Original Research Paper



Nursing

A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PREVENTION OF SWINE FLU AMONG STUDENTS OF SELECTED NURSING COLLEGES IN SRINAGAR.

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ABSTRACT Swine flu is a respiratory tract infection from the pigs. This kind of virus can kill whole of the human race. Some of the symptoms of swine flu are fever, Lethargy, Lack of appetite, Runny nose, Sore throat, nausea, Vomiting, Diarrhea, and coughing. It is transmitted easily between humans, due to an ability attributed to a mutation not yet identified and makes it through the saliva, by air, by close contact between the mucous membrane or through hands mouth transmission due to contaminated hands.⁵

Aim: Aim of the study is to enhance the knowledge of Students regarding prevention of swine flu and in turn, help the students to improve the quality of life by controlling the spread of swine flu.

Materials and Methods: A Pre-experimental study was conducted using one group pre test post research design to assess the level of knowledge of students regarding prevention of swine flu. The study was conducted in 2 selected nursing colleges of Srinagar (Government College of Nursing, M.A road and Government College for Nursing and Paramedical Sciences, Shireen Bagh. The sample was selected by Stratified proportionate Simple random sampling. The sample size was 80. Structured questionnaire was used to assess the knowledge of students.

Results and conclusion: The overall mean knowledge score 28.61 obtained by the subjects in post-test was higher than mean knowledge scores 20.18 in the pre-test and with the improvement score as 8.42. There was significant difference between pre-test and post-test knowledge score at $p \le 0.05$. The results of the study revealed that that the planned teaching programme was significantly effective in improving the knowledge of students regarding prevention of swine flu. Hence the study concluded that improved knowledge regarding prevention of swine flu helps the students to take preventive measures against swine flu, which will, in turn, help the students to improve the quality of life by controlling the spread of swine flu, and thus the students can bring about the awareness among the public.

KEYWORDS: Planned Teaching Programme, Effectiveness, Knowledge, Students, Nursing College, Prevention Of Swine Flu.

Introduction

"It Is Health That Is Real Wealth And Not Pieces Of Gold And Silver"

(MAHATMA GANDHI)

Life is not merely to be alive but to be healthy and wealthy. Every day we hear about new disease and get fear and panicked. Despite incredible improvements in health since 1950, there are still a number of challenges, and infectious diseases remain among the leading causes of death worldwide. More than half of the victims are people suffering from chronic medical condition.¹

Swine flu (swine influenza) is a respiratory disease caused by viruses (influenza virus) that infect the respiratory tract and result in nasal secretions, a barking cough, decreased appetite and listless behavior. (In simple definition, swine flu is a respiratory disease, caused by a stain of the influenza virus known as H1N1).²

Swine flu, was first proposed to be a disease related to human flu during the 1918 flu pandemic, when pigs became ill at the same time as human. The first identification of an influenza virus as a cause of disease in pigs occurred about ten years later in, 1930.³

The swine flu virus, first detected in Mexico in April 2009 is rapidly spreading across the world. On 10th August 2010, the world health organization (WHO) declared that the H1N1 influenza pandemic was officially over. The H1N1 flu virus will be one of the main viruses circulating this winter. Therefore, the H1N1 flu virus has been included in the 2010–2011 seasonal flu vaccine.⁴

Swine flu is a respiratory tract infection from the pigs. This kind of virus can kill whole of the human race. Some of the symptoms of swine flu are fever, Lethargy, Lack of appetite, Runny nose, Sore throat, nausea, Vomiting, Diarrhea, and coughing. It is transmitted easily between humans, due to an ability attributed to a mutation not yet identified and makes it through the saliva, by air, by close contact between the mucous membrane or through hands mouth transmission due to contaminated hands.⁵

The two antiviral drugs can be taken such as Tamiflu and Relenza available with prescription can make the illness milder and make feel better faster. These drugs are also prevent serious influenza complications. There are different agencies that are providing funding advice and other support from different rich nations to every country to assist swine flu epidemic planning and preparation.⁵

Need for the study

"Swine Flu -Swine Influenza A H1N1 Virus is spreading like a rocket speed and everybody is in fear"

Since swine flu is a most recent epidemic outbreak and most highly dangerous disease it caused havoc in the minds of people to use surgical mask and caused tremendous fear in the mind of public.

To provide knowledge to the public regarding respiratory hygiene through mass media and educational messages through news paper, journals, magazines, Television, TV aids, Internet etc must be done. A step must be taken by the Government in distributing surgical masks and discouraging large public gatherings including theater events, Games etc.

For various infection people are scared of swine flu of all ages in whole of countries. The people at high risk of getting swine flu are parents who have had drug treatment of Asthma in the past three years, pregnant women, people aged 65 years and older, children under five years of age, children, people with chronic lung disease, chronic heart disease, kidney disease, liver disease, chronic neurological disease people with immnosuppression or Diabetes mellitus. Therefore I as a Researcher felt that above studies were pathway for me to select this problem statement.

Objectives:

- To assess the pre-test knowledge scores regarding prevention of swine flu among students of selected nursing colleges in Srinagar.
- To assess the post-test knowledge scores regarding prevention of swine flu among students of selected nursing colleges in Srinagar after planned teaching programme.
- To compare pre test and post test knowledge scores regarding prevention of swine flu among students of selected nursing colleges in Srinagar.
- 4. To determine the association of pre-test knowledge scores of students regarding prevention of swine flu with their selected demographic variables(age of adolescents, gender, educational status of father, educational status of mother, residence, type of family ,family income).

Hypothesis:

- 1) \mathbf{H}_i : There is significant difference between pre-test knowledge and post test knowledge scores regarding prevention of swine flu among students at ≤ 0.05 level of significance.
- 2) H₂: There is significant association between pre-test knowledge

scores of students regarding prevention of swine flu with their selected demographic variables (age of students, gender, educational status of father, educational status of mother, residence ,type of family, family income) at \leq 0.05 level of significance

Conceptual frame work.

The conceptual framework of study was based on 'Imogene Kings GoalAttainment Theory (1971).⁶

Materials and Methods

The research design used in this study was Pre- experimental in nature. The study was conducted at selected 2 nursing colleges of District Srinagar, Kashmir. The sample of 80 students on the basis of inclusion and exclusion criteria were selected by using stratified proportionate simple random sampling. The tool used for the study was structured knowledge questionnaire which consists of section I (Demographic Performa: age of students, gender, educational status of father, educational status of mother, residence type of family, family income and section II (consisting of 36 items related to knowledge assessment regarding prevention of swine flu .The content validity of structured knowledge questionnaire was ensured by submitting the tool to the experts in the field of community health nursing, child health nursing, clinical psychology .A pilot study was conducted on 10% of total sample size in Government College of Nursing M. A Road Srinagar. Reliability of tool was established by Karl Pearson's Correlation coefficient. The reliability of tool was calculated and it was 0.99.

Results and Findings

In this study, 80 students participated. The data and the findings were entered in a master data sheet followed by the analysis and interpretation using descriptive statistics (i.e. frequency, percentage, mean, median and standard deviation) and inferential statistics (i.e. ttest and ANOVA) according to the objectives of the study. The results obtained were presented in the following headings:

Section I: Findings related to Demographic variables.

Table 1: Shows Frequency and percentage distribution of subjects according to demographic variables.

Variables		Frequency(f)	N=80 Percentage (%)
Age	Less than 20 years	45	56.3
Age	Greater than 20 years	35	43.8
	Total	80	100
Gender	Male	40	50
Gender	Female	40	50
	Total	80	100
Educational	Illiterate	8	10.0
status of	Middle pass	12	15.0
father	Secondary	23	28.7
ratifici	Higher secondary	11	13.8
	Graduate	21	26.3
	PG	5	6.3
	Total	80	100.0
Educational	Illiterate	26	32.5
status of	Middle pass	21	26.3
mother	Secondary	13	16.3
	Higher secondary	7	8.8
	Graduate	9	11.3
	PG	4	5.0
	Total	80	100.0
Residence	Rural	33	41.3
	Urban	47	58.8
	Total	80	100.0
Type of	Nuclear	40	50.0
family	Joint	40	50.0
	Total	80	100.0
Family	Less than 10000	25	31.25
income per	10000 to 30,000	37	46.25
month	Greater than 30,000	18	22.5
	Total	80	100.0

Section II. Knowledge of subjects regarding prevention of swine flu before and after implementation of planned teaching Programme.

 $Table 2: Shows\ Mean, Median, S.D, Range\ of\ pre\ -test\ and\ post-test\ knowledge\ scores\ of\ subjects\ regarding\ prevention\ of\ swine\ flu.$

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Knowledge	Mean	Median	Standard	Minimum	Maximum	Range	ı
Scores			deviation				

Pre test	20. 18	21.00	3.99	9.00	28.00	19.00
score						
Post test	28.61	29.00	3.46	19.00	34.00	15.00
score						

Table 3: Comparison of pre- test and post -test Mean knowledge scores of subjects regarding prevention of swine flu.

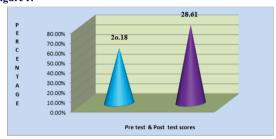
To test research hypothesis, following Null Hypothesis was formulated.

 $\mathbf{H_o}$: There is no significant difference between the pre test and post test knowledge scores regarding prevention of swine flu.

Table 3

			N=80
	Mean ± Standard deviation	Mean Difference	P Value
Pre test score	20.18±3.99	8.42	≤0.001
Post test score	28.61±3.46		

Figure 1:



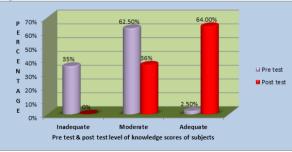
The data in table 3 and figure 1 showed that over all pre-test score mean 20.18 as against post-test score mean of 28.61 with mean difference of 8.42. The difference between the two scores (56% v/s 79.40%) showed a significant association (p value ≤ 0.001). Hence the Null hypothesis (H0) is rejected and on contrary Research hypothesis H1 "There is significant difference between pre-test knowledge and post test knowledge scores regarding prevention of swine flu" among students is accepted.

Table 4: Shows Comparison between pre-test & post-test Level of Knowledge of subjects regarding prevention of swine flu.

N-QA

Level of	Percentage	Pre test		Post test	
Knowledge	Score	Frequency	%age	Frequency	%age
Inadequate	≤50%	28	35%	0	0%
Moderate	51-75%	50	62.5%	29	36%
Adequate	>75%	2	2.5%	51	64%
Total		80	100%	80	100%

Figure 2:



The data in the table 4 and figure 2 showed that in pre- test 35% having inadequate, 62.5% having moderate and 2.5% having adequate knowledge and in post- test 64.% having adequate, 36% having moderate and no one was having inadequate knowledge regarding prevention of swine flu. This indicates that Planned Teaching Programme was effective in increasing knowledge regarding prevention of swine flu.

Section III: Findings related to association of pre –test knowledge scores of subjects with their selected demographic variables.

Here the researcher tests the null hypothesis H0that there is no significant association between pre-test knowledge scores of subjects with their selected demographic variables.

Table 5:

				N=80
Variables	Category	Pre test	Mean	P value
		mean /	difference	
		standard		
		deviation		
Age	Less than 20 years	20.00±4.15	0.42	0.57
	Greater than 20	20.42±3.82		N.S
	years			
Gender	Male	20.90± 3.54	1.42	0.11
	Female	19.47 ± 4.32		N.S
Educational	Illiterate	18.25±5.11	0.66	0.11
status of	Middle pass	18.91±5.38	0.78	N.S
father	Secondary	19.69±3.06	3.03	
	Higher secondary	22.72±1.95	2.25	
	Graduate		1.33	
	PG	21.80±4.08	3.55	
Educational	Illiterate	18.03±4.82	3.49	0.03
status of	Middle pass	21.52 ± 2.83	0.83	S*
mother	Secondary	20.69±3.61	0.59	
	Higher secondary	21.28±3.54	0.38	
	Graduate	21.66±2.17	1.41	
	PG	20.25±4.34	2.22	
Residence	Rural	19.51±3.25	1.14	0.05
	Urban	20.65±4.41		N.S
Type of	Nuclear	20.82±3.90	1.27	0.15
family	Joint	19.55±4.03		N.S
Family	Less than 10000	18.92±4.23	1.89	0.16
income/month	10000 to 30,000	20.81±4.15	0.15	N.S
	Greater than	20.66±2.97	1.74	
	30,000			

Note: N.S-Not significant. S^* -Significant at $p \le 0.05$ level

The data presented in Table 5 indicates that there is significant association of pre test knowledge scores with demographic variable as Educational status of mother (p=0.01) at p \leq 0.05 level and no association was found with variables as Age , Gender, Educational status of father, residence, Type of Family, Family income. Hence the investigator accepted the Null hypothesis (\mathbf{H}_0 : There is no significant association between pre test knowledge scores of subjects with their selected demographic variables) & rejects the Research hypothesis (\mathbf{H}_2 : There is significant association between pre-test knowledge scores of students regarding prevention of swine flu with their selected demographic variables i.e. age of students, gender, educational status of father, educational status of mother, , residence, type of family, family income) at p \leq 0.05.

Discussion

The findings of the study revealed that knowledge level of students regarding prevention of swine flu is inadequate and there is a great need to improve this knowledge. In pre- test knowledge scores 28(35%) were having inadequate knowledge, 50(62.5%) were having moderate knowledge and 2(2.5%) were having adequate knowledge regarding prevention of swine flu. This reveals that majority of students were having moderate knowledge, so they need to be educated and informed regarding prevention of swine flu.

The present results were supported by the findings of a descriptive study conducted by Marshal TP, Menon SA, Shailaja Anik, Apurva Rai (2017)⁷ to Assess the Effectiveness of Health Awareness Programme on Knowledge regarding Swine Flu among People in selected Rural Area of Balod, (C.G.). During Pre test (2%) were having excellent knowledge, (42%) having good knowledge, (34%) having average knowledge and (22%) having poor knowledge. Results of the study concluded that knowledge regarding swine flu among people is insufficient & prior information is necessary to create awareness to take preventive measures against swine flu.

The findings in post-test revealed that majority of the students, 51(64%) were having adequate knowledge, 29(36%) were having moderate knowledge & no one was having inadequate knowledge regarding prevention of swine flu after implementation of planned teaching Programme

The present results were supported by the findings of a descriptive study conducted by Marshal TP, Menon SA, Shailaja Anik, Apurva Rai (2017)⁷ to Assess the Effectiveness of Health Awareness

Programme on Knowledge regarding Swine Flu among People in selected Rural Area of Balod, (C.G.). During post test majority (12%) were having excellent knowledge, (70%) were having good knowledge, (18%) were having average knowledge and (0%) were having poor knowledge after implementation of awareness program regarding swine flu.

The overall mean knowledge score 28.61 obtained by the students in post- test was higher than mean knowledge score 20.18 in the pre- test There was significant difference between pre-test and post- test knowledge score at p<0.05. This indicates that Planned Teaching Programme was highly effective in enhancing the knowledge of students regarding prevention of swine flu.

The present results were supported by the findings of a descriptive study conducted by Marshal TP, Menon SA, Shailaja Anik, Apurva Rai (2017) to Assess the Effectiveness of Health Awareness Programme on Knowledge regarding Swine Flu among People in selected Rural Area of Balod, (C.G.). The mean score of pre test and post test level of knowledge regarding swine flu were 14.84 and 20.64 with the improvement score as 5.8.

The association of demographic variables with pre test knowledge scores by using ANOVA revealed that there is statistically significant association with variable as educational status of mother (p=0.01) at p ≤ 0.05 level and no association was found with variables as Age , Gender, Educational status of father, residence, Type of Family, Family income. Hence the research hypothesis (H2: There is significant association between pre-test knowledge scores of students regarding prevention of swine flu with their selected demographic variables (age of adolescents, gender, educational status of father , educational status of mother, residence, type of family, family income) is rejected.

The present results were supported by the findings of a descriptive study conducted by $Pardeshi\,AK$ and $Mini\,Shibu\,(2018)^s$ to assess the effectiveness of planned health teaching on knowledge regarding swine flu among students in selected schools of pune city. There was a significant association between knowledge and age of the students as p value <0.05 whereas the other variable like gender, educational status of parents and information on swine flu was not significantly associated as p>0.05.

From the above findings, it can be concluded that the knowledge level of students regarding prevention of swine flu can be enhanced by conducting different teaching Programmes. By imparting this kind of knowledge it can help to prevent the transmission of swine flu & can improve their quality of life. Furthermore, from the above findings it has been seen that there was significant association between pre- test knowledge and mother's educational status i.e., those whose mothers were highly qualified were having good knowledge regarding prevention of swine flu. So, we can reveal that mother's education level and knowledge have great impact on child's knowledge and behaviour.

Recommendations:

- Similar study may be replicated on large samples to generalize the findings.
- A study may be conducted in health clinics & community organisations that have access to adults & want to have an impact on health of community.
- A study can be done to assess the attitude and practices of caregivers on swine flu disease.
- A comparative study can be done to assess the knowledge regarding swine flu between students residing in urban and rural
- A similar study can be conducted with different teaching strategies such as SIM. (Self-instructional module), video assisted teaching.

Conclusion:

Based on the findings of the study it can be concluded that there was evident increase in the knowledge scores in all the areas included in the study after administration of PTP. Thus it was proved that PTP was effective for creating awareness regarding prevention of swine flu among students of selected nursing colleges in Srinagar.

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