A Study to Assess The Effectiveness of Structured Teaching Programme (Stp) on Knowledge Regarding Prevention of Swine Flu Among Rural Population of Kale, Karad Taluka."

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ABSTRACT Swine flu is an infectious disease caused by swine influenza virus. It is also called as pig flu, hog flu. It is a general term used for a variety of strains of influenza virus commonly found in pigs and people who have frequent close contact with pigs such as, farmers or veterinarians may catch a strain of the swine flu from pigs.1   In Maharashtra 4826 cases and 440 deaths occurred. This shows that total affected cases in India were 34220 and deaths were 2115. With regard to above data there is urgent need to take steps to make people aware regarding swine flu, treatment and management. Aim& Objectives:1) To assess the level of knowledge regarding prevention of swine flu among rural population.2) To determine the effectiveness of structured teaching programme on knowledge regarding prevention of swine flu among rural population.3) To find out the association between knowledge score of adults with selected demographic variables.

Material & Methods: A quasi experimental one group pre test and post test was adopted in the present study to accomplish the objectives. Simple Random sampling technique was used to select samples consists of 60 adults. The pre test assessment of knowledge of the adults was carried out using the structured knowledge questionnaires followed by ST P session regarding swine flu. After 7 days the post test was conducted using the same structured knowledge questionnaires. The collected data was analyzed by using descriptive and inferential statistics. Result: Table reveals that in pre-test 3 (5%) adult are had poor knowledge, the majority 42(25%) had average knowledge and 15(70%) had good knowledge regarding swine flu Where as in post-test 20(33%) adult had average knowledge, 35 (58%) had good knowledge and 5(8%) adult had poor knowledge regarding swine flu .   Table reveals that in pre-test 2 (3.33%) adults are having poor knowledge, the majority 32(53.33%%) had average knowledge and 26 (43.33%) had good knowledge regarding treatment of swine flu where as in post-test majority 33(55%) adult had average knowledge, 19(32 %) had good knowledge and 8 (13%) student had poor knowledge regarding treatment of swine flu. Table reveals that in pre-test 7 (11.6 %) student are had poor knowledge, the majority 43(71.6%) had average knowledge and 10(17%) had good knowledge regarding prevention of swine flu Where as in post-test majority 30(50 %) adults had average knowledge, 23 (38.3%) had good knowledge and 7 (12%) adult had poor knowledge regarding prevention of swine flu .

Conclusion: The study concluded that there is a strong need to create awareness amongst the subjects regarding swine flu, treatment and prevention through IEC activities.

INTRODUCTION:

Swine flu is an infectious disease caused by swine influenza virus. It is also called as pig flu, hog flu. It is a general term used for a variety of strains of influenza virus commonly found in pigs and people who have frequent close contact with pigs such as, farmers or veterinarians may catch a strain of the swine flu from pigs.1 The swine flu is an infectious disease of the respiratory tract including the nose, throat, bronchial tubes and lungs. The effects of the swine flu can vary from mild to severe life threatening depending on individual factors such as the specific strain of the swine flu, age, general health status and presence of coexisting chronic conditions, such as cancer or diabetes. The swine flu in humans can be a mild illness or in some people it may result in serious, even life-threatening complications can occur lead to death. In Maharashtra 4826 cases and 440 deaths occurred. This shows that total affected cases in India were 34220 and deaths were 2115. With regard to above data there is urgent need to take steps to make people aware regarding swine flu, treatment and management.

Material & Methods

The purpose of this Evaluative study was to obtain adults general knowledge and awareness levels about swine flu H1N1 influenza, the cross-sectional survey method was used. The questionnaires were distributed to the adults and told them to tick the correct answer from given options. The questionnaire was designed on the following areas: current knowledge of adults regarding H1N1 influenza, kind of general information about swine flu, treatment and preventive measures.

Research Design

Quasi experimental one group pre-test, post-test design was used.

Setting

The present study was conducted in the Kale, Karad

Population

Adults in the age group of 18- 45 years and above Kale, Karad.

Sampling Technique
Simple Random sampling technique.

Sample and Sample Size
60 adults including male and female.

Statistical Method : :
Descriptive and inferential statistics was used to describe the data.

- Frequency and percentage were used to summarize the data.
- Mean, standard deviation was used to describe the knowledge score.
- Inferential statistics were used to draw the following conclusions.
1) Paired't' test used for testing effectiveness of PTP & research hypotheses.
2) Chi-square test to find the association between knowledge and demographic variables for testing the research hypotheses.

Discussion:
Swine flu is an infectious disease caused by swine influenza virus. it is also called as pig flu, hog flu. It is a general term used for a variety of strains of influenza virus commonly found in pigs and people who have frequent close contact with pigs such as, farmers or veterinarians may catch a strain of the swine flu from pigs. the majority (58 %) of subjects are having good knowledge regarding swine flu where as in post test subjects having average knowledge regarding treatment of swine flu (55 %) also in post test 50 % has average knowledge regarding prevention of swine flu. Conversely a study conducted by Mrs. **Kavita Kelkar** in Pune   Nov-Dec 2011 on 60 sample and non probability convenient purposive sampling technique uses convenient sampling method. she reported that there is a significant difference between the average values of pre and post related to the knowledge of swine flu, which gives an interpretation, that there is a significant gain in knowledge score of the samples in the post-test phase. In above finding it shows that there is a significant difference between the average values of pre and post related to the knowledge of swine flu, which gives an interpretation, that there is a significant gain in knowledge score of the samples in the post-test phase. To achieve the set objectives of the study, 60 adult rural populations were studied to get the projected results.

Efforts should be made to educate the community. There is a strong need to create awareness amongst the subjects regarding swine flu, treatment and prevention through IEC activities

Result: Table reveals that in pre-test 3 (5%) adults are had poor knowledge, the majority 42(25%) had average knowledge and 15(70%) had good knowledge regarding swine flu   Where as in post-test majority 20(33%)adults had average knowledge, 35 (*58*%) had good knowledge and 5(8%) adults had poor knowledge regarding swine flu . Table reveals that in pre-test 2 (3.33%) adults are having poor knowledge, the majority 32(53.33%%) had average knowledge and 26 (43.33%) had good knowledge regarding treatment of swine flu where as in post-test majority 33(**55%**) adults had average knowledge, 19(32 %) had good knowledge and 8 (13%) adults had poor knowledge regarding treatment of swine flu. Table reveals that in pre-test 7 (11.6 %) adults are had poor knowledge, the majority 43(71.6%) had average knowledge and 10(17%)

had good knowledge regarding prevention of swine flu Where as in post-test majority 30(**50** %)adults had average knowledge, 23 (38.3%) had good knowledge and 7 (12%) adults had poor knowledge regarding prevention of swine flu .

SECTION - I
Table No. I
Distribution of subjects according to socio-demographic variables

The data on sample characteristics revealed that
1) The maximum no of 21(60%) adults belongs to the age group of 45 yrs and above.
2) The majority of adults are 39(65%) were female. The majority of adults are female which was housewife 19(32%) having monthly income less than 3000 i.e 34 (57%) residing in joint family i.e 37 (62%).
3) The majority of the adults are having secondary education i.e.17 (28 %).

Section I: Socio-demographic variables of subjects of kale rural population.

Section II:
Part A: Findings on the knowledge of subjects regarding meaning, cause, signs and symptoms, Treatment and prevention..

Part B: Finding regarding swine flu and its prevention

1) Area wise frequency and percentage distribution of knowledge score of **subjects regarding swine flu & treatment**
2) Area wise mean, median, mode, standard deviation of knowledge scores of **subjects regarding swine flu & treatment**
3) Mean difference, Standard Difference (SD) and paired't' value of knowledge score of adults.
4) Section C: Association between the pre-test with socio demographic variables.

Statistical analysis using chi-square test to find the association between pre test knowledge scores with socio demographic variables revealed that the age ,gender, education qualification of subjects with the pre test knowledge of **subjects regarding swine flu & treatment** .

Section III: Association between knowledge and selected socio-demographic variables Regarding their educational status, majority of male had studied up to the secondary level (28.3%) and (17%) had no education but (5%) had education up to post graduation. Education plays an important role in motivational activity .The finding indicates that due to lack of education regarding swine flu, treatment &prevention.

The majority of the subjects (80%) were Hindus,(8%) were Muslim and 12 % were from other casts. Religion plays an important role in any decision making because, it is observed that in subjects having less knowledge regarding treatment of swine flu treatment & it's prevention.

Since most of the people 27 % were working in the farm where they had no access to the information neither through health workers nor through mass media regarding swine flu ,treatment &prevention of swine flu whereas some gets knowledge from mass media (55%) While monthly income of family in (57%) had less than Rs.3000/-

and (8.3%) had income up to Rs.9000/-and above. There-fore to balance income and expenditure male as well as subjects had to work for more long hours and they did not have sufficient money to spend on treatment. It is also observed that most of the subjects beliefs in other medicine.

Regarding type of family (62%) subjects were from joint family. The observation reveals that in most family's decision is taken by senior citizen who knows other remedies like private medicine.

The findings of the study indicated that-

Out of 60 respondents, majority of the sample, 60 % belonged to age group 49 years and above years of age 60% were males. It was revealed that 80% were Hindus and 27% had primary education. Above 27% were farmer & 57% subjects having monthly income less than 3000 whereas 62% subjects were belong to joint family.

There is a significant association in pre test between knowledge of swine flu, treatment and prevention and their income (χ^2 = **10.062**), and in post test there is a sig-nificant association in place of residence (χ^2 =**5.249)**, and also to source of information (χ^2 = **4.498**),

There is no significant association swine flu ,treatment and prevention between age (χ^2 = 0.5886), sex (χ^2= 2.623), religion (χ^2=1.183), type of family (χ^2= 1.247) & monthly income of family (χ^2=6.334).

Therefore, it is necessary to give concentration for giving information regarding swine flu and it's prevention

Conclusion

Based on the findings of the study, the following conclusions were drawn:

Swine flu prevention information campaign should target adults since more victims are adults, awareness campaign in rural areas should be carried out. The study concluded that there is a strong need to create awareness amongst the subjects regarding swine flu, treatment and prevention through IEC activities.

Tables:
Section II – PART A
Knowledge of subjects regarding swine flu & treatment
Table : II
Area wise distribution of subjects according to knowledge pre test & post test scores regarding knowledge of swine flu & treatment.   **N=60**

Area of analysis	Knowledge regarding swine flu & treatment	No of subjects	Percentage
PART –A pre test (Knowledge regarding swine flu & treatment)	GOOD	15	25%
	AVERAGE	42	70%
	POOR	3	5%
	TOTAL-	60	100%
Post test :			
PART –A post test (Knowledge regarding swine flu & treatment)	GOOD	35	58%
	AVERAGE	20	33%
	POOR	5	8%
	TOTAL-	60	100%

Table II - Depicts that the 42 (70%) subjects having average knowledge regarding swine flu & treatment15 (25%) having good knowledge whereas 3(5%) having poor knowledge regarding swine flu & treatment whereas in post test 35(58%) subjects having good knowledge regarding swine flu & its treatment & 20 (33%) having average knowledge whereas 5(8%) having poor knowledge regarding swine flu & its treatment.

Section II – PART B
TABLE III- Area wise distribution of subjects according to knowledge pre test & post test scores regarding treatment on swine flu.   **N=60**

Area of analysis	Knowledge regarding treatment on swine flu	No of subjects	Percentage
PART –B pre test (Knowledge regarding Treatment on swine flu)	GOOD	26	43.33%
	AVERAGE	32	53.33%
	POOR	2	3.33%
	TOTAL	60	100%
Post test			
(Knowledge regarding Treatment on swine flu)	GOOD	19	32%
	AVERAGE	33	55%
	POOR	8	13%
	TOTAL	60	100%

Table III- Reveals that the subjects 32 (53.33%) having average knowledge regarding comprehension on swine flu 26 (43.33%) having good knowledge whereas 2(3.33%) having poor knowledge regarding comprehension on swine flu whereas in post test the 33 (55%) subjects having average knowledge regarding swine flu & 19(32%) having good knowledge whereas 8(13%) having poor knowledge regarding swine flu.

Section II – PART C

TABLE IV- Area wise distribution of subjects according to knowledge pre test scores regarding preventive measures of swine flu N=60

Area of analysis	Knowledge Regarding preventive measures of swine flu	No of subjects	Percentage
PART- C pre test (Knowledge regarding preventive measures of swine flu)	GOOD	10	17%
	AVERAGE	43	71.6%
	POOR	7	11.6%
	TOTAL	60	100%
PART- C post test (Knowledge regarding preventive measures of swine flu)	GOOD	23	38.3%
	AVERAGE	30	50%
	POOR	7	12%
	TOTAL	60	100%

Table IV- Reveals that the subjects 43 (71.6%) having average knowledge regarding treatment on swine flu 10 (17%) having good knowledge whereas 7 (11.6%) having poor knowledge regarding comprehension on swine flu whereas in post test the 30 (50%) subjects

Table : V- Distribution of subjects according to mean ,median, mode ,SD, and range of pre and post test knowledge scores regarding knowledge of swine flu &treatment. N=60

Area of analysis	Mean	Median	Mode	S.D	P Value	Min – Max
Part A (Pre Test Knowledge regarding swine flu & treatment.)	5.26	5	5	1.921	<0.0001	2-9
Part A (Post Test Knowledge regarding swine flu & treatment.)	8.423	9	9	1.192	<0.0001	6-10

Table V- Depicts that the knowledge regarding swine flu & treatment mean (5.26) & median (5) whereas in post test mean (8.423) & median (9)

Table : VI - Distribution of subjects according to mean ,median, mode ,SD, and range of pre and post test knowledge scores of comprehension on swine flu. N=60

Area of analysis	Mean	Median	Mode	S.D	P Value	Min – Max
Part B (Pre Test Knowledge regarding comprehension on swine flu)	5.26	5	5	1.921	<0.0001	2-9
Part B (Post Test Knowledge Regarding comprehension on swine flu)	8.423	9	9	1.192	<0.0001	6-10

Tables VI - Depicts that the pre test knowledge regarding comprehension on swine flu mean (2.4) & median (2) whereas in post test mean (4.1525) & median (4).

Table : VII- Distribution of subjects according to mean ,median, mode ,SD, and range of pre and post test knowledge scores of prevention of swine flu. N=60

Area of analysis	Mean	Median	Mode	S.D	P Value	Min – Max
Part C (Pre Test Knowledge regarding prevention of swine flu)	5.71	6	6	2.001	<0.0001	0-10
Part C (Post Test Knowledge regarding prevention of swine flu)	9	9	9	0.1567	<0.0001	4-10

Tables VII- Depicts that the pre test knowledge regarding prevention of swine flu mean (5.71) & median (6) whereas in post test mean (9) & median (9).

TABLE- XIII- Testing of hypothesis for evaluation of effectiveness of structured teaching program on prevention of swine flu. N=60

Area wise distribution	Pre Intervention X – ± S.D	Post Intervention	Mean Difference	Paired 't' Value	P Value
Structured teaching programme on knowledge regarding swine flu .	2 ± 1	4 ± 1	1.383	9.124	0.0001
STP on knowledge regarding treatment on swine flu	5 ± 2	7 ± 1	2.2	10.778	0.0004
STP on prevention of swine flu	6 ± 2	8 ± 1	2.516	11.09	< 0.0001

TABLE- XIII -Indicates that calculated paired 't' value **(t=9.124).** Hence, H1 is accepted. This indicates that the gain in knowledge score is statistically significant at p < o.o5 levels. Therefore, the structured teaching programme regarding knowledge of swine flu is effective in improving the knowledge of rural population. Whereas STP on treatment indicates that calculated paired 't' value **(t=10.778).** Hence, H1 is accepted. This indicates that the gain in knowledge score is statistically significant at p < o.o5 levels. Therefore, the structured teaching programmes regarding swine flu its treatment & prevention is effective in improving the knowledge of rural population. Also on Structured teaching programme on prevention of swine flu indicates that calculated paired 't' value **(t=11.09).** Hence, H1 is accepted. This indicates that the gain in knowledge score is statistically significant at p < o.o5 levels. Therefore, the structured teaching programme regarding prevention of

swine flu is effective in improving the knowledge of rural population.

IMPLICATION OF THE STUDY

The present study enabled the student to gain knowledge on swine flu and also helped the students to improve their knowledge and health. The findings of the study have implications for nursing practice, nursing education, nursing administration and nursing research.

Nursing Education-

To educate student nurses in enhancing knowledge and skills in theory as well as in practice. Hence, it is an opportunity for the nurse educator to develop effective training modules in training the subjects in swine flu prevention.

Nursing Research-

1. The research helps to plan new interventional studies to improve knowledge regarding swine flu.
2. The study helps the nurse researcher to develop insight in to the development of teaching module and for improving their knowledge and nursing management of swine flu.
3. One of the aims of nursing research is to contribute the knowledge to the body of nursing, to expand and broaden the scope of nursing. This is possible only if nurses take initiative to conduct the further research

Nursing Administration

The present study has proven effectiveness of structured teaching programme enhancing the knowledge of student nurses regarding swine flu. So the nurse administrator can take initiative to provide facilities to conduct research sucheducational programmes in the hospital as well as in the colleges. The nurse administrator should take part in the making of health policies, development of protocols and standing orders with respect to swine flu.

Nursing Service:-

Community health nurses are the link between community and the health care system. She is a direct care provider, a change agent in the community, and is also a health team member works in close association with subjects and plays an important role in implementation of knowledge regarding swine flu and it's prevention. Care operates at multiple level such as in health care system, community based programmes and within the home. Therefore nurses need to update their knowledge about swine flu and it's prevention which will be beneficial for both nurse and community.

RECOMMENDATIONS

On the basis of findings of the study, the following recommendations are made for further research:

1) Similar study may be conducted in the large scale for making a more valid generalization.
2) A comparative study may be conducted between urban and rural subjects.
3) Similar study may be conducted from School Health Nurses in the different high schools.
4) A similar study can be conducted to see the effectiveness of the self instructional module

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