II: Item wise analysis of pretest and posttest knowledge score regarding knowledge and prevention of swine flu.

Section III: The effectiveness of structured teaching programme through pre and post-test knowledge score.

Section IV: Association between Pre-test knowledge Score and Selected demographic variables.

Section V: Association between Post-test knowledge Score and selected demographic variables.

Section –I Description of demographic variables:

The total number of respondents was 60 clients. The sample characteristic selected for analysis was age, gender, educational status, occupational status, the income of the family per month.

Table No 1: Frequency and percentage distribution of patients by age, gender, religion education status, income of the family per month, occupation.

N=60

S.N	Variable	Frequency	%
1.	Age a) 21 to 30years b) 31 to 40years c) 41 to 50years d) 51 to 60 years	 19 15 15 11	 31.7 25 25 18.3
	Gender a) Male b) Female	 33 27	 55 45
3.	Educational status a) No formal education b) Primary education c) Secondary education d) Graduation and above	 3 9 18 30	 5 15 30 50
4.	Occupational status a) farmer b) coolie c) housewife d) Business e)Government employee f) Private employee g) Unemployed	 10 2 11 11 10 10 6	 16.7 3.3 18.3 18.3 16.7 16.7 10
5.	Family monthly income a) Less than Rs. 2500 b) Rs. 2501- Rs.4000 c) Rs.4001- Rs.5000 d) Above - Rs.5001	 16 9 13 22	 26.7 15 21.7 36.7

The data presented in table 1 shows that majority of participants 31.7% were in the age group of 21 - 30 years, 25% were in the age group of 31- 40 years, 25% were in the age group between 41- 50 years and 18.3% were found in the age group between 51 – 60 years

Regarding educational status the data reveals that 5% were illiterate, 15% of participants were primary education, 30% of participants were secondary education and 50% were of graduation and above. The data indicates the majority of the participants 26.7% were less than Rs 2500, 15% were earning Rs 2501- Rs 4000, 21.7% were earning Rs 4001 - 5000 and 36.7% were earning above Rs 5001.The data shows 16.7% were farmer, 3.3% were coolie, and majority 18.3% were housewife and 18.3%were business and 16.7%were government employee and 16.7% were private employees and 16.6% were Housewives 6% were unemployed

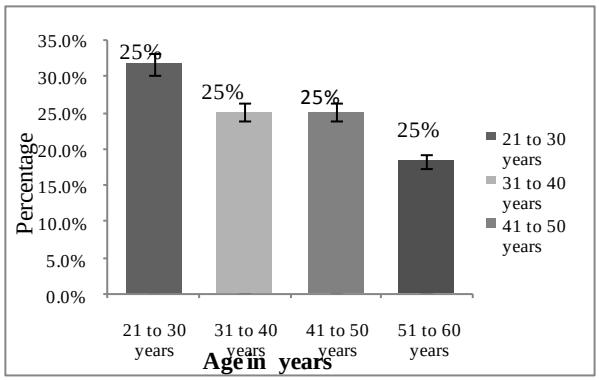


Figure No 1: Frequency and percentage distribution of age

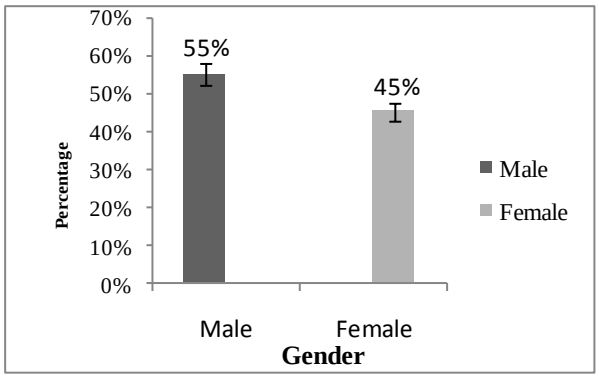


Figure No 2: Frequency and percentage distribution of gender

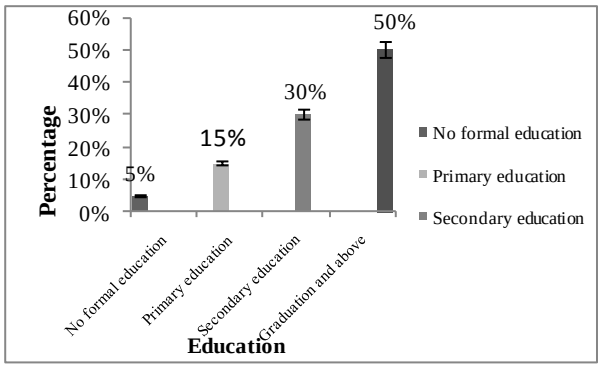


Figure No 3: Frequency and percentage distribution of education

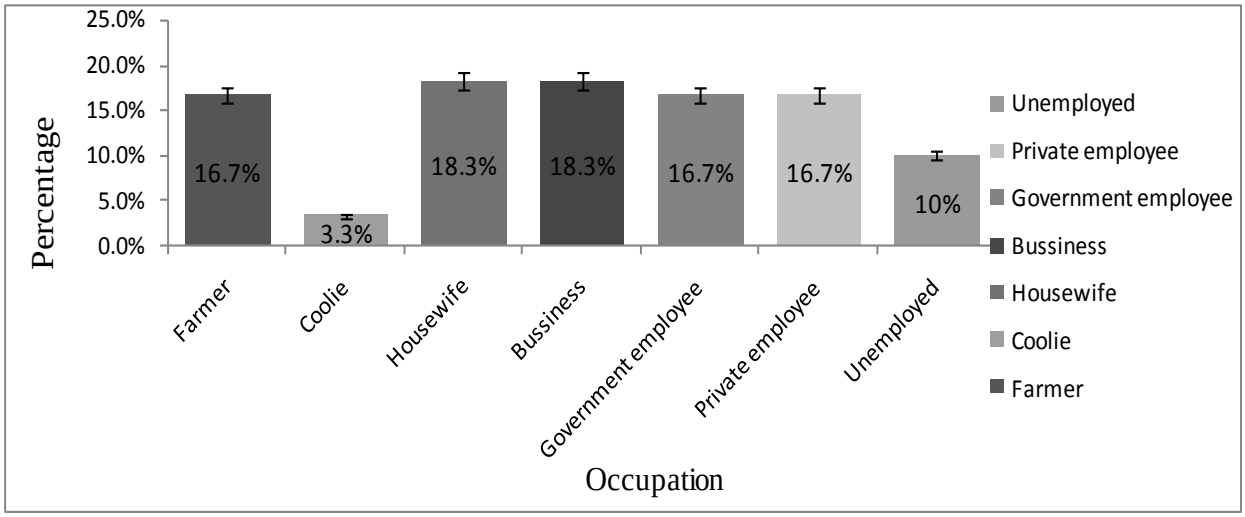


Figure No 4: Frequency and percentage distribution of occupation

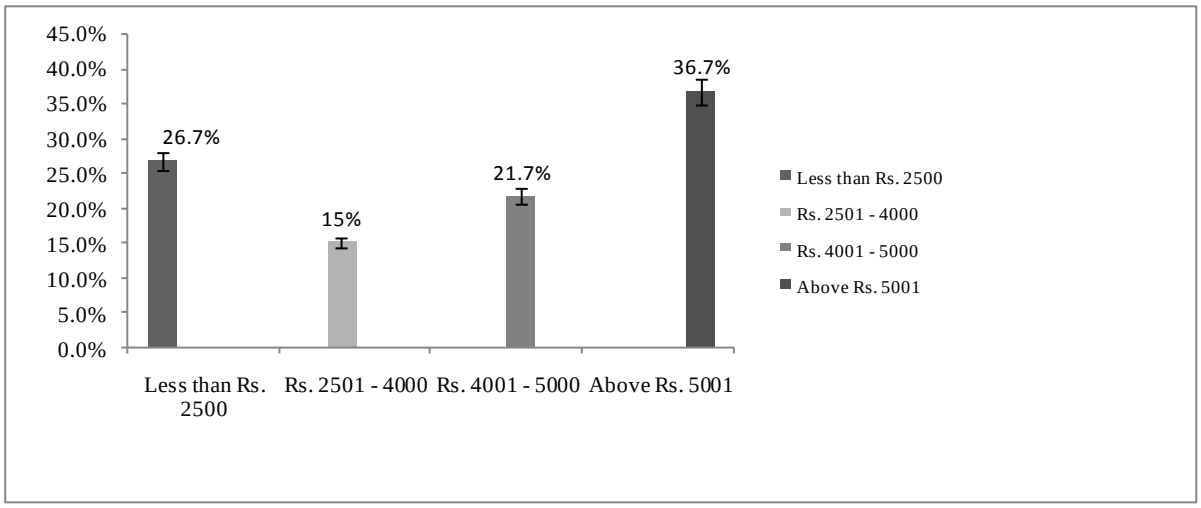


Figure No 5: Frequency and percentage distribution of family monthly income

Section-II: Item wise analysis of pretest and posttest knowledge score of knowledge and prevention of swine flu.

Table No 2: Frequency and percentage distribution of pretest and posttest knowledge score on swine flu

N=60

S.N.	Contents	Pretest		Post-test	
		F	%	F	%
1.	What is swine flu? a) Respiratory infection b) Gastro intestinal infection c) Urinary tract infection d) brain infection	40 10 7 3	66.6 16.7 11.7 0.5	60 0 0 0	100 0 0 0
2.	What is the causative organism of swine flu? a) H1n2 virus b) H2n3 virus c) H1n1 virus d) H3n2 virus	10 22 18 7	16.7 6.7 30 11.7	2 0 58 -	3.3 0 96.66 -
3	What is the incubation period for swine flu? a) 1 month b) 28 days c) 1 to 3 days d) 1 to 7 days	8 18 12 22	13.3 30 20 36.7	0 0 3 57	5 95 5 95
4.	What is the medium (or) mode of transmission for swine flu? a) Unhygienic food b) Coughing and sneezing c) Infected soil d) mosquitoes	8 31 15 6	13.3 51.7 25 10	1 59 0 0	1.7 98.3 0 0
5.	Who are at the risk for swine flu? a) Pregnant women, childrens, and adults b) adolescents c) psychiatric problems d) none of the above	33 11 10 6	55 18.3 16.7 10	48 0 2 10	80 0 3.3 16.7
6.	What is the major symptom of swine flu? a) A cough and fever b) constipation c) diarrhea d) abdominal pain	39 11 7 3	65 18.3 11.7 0.5	60 0 0 0	100 0 0 0
7.	What is the diagnostic test for swine flu? a) X-ray b) Real-time RT-PCR c) CT- scan d) MRI	8 36 6 10	13.3 60 10 16.7	0 60 0 0	100 0 0 0
8.	What is the clinical specimen used for Diagnosis of swine flu? a) Nasopharyngeal, throat swab b) Blood examination c) Urine examination d) CSF analysis	28 18 10 4	46.7 30 16.7 6.6	56 2 2 0	93.3 3.3 3.3 0
9	What is the drug recommended for prophylaxis and treatment of swine flu? a) Oseltamiver (Tamiflu) b) Isoniazid c) Rifampicin d) Atenolol	23 26 4 7	38.3 43.3 6.7 11.1	58 0 2 0	96.7 0 3.3 0
10	What is the duration of prophylaxis for swine flu? a) 5 days after last exposure b) 7 days after last exposure c) 10 days after last exposure d) 15 days after last exposure	20 20 9 11	33.3 33.3 15 18.3	4 55 1 0	6.6 91.7 1.6 0

The data presented in table 2 reveals that in patients 40(66.7%) respondents answered correctly regarding meaning of swine flu, 22(36.7%) respondents answered correctly regarding the causative organism for swine flu,

22(36.7%) respondents answered the incubation period for swine flu, 31(51.7%) respondents gave correct response to the mode of transmission for swine flu, 33(55%) respondents recognized the risk group for swine flu,39(65%) respondents answered the major symptom of swine flu, 36(60%) respondents answered correctly the diagnostic test for swine flu , 28(46.7%) respondents gave correct response to the clinical specimen for swine flu, 26(43.3%) respondents gave correct answer regarding the treatment for swine flu, 20(33.3%) respondents answered correctly about the duration of prophylaxis for swine flu. In Post Test 60(100%) respondents answered correctly regarding meaning of swine flu, 58(96.7%) respondents recognized the causative organism for swine flu, 57(95%) respondents answered the incubation period for swine flu, 59(98.33%) respondents gave correct response to the mode of transmission, 48(80%) respondents recognized the risk group for swine flu,60(100%) respondents answered the major symptom for swine flu, 60(100%) respondents answered correctly for the diagnostic test for swine flu, 56(93.3%) respondents gave correct response about the clinical specimen for swine flu,58(96.7%) respondents answered about the treatment for swine flu,55(91.7%) gave correct answer for the duration for prophylaxis for swine flu.

Table No 3: Frequency and percentage distribution of clients having knowledge on prevention of swine flu in pretest and post-test knowledge score on rating scale N = 60

SN	Contents	Pretest		Post-test	
		F	%	F	%
1	Disinfection is a method of aseptic technique to inactivate swine flu virus. a) disagree b) mildly agree c) moderately agree d) strongly agree	 6 13 14 27	 10 21.7 23.3 41.7	 0 0 2 58	 0 0 3 96.7
2	Drying is the best method of aseptic technique to inactivate swine flu virus. a) Disagree b) mildly agree c) moderately agree d) strongly agree	 25 12 11 12	 41.7 20 18.3 20	 56 2 2 0	 93.33 3.3 3.3 0
3	Best method of preventing swine flu in a simple method is hand washing a) Disagree b) Mildly agree c) Moderately agree d) Strongly agree	 9 14 21 16	 15 23.3 35 26.7	 5 26 4 25	 8.3 43.33 6.66 41.6
4	For preventing swine flu recommended hand washing time period is 15 – 20 seconds a) Disagree b) Mildly agree c) Moderately agree d) Strongly agree	 10 13 13 22	 16.7 21.7 21.7 36.7	 0 1 1 58	 0 1.66 1.66 96.66
5	Avoiding swine flu person is an essential preventive method of swine flu a) Disagree b) Mildly agree c) Moderately agree d) Strongly agree	 21 19 12 8	 35 31.7 20 13.3	 0 0 57 3	 0 0 95 5
6	5 to 10 minutes is an ideal time period for hand washing for preventing the spread of swine flu a) Disagree b) Mildly agree c) Moderately agree d) Strongly agree	 6 13 27 25	 10 21.7 45 41	 56 1 1 2	 93.33 1.66 1.66 3.33
7	Throwing tin trash is the best method of waste Disposal for preventing swine flu a) Disagree b) Mildly agree c) Moderately agree d) Strongly agree	 17 18 22 3	 28.3 30 36.7 5	 0 1 2 57	 0 1.66 3.33 95

8	Burning is also the best method of waste disposal for preventing spread of swine flu				
	a) Disagree	13	21.7	54	90
	b) Mildly agree	10	16.7	3	5
	c) Moderately agree	15	25	3	5
	d) Strongly agree	22	36.7	0	0
9	Wiping is the best method of household cleaning for prevention of swine flu				
	a) Disagree	9	15	0	0
	b) Mildly agree	11	18.3	1	1.66
	c) Moderately agree	20	33.3	1	1.66
	d) Strongly agree	20	33.3	58	96.66
10	Wiping with acid is a very good method of household cleaning for prevention of swine flu				
	a) Disagree	9	15	59	98.33
	b) Mildly agree	14	23.3	1	1.66
	c) Moderately agree	21	35	0	0
	d) Strongly agree	16	10	0	0

Table 3 reveals that in pretest 27 (45%) respondents answered Disinfection is a best preventive method for swine flu, 25 (41.6%) respondents recognized drying is a preventive method of swine flu, 21 (35%) respondents answered hand washing is the best method of swine flu,22(36.7%) respondents gave correct response for 15– 20 seconds is the time period for hand washing to prevent swine flu ,21(35%) respondents recognized avoiding swine flu person prevents swine flu, 25 (41.6%) respondents answered 5 to 10 minutes is an ideal time for hand washing, 22 (36.7%) respondents gave correct response for throwing in the trash is a preventive method of swine flu, 22(36.7%) respondents recognized burning is the best method for swine flu, 20 (33.3%) respondents answered for wiping the house hold things is a preventive method for swine flu, 21(35%) respondents answered correctly for wiping with acid is not a preventive method for swine flu.27(45%) respondents gave correct response for the vaccine is the preventive method for swine flu, 22(36.7%) respondents answered 100 degree is an ideal temperature for swine flu, 22(36.7%) respondents 160 degree is the ideal temperature for boiling swine flu,21(35%) respondents answered killing pigs in the prevalent area is a preventive method of swine flu, 21(35%) respondents answered swine flu infected clients must use hand kerchiefs while coughing or sneezing,22 (36.7%) respondents answered discarding the clothes of an infected person is the preventive method of swine flu,28 (46.6%) respondents recognized utensils of an infected person is washed with dish washer is the preventive method for swine flu,22 (36.7%) gave an answer for protein rich foods prevents swine flu,20 (33.3%) respondents answered mosquito nets for the prevention of swine flu.

In Post test 58 (96.7%) respondents answered disinfection is the best method of prevention of swine flu, 56 (93.3%) respondents recognized drying is not a preventive method of swine flu, 25 (41.6%) respondents answered hand washing is the preventive method of swine flu,58(96.6%%) respondents gave a correct response that 15 to 20 seconds is the ideal time for prevention of swine flu,57 (95%) respondents answered avoiding swine flu infected person is a preventive method, 56 (93.3%) respondents answered 5 to 10 minutes is not an ideal time for hand washing,57(95%) respondents gave correct response for throwing trash prevents swine flu, 54 (90%) respondents, recognized burning is not a best method for swine flu, 59 (98.66%) respondents answered that wiping with the house hold things is the best preventive method of swine flu, 59 (98.33%) respondents answered that wiping with with acid is not a best method for prevention of swine flu.57 (95%) respondents gave a correct answer that vaccine can prevent swine flu, 57 (95%) respondents answered boiling pork at 100 degree is not an ideal temperature for prevention of swine flu , 56 (93.33%) respondents answered 160 degree is the ideal temperature for boiling pork meat, 59 (98.33%) respondents answered killing pork is not an preventive method for prevention of swine flu, 49(81.66%) respondents answered correctly that swine flu infected person must use hand kercheifs while sneezing or coughing.58 (96.6%) respondents answered that discarding the linen of swine flu infected person is not a preventive method for swine flu, 50 (83,3%) recognized that the utensils used by a swine flu infected person are washed with dish washer for prevention of swine flu, 58 (96.7%) respondents answered protein rich food prevents swine flu, 57 (95%) respondents answered using mosquito nets is not the best method of preventing swine flu.

Table No 4: Frequency and percentage distribution of pre-test and post test overall knowledge score on swine flu.

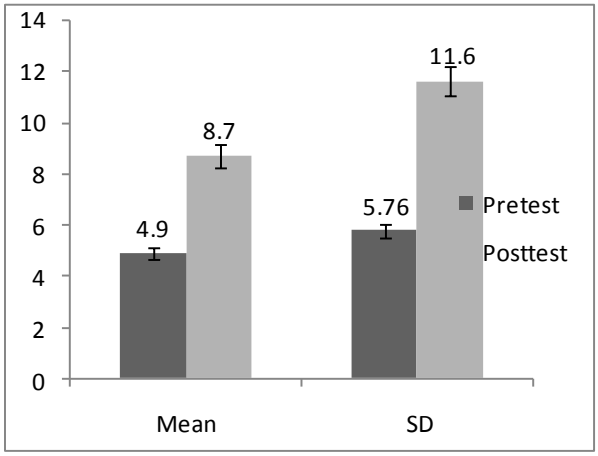
N =60

Pre test						post test					
Mild knowledge		Moderate knowledge		Good knowledge		Mild knowledge		Moderate knowledge		Good knowledge	
F	%	F	%	F	%	F	%	F	%	F	%
27	45%	24	40%	9	15%	0	0%	9	15%	51	85%

In pretest 27 (45%) respondents had mild knowledge on swine flu, but in the post-test none of them had mild knowledge. The findings represent that the following structured teaching programme on knowledge regarding swine flu only made improvement in knowledge score. Thus, the effectiveness of structured teaching programme is proved.

The results the obtained mean value during post-test is 8.7 significantly higher than the pretest mean score 4.9. It directly represents that the structured teaching programme is effective.

Figure No 6: Mean and standard deviation for pre-test and post test knowledge score on swine flu



The results show the obtained mean value during the post-test is 51.6 significantly higher than the pretest mean score value 29.8. It directly represents that the structured teaching programme is effective.

Section – III

Table No 5: Comparison of pretest and post test knowledge score of structured teaching programme on swine flu.

N=60

Pre-test	Post-test	
Mean ± SD	Mean ± SD	't' value
29.8 ± 44.9	51.6 ± 74.2	5.62

The above table shows the calculated 't' value (5.62) is significantly higher than the table value (1.645). So the researcher accepted research hypothesis, so it is proved that there is a significant relationship between pre and post test knowledge score on structured teaching programme on swine flu. The results show that the calculated' "t" value is (10.6) is significantly higher than the table value (1.645). So the researcher accepted the research hypothesis, so it is proved that there is a significant relationship between pre and post test knowledge score on prevention of swine flu.

Section – IV: Association of pretest knowledge score of structured teaching programme on swine flu and selected demographic variables. This section presented the findings of the association of pretest knowledge scores of clients and selected demographic variables. The chi-square test has been applied to find out the association of pretest level of knowledge of patients with their demographic variables. The table shows that the demographic variables gender (0.3<3.84), family income (3.75<7.81) has not shown statistically significant association at p<0.05 level and hence it is lower than the table value. Associations of post-test Knowledge score of swine flu and selected demographic variables. This table presented the findings on the association of post-test knowledge scores on swine flu and selected demographic variables. Chi-square test has been applied to find out the association of post-test level of knowledge of patients with their demographic variables. The table shows that the demographic variables age (0.99<7.81), gender (1.24<3.84), family income (6.47<7.81) has not shown statistically significant association at p<0.05 level. Association of pre-test and post test level knowledge score on prevention of swine flu and selected demographic variables. This table presented the findings of the association of pre-test scores on prevention of swine flu. Chi – square test has been applied to find out the association of pre-test level of knowledge on prevention of swine flu with their demographic variables. Demographic variables age (2.58<7.81), gender (0.36<3.84), education (4.91<7.81), occupation (7.65<12.6), family income (2.81<7.81) has not shown statistically significant association at p<0.05 level and hence it is lower than the table value.

4. Discussion

Swine flu is a respiratory tract infection, which can kill the human race. This infection is a worldwide outbreak. The disease spreads easily to person – to person, can cause illness, and can spread out across the country. In an effort to assess the knowledge of patients, pre-experimental one group pretest posttest design was conducted. A sample of 60 inpatients (IP) clients was selected. A pre-test was conducted to assess the existing knowledge. Health education was given through structured teaching programme on knowledge and prevention of swine flu. A post-test was conducted to assess the effectiveness of structured teaching programme. The study's independent variables were age, gender, educational status, the income of the family per month, occupation. While the dependent variables were the knowledge of clients, as evaluated through structured questionnaire and rating scale.

The present study aimed at assessing the knowledge and prevention of swine flu among the inpatients before and after implementation of the structured teaching programme. The study Hypothesis is a significant association between pretest and post test knowledge scores regarding knowledge and prevention of swine flu

among clients. There is a significant association between the pretest knowledge and the selected variables regarding knowledge and prevention of swine flu among clients. There is a significant association between the post-test knowledge and the selected variables regarding knowledge and prevention of swine flu among clients. The present study Null hypothesis is no significant association between pre-test and post test knowledge scores on knowledge and prevention of swine flu among clients. There is no significant association between the pretest knowledge and selected demographic variables. There is no significant association between the post-test knowledge and the selected demographic variables. [9]

Characteristics of sample: Out of 60 samples, the majority (31.7%) were in the age group between 21 to 30 years. Majority of samples (55%) belonged to males. With regard to education, the majority of the respondents were graduation and above (50%). Majority of samples (50%) had a monthly income of above Rs.5001 Majority of samples (18.3%) were a business.

Frequency and percentage distribution of pretest and post test knowledge score on swine flu; 40(66.7%) respondents answered correctly regarding the meaning of swine flu, 22(36.7%) respondents answered correctly regarding the causative organism for swine flu, 22(36.7%) samples answered the incubation period for swine flu, 31(51.7%) samples gave the correct response to the mode of transmission for swine flu, 33(55%) samples recognized the risk group for swine flu,39(65%) samples answered the major symptom of swine flu, 36(60%) samples answered correctly the diagnostic test for swine flu, 28(46.7%) samples gave the correct response to the clinical specimen for swine flu, 26(43.3%) samples gave a correct answer regarding the treatment for swine flu, 20(33.3%) samples answered correctly about the duration of prophylaxis for swine flu. Education (8.35<7.81) found to have a significant association with regard to post-test knowledge on prevention of swine flu. Hence, the researcher accepted research hypothesis. [10]

The major findings of the study were: Out of 60 respondents, the majority (31.7%) was in the age group between 21 to 30 years. Majority of respondents (55%) belonged to males. With regard to education, the majority of the respondents were graduation and above (50%). Majority of respondents (50%) had a monthly income of Rs. 5001. Majority of respondents (18.3%) were a business. The average knowledge score for the pretest score on knowledge on swine flu is 27 (45%) has the mild knowledge, 24 (40%) has the moderate knowledge, 9 (15%) has good knowledge and post-test score on knowledge regarding swine flu is 9 (27%) has the moderate knowledge, 51 (85%) has good knowledge and none of them have mild knowledge. The average knowledge score for the pretest score on knowledge on prevention of swine flu is 2 (3.3%) mild knowledge, 3 (5%) moderate knowledge, 18 (30%) good knowledge, 37 (61.6%) very good knowledge and for post-test score on prevention of swine flu is 0 (0%) for mild, moderate, and good knowledge and 100 (100%) for very good knowledge.

Association between knowledge scores on prevention of swine flu and selected demographic variables: There is no significant association between the pretest knowledge level on prevention of swine flu among clients and selected demographic variables like age, gender income of the family per month, occupation at 0.05 levels. There is a significant association between the post-test knowledge level on prevention of swine flu among patients and selected demographic variable like Education at 0.01 and 0.05 level of significance. Hence the researcher accepts the research hypothesis.

Conclusions

Nursing plays a vital role in imparting knowledge as lack of knowledge on prevention of swine flu is one of the main cause of related health problems and it is necessary to educate the clients about the importance of health protection and to prevent the transmission of infection. The present study showed that most of the clients had inadequate knowledge on prevention of swine flu and the student researcher in her clinical practice encountered many of the health problems occurred due to lack of knowledge. Nursing education emphasizes that health care system should pay more attention to training the nursing students. So that the nurses themselves will become knowledgeable and can be of help others as by imparting Health education by using various methods of educational technology. Nurses can also coordinate and discuss prevention of transmission of infection and its consequences at various forums and meetings so that the health programs are organized at various levels for clients and public, thus creating awareness in order to prevent the transmission of infection. Currently, nursing practice based on evidence-based practice. so it is important to do research to equip the Medical health nurses to be an independent practitioner in various healthcare settings. We conclude in order to plan health education programme to improve knowledge of clients regarding knowledge and prevention of swine flu.

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