

## Knowledge, Attitude and Experience of Mothers of Under-Five Children on Swine Flu, Selected Village Uttar Pradesh

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Received on 29.06.2018

Accepted on 31.08.2018

### Abstract

*Background:* Influenza has been reported since the 16th century, WHO referred to this novel strain of influenza A (H1N1) as swine flu approximately 500 million people were affected by the H1N1 virus. The Aim of this study to understand the knowledge, attitude, and experience of under-five mothers regarding swine flu. *Objectives of the study:* To assess the knowledge and attitude of under-five mothers, level of knowledge of participants with selected demographic variables, and describe the lived experience under-five mothers, develop validate booklet regarding swine flu. Sample other of under-five children, purposive sampling technique, and nesting of the sample were done. 30 samples were required for quantitative research. Data saturation end with eight samples for qualitative research. *Data Analysis:* Descriptive and inferential for knowledge and attitude. Phenomenological Colaizzi (1978) were used for mother lived experience. Result 60% had poor knowledge, 36.7% had the moderate knowledge, and 3.3% had good knowledge, mean knowledge 11.10 and standard deviation was 3.28. In addition, attitude regarding swine flu 43.8% had a poor attitude, 37.5% had moderate attitude and 18.7% and Mean 17.25 & standard deviation 7.74., Religion, Number of children, and knowledge of the samples were significantly associated with the selected socio-demographic variables of the sample. Age, Educational level, Occupation Monthly income, and type of family were not significant associations with the selected sociodemographic variable of the sample. Mother's experience analyzed, concluded with 4 themes and 7 subthemes. *Conclusion:* The study concluded that mother of under-five children should be required additional health information regarding swine flu.

**Keywords:** Under-Five Mothers; Swine Flu; Live Experience; Attitude; Knowledge.

### Introduction

Influenza has been reported since the 16<sup>th</sup> century, Researchers in 2009 found a new influenza strain different from human influenza and WHO referred this novel strain of influenza A (H1N1) as swine flu. Approximately 500 million people worldwide are estimated to be affected by H1N1 virus, killing 40-50 million worldwide and 10 - 20 million in India with a mortality rate of 10%. India ranks as 3<sup>rd</sup> most affected country for cases and deaths of swine flu globally. The Indian government has taken a series of preventive measures and followed the WHO guidelines which include the promotion of public knowledge about swine flu. There is an urgent need

to assess the success of these efforts which help to ensure the preparedness of the public in facing subsequent outbreaks. Since very little is known regarding this in India and especially J&K, the present study was planned to explore the knowledge and practice level in rural area of Uttar Pradesh. Many people are not aware about the swine flu and what are the preventive measures. Recently the Indian government has been undertaken various steps and also educate people regarding the swine flu and its prevention. The influenza virus is common in pig populations and transmission of the virus from pigs to humans is not common and does not always lead to human flu, often resulting only in the production of antibodies in the blood.

If transmission does cause human flu, it is called zoonotic swine flu. People with regular exposure to pigs are at increased risk of swine flu infection [2,3].

Swine Flu or the Influenza A (H1N1) an acute respiratory disease of the pigs, is caused by one of the numerous swine influenza A strains and is highly contagious. The transmission of the virus is from person-to-person and is similar to the manner in which seasonal influenza spreads the typical incubation period found for influenza is 1 to 4 days, with an average of 2 to 3 days. The symptoms of this form of the virus include sore throat, chills severe headache, coughing, weakness and general discomfort like those of influenza. However, some individuals with swine flu have shown serious respiratory illness, including pneumonia or respiratory failure leading to death. Persons suffering from chronic medical conditions like heart disease, diabetes and pregnant women are at higher risk for complications from swine flu [3,4].

On June 11, 2009, the World Health Organization (WHO) raised its pandemic alert level to the highest one indicating that a pandemic of H1N1 flu was underway. Occurrence of swine flu has been reported from every part of the globe like mid-western United States, Canada, Mexico, South America, Kenya, China, Taiwan, Japan, and several parts of Eastern Asia including India Rajasthan and Gujarat are the worst affected regions in India. In the year 2014, 937 cases of swine flu were reported in India and out of which the death toll was 218 [6].

Health workers are vital role in preventing transmission of H1N1 virus, usually this virus was transmitted via blood, respiratory and oral secretions. In India had reported that the Maharashtra state still continues to place on top among other places that have many confirmed swine flu cases. Its last death made its toll climbed up to 197 deaths. The place also has approximately about 3600 people who were infected by the swine flu. Kerala conformed 27 cases, swineflu. New Delhi had 13 cases were of swine flu. Since children are at more risk being involved in groups and possessing less immunity need for educating the children about flu complications, hand hygiene, respiratory etiquette using proper educational materials to enhance compliance and to prevent the occurrence of Influenza [5].

Control of swine influenza by vaccination has become more difficult in recent decades, as the evolution of the virus has resulted in inconsistent responses to traditional vaccines. Standard commercial swine flu vaccines are effective in controlling the infection when the virus strains match enough to have significant cross-protection,

and custom (autogenous) vaccines made from the specific viruses isolated are created and used in the more difficult cases. Present vaccination strategies for SIV control and prevention in swine farms typically include the use of one of several bivalent SIV vaccines commercially available in the United States. Of the 97 recent H3N2 isolates examined, only 41 isolates had strong serologic cross-reactions with antiserum to three commercial SIV vaccines. Since the protective ability of influenza vaccines depends primarily on the closeness of the match between the vaccine virus and the epidemic virus, the presence of nonreactive H3N2 SIV variants suggests current commercial vaccines might not effectively protect pigs from infection with a majority of H3N2 viruses. The United States Department of Agriculture researchers say while pig vaccination keeps pigs from getting sick, it does not block infection or shedding of the virus [1,6].

## Material and Method

### *Problem statement*

A study to assess the knowledge, attitude and lived experience of mothers of under-five children regarding swine flu in selected villages Mohanlalganj-a mixed method. Objectives of study to assess the knowledge of under-five mothers regarding swine flu. Assess the attitude of under-five mothers regarding Swine flu. Determine the association between the knowledge with selected demographic variables. Describe the lived experience of mothers of under-five, and analysis the experience to drive the major theme and to develop and validate booklet for the mother of under-five children regarding the swine flu.

### *Quantitative Research*

The aim of the study to determine the knowledge, attitude and lived experience mothers of under-five children regarding the swine flu. This study was carried out in Mau village Uttar Pradesh, the study has included mothers of under-five children and those children were history or suffered from swine flu, the purposive sampling technique was used to recruit the 30 respondents. The study was conducted from Augusts 2017 to December 2017, structured knowledge questionnaire was used for knowledge assessment, and tool was developed by the investigator and validated from experts in the field of medical and nursing,

Part 1: Demographic characteristics: This was designed to elicit the personal information and

source of information of participants, it consists of 9 items.

Part II: Structured knowledge questionnaires, it consists of 30 questions, participants were instructed to select the most appropriate answer for the question and place the tick mark against corresponding places. Thus altogether there are 30 items with a maximum possible score was 30. The scoring was done arbitrarily and classified like poor knowledge (1-10), moderate knowledge (11-20) and good knowledge (21-30), The Cronbach's Alpha was used to test the reliability of structural knowledge questionnaires ( $r = .753$ ).

Part III: For the attitude of the mother of under-five children was assessed by using 5 points rating scale, which included total 16 items, scoring was arbitrarily classified as poor attitude moderately attitude and good attitude.

Data were collected after obtaining the administration permission from Community Health Center Mohanlal ganj and written consent was taken from the mother of under-five children, before taking written consent investigator was explaining the purpose of the study and anonymity of information.

#### *Qualitative Method*

The phenomenological research design was used to explore the experiences of mothers of under-five children regarding the swine flu. Colaizzi (1978) method of data analysis was appropriate for exploring the phenomenon of the lived experience. The phenomenologist believes that lived experience gives meaning to each person's perception of a particular phenomenon and is unique to the individual. The Target population of this study was under five mothers from Mau village Mohanlal ganj, the purposive sampling technique was used before sample requirement the researcher had checked the inclusion and exclusion criteria, inclusion criteria of the sample that mothers who can speak and write the Hindi, and those children had a history of swine flu. Mothers of under-five children were not excluded from the study based on race, religion, employment. Who fulfilled the study criteria had a fixed interview date as per participant convenient. Informed consent was obtained at the time of the interview, the sample was recruited until data saturation, the total of eight samples was required. The interview was conducted in participant home, and voice recorder, notebook, and pen were used to note the any facial or any action during an interview. The

investigator individually conducts the interview and begins to the open-ended questions and in-depth data were collected. The validity of the data for searching the truths and understand the lived experiences of mothers of under-five children. Data collection were initiated after a written consent from the participants and obtained the approval from the Superintendent of Community Health Center Mohanlal ganj, the researcher has discussed the confidentiality and anonymity of the data. Each interview began with the open-ended question, "Tell me how you feel when you care for (the name of the child with swine flu)", "Tell me what is your opinion regarding swine flu", "Tell me how you feel when your child suffered from swine flu", and "what has been the most difficult thing about being the mother of a child with swine flu?". The researcher encouraged the respondents to describe their experiences and share their stories to uncover common meanings. The researcher had to be permitted to participants to discuss whatever aspect of the mothering experience that they wished to discuss, interviewer given adequate time to discuss their experiences. The entire interview had recorded and the interviews lasted for 30-40 minutes. All participants were given the opportunity to contact the investigator by telephone in the weeks following the interview, and if there was additional information that they wished to share. None of the participants contacted the investigator to provide additional information.

#### **Result**

##### *Quantitative Analysis*

The analysis of the data were processed by which quantitative information is reduced, organized, summarized, evaluated, interpreted and communicated in a meaningful way. The analysis and the interpretation of the data of this study are based on data which gathered by Structured knowledge questionnaire and attitude scale, and the total number of the participant was ( $N=30$ ). The result was computed using both the descriptive and inferential statistics used by SPSS version 16. The researcher collected, organized and interpreted the data based on the objectives of the study. The analysis of data were organized and finalized, according to the plan for data analysis and presented in form of tables and figures.

##### *Qualitative Analysis*

The data were obtained by the semi-structured interview; voice recorder had used during the

Table 1 Show that characteristics of demographic variables of the 30 mothers of under-five children. The data revealed that a majority of the participant's age between the 26-30 years 16 (53.3%). Whereas 12 (40%) of under-five mothers were completed primary school, 26 (86%) were housewives (not working), the majority of the participants belongs to Hindu religion 18 (60%). and the majority of mothers of under-five had A single child 14 (46.7%), the family's monthly income range between Rs 5000-10000, 16 (53.3%). The majority of mothers of under-five children belong to the nuclear family 35 (58.3%), and 17 (56.7%) belonged to the joint family, most of the participant were staying in

semi-pucca house, 22 (73.3%), and majority of the mothers of under-five children had inadequate knowledge regarding the swine flu.

Chi-square test used to find out the association between the knowledge with selected socio-demographic variables of the participants. The table 1 shows that statistical significant association of knowledge of mothers of under-five children regarding the swine flu Religion, ( $\chi^2 = 17.228^*$ ), Number of children ( $\chi^2 = 16.46^*$ ), Type of house, ( $\chi^2 = 17.413^*$ ) and previous knowledge ( $\chi^2 = 18.074^*$ ), similarly there was no significant difference in age, education, income and the type of family.

**Table 1:** Distribution of sample characteristics in frequency, percentages and Chi-square.

N-30

Demographic variable	Frequency	Percentages	Knowledge			df	x <sup>2</sup>
			Poor	Moderate	Good		
<i>Age of mother</i>							
a. Less than 20 years	01	3.3	1	0	0	6	6.790
b. 21-25 years	07	23.3	2	2	3		NS
c. 26- 30 years	16	53.3	8	4	4		
d. More than 30 years	06	20.0	0	3	3		
<i>Education Status of Mother</i>							
a. Primary	12	40.0	3	4	5	6	6.855
b. Secondary	07	23.3	2	3	2		NS
c. Graduation	8	26.7	4	2	2		
d. Post-graduation and above	03	10.0	0	0	3		
<i>Occupational status of mother</i>							
a. Working	04	13.3	2	2	0	2	1.678
b. Not working	26	86.7	9	9	8		NS
<i>Religion</i>							
a. Hindu	18	60.0	10	6	2	4	17.228*
b. Muslim	10	33.3	9	1	0		
c. Christian	02	6.7	0	0	2		
<i>Number of children</i>							
a. No children	12	40.0	10	1	1	4	16.46*
b. One child	14	46.7	9	3	2		
c. More than two child	04	13.3	0	0	4		
<i>Monthly income in Rupees</i>							
a. Rs:1000-5000 per month	13	43.3	4	6	3	4	3.337
b. Rs:5001-10000 per month	16	53.3	8	4	4		NS
c. Above 10000 per month	01	3.3	0	1	0		
<i>Type of family</i>							
a. Nuclear family	8	26.7	4	2	2	2	3.337
b. Joint family	22	73.3	8	7	7		NS
<i>Type of House</i>							
a. Kaccha	03	10.0	3	0	0	4	17.413*
b. Semi pucca	22	73.3	10	8	4		
c. Pucca	05	16.7	0	0	5		
<i>Previous Knowledge</i>							
a. Yes	13	43.3	4	8	1	2	18.074*
b. No	17	56.7	4	0	13		

\*level of significance

\*Knowledge N=30, Attitude N=16

**Table 2:** Frequency and percentage distribution regarding knowledge on swine flu

N-30

S.No	Knowledge	Frequency	Percentages
1	Poor Knowledge	18	60
2	Moderate Knowledge	11	36.7
3	Good knowledge	1	3.3

\*Knowledge N=30, Attitude N=16

Table 2 Show that 18 (60%) mothers of under-five children had poor knowledge, 11 (36.7%), mothers of under-five children had moderate knowledge. 1 (3.3%) mother of under-five children had good knowledge regarding the swine flu and its prevention. The nurses are very important health care indicator for rural health care system and nurses along with other health team members haveto be conducted the program related to the swine flu.

Figure 1 Shows that 7 (43.8%) mother of under-five children had a poor attitude, 6 (37.5%) mothers of under-five children had moderate attitude and 3 (18.8%) mother of under-five children had a good attitude towards the swine flu and its prevention. The majority of mothers of under-five children had poor knowledge so that nurses should be educated to the under-five-mothers and clarified their doubt and misconception regarding the swine flu.

Table 3 Depicts that mean 11.10, standard deviation of 3.28 and mean percentages 37 knowledge on swine flu among the mothers of under-five children. Whereas attitude of Mean 17.25, the standard deviation of 7.74 and mean percentages 35.90 on swine flu among the mothers of under-five children.

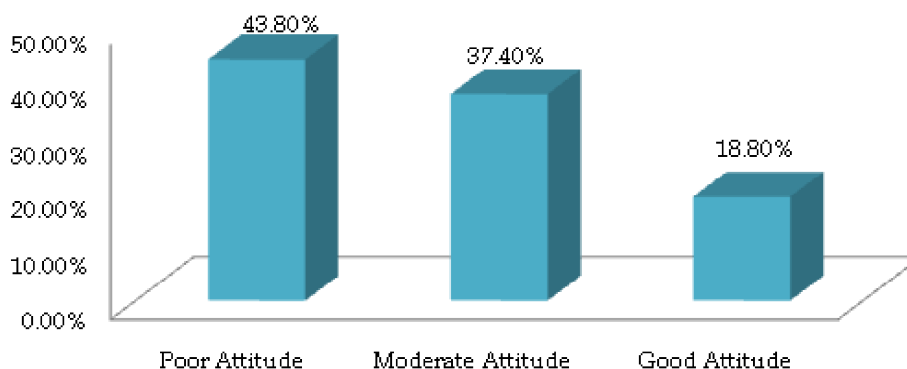
interview, later interviewer has a transcription from voice recorder and after that translated into English. The data were analyzed using Colaizzi's (1978) methodology. It helps the researcher in establishing themes and sub-themes.

The researcher reassured the verbatim transcription with the voice recorder and cross-checked by the other investigator for the accuracy of the data. The researcher read the verbatim several times, concluded the phages and sentence that pertaining to the study, and also the investigator reassures the meaning and compared with the Colaizzi method.

The researcher has formulated the mother's experiences and organized into the clusters of themes. The themes identified in this study were incorporated into an exhaustive description of the lived experiences of mothers of under-five children regarding the swine flu. The result is described the lived experience of mothers of under-five children regarding the swine flu. The experience of mothers of under-five children is expressed their feeling and formulated themes that to be elicited from interviews with the participants.

This phenomenological study was guided by the Colaizzi's method of data analysis and the common themes of the lived experience were identified using this approach. The participants' names are changed for the maintaining of the anonymity and confidentiality of participants and their families.

**Under five Mother Attitude**



**Fig.1:** Under-five mother attitude on swine flu frequency distribution

**Table 3:** Describe sample Mean, standard deviation and Mean percentages of knowledge and attitude.

N-30

S.No	Variable	Mean	Standard Deviation	Mean percentage
1	Knowledge score	11.10	3.28	37.00
2	Attitude score	17.25	7.74	35.90

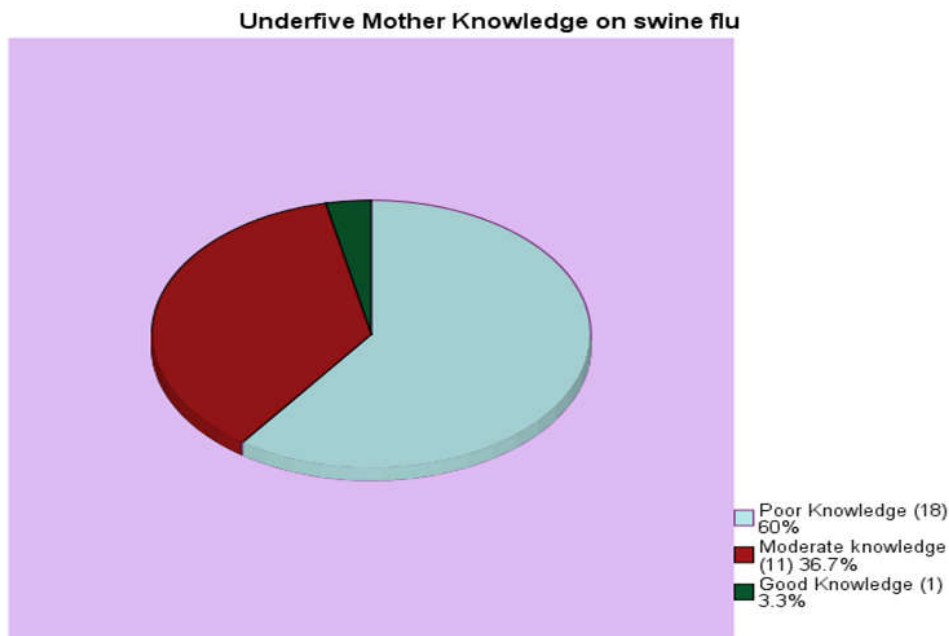


Fig. 2: under five mother’s knowledge on swine flu frequency distribution

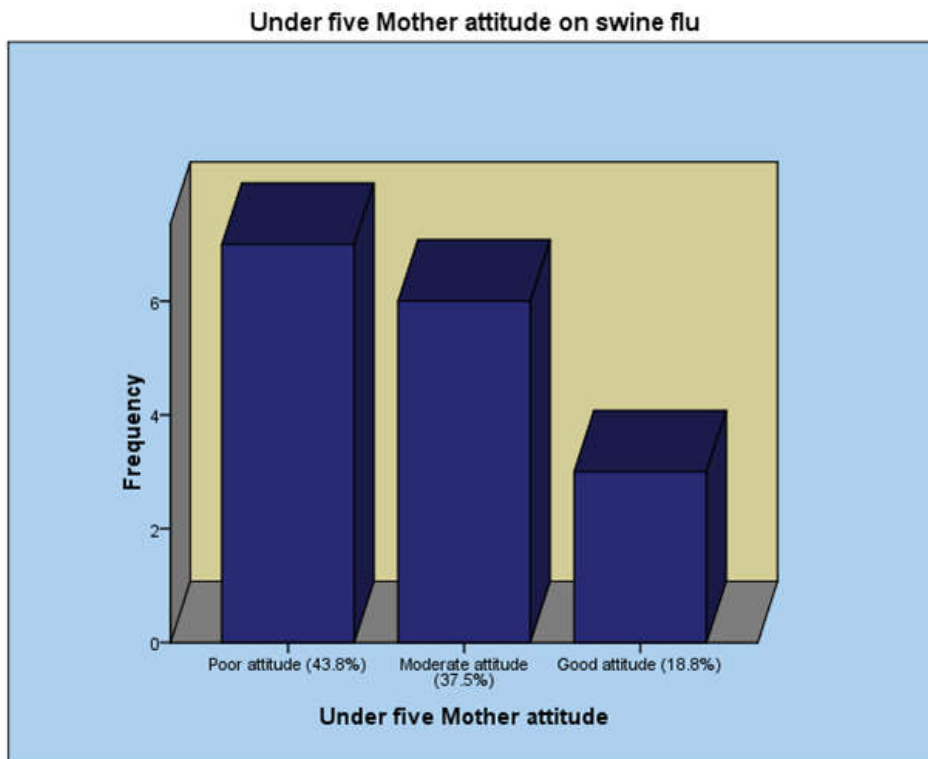


Fig. 3: Under five mother attitude on swine flu frequency distribution

The researcher was derived following the four major them and seven sub-themes.

*Themes Sub-themes*

1. Bonding between mother and child.
2. The mother explained the positive aspects of

their parenting. 3. The child is suffered from swine flu eliciting responses. A. The timing of persistent signs and symptoms. B. The initial reactions of under-five mothers’ blame and frustration C. Personal growth. D. Mothers have described the financial burden of the family. 4 Family life is disrupted, resulting in altered relationships among

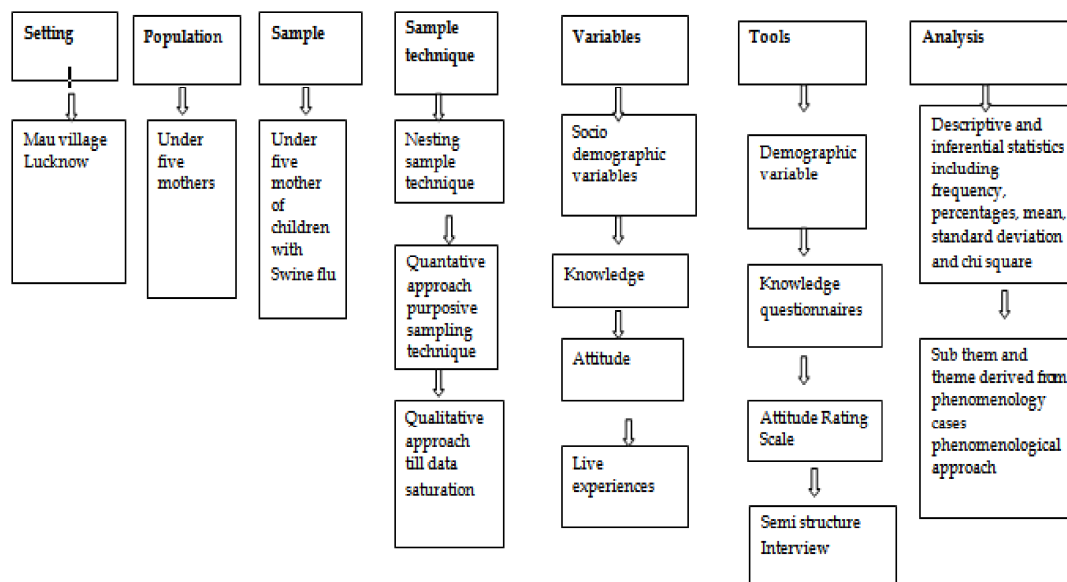


Fig. 4: Schematic diagram shows research methodology

family members A. Child sibling. B. Husband. C Other family members.

### Discussion

The present study indicated that the majority of the mothers of under-five children had inadequate knowledge and poor health attitude regarding personal hygiene, environmental hygiene, disease progress and management of the swine flu. The majority of study findings show that respiratory infection is major causes to the child mortality. Therefore, teamwork is very important in term of the health education and rural health program, and also provides an adequate resource in a cost-effective manner to the client or family. The best we heath team members can do is keeping ourselves informed them about the possible happening and step we can be taken and early detection, implemented the plan based on the availability of resources.

The nurses should understand the primary caregivers or mothers of under-five children feeling and attitude before to be initiated the nursing intervention. The swine flu is the serious health problem in children because of inadequate health facilities at rural areas especially high density populated state like Uttar Pradesh. Therefore, prevention is better than cure so that healthcare personnel are a key person to spread the health information to the rural population.

The supporting study was conducted in Jammu region, the study was conducted among the rural

population. The purpose of the study was to assess the knowledge, attitude and practices (KAP) of rural population. 270 participants were administered a pre-designed and pre-tested questionnaire consisting of 26 questions evaluating KAP. Overall knowledge score was 62.9%. More than 90% had heard of swine flu, knew prevalent season and had knowledge of disease symptoms. However, knowledge about preventing vaccine was low (27.7%). Overall attitude score was 79.5%. Higher number of the participants expressed willingness to seek more knowledge about disease prevention, though half of them were not satisfied with health authority's efforts. The total practice rate was 60%. Preference for nutritious diet and willingness to use tissue/handkerchief was over 80%, but only 40% expressed willingness to use mask. The current study found good KAP regarding swine flu in the rural area. However, unwillingness to use mask, dissatisfaction with health agencies and lack of knowledge about population at risk is a matter of concern [8].

The supporting study finding shows that out of 200 participants. Majority of participants (higher secondary students) 97.75% have heard about of swine flu, and major clinical symptom like fever, coughing and sneezing, the main way to spread of infection, 97% students mentioned mask is more effective measures to control from swine flu. Less than half students had poor knowledge regarding medication for swine flu, 79% said that TV is a major source of information, 53.2% students have been trying getknowledge. Above result was concluded that higher secondary students

(9<sup>th</sup> and 10<sup>th</sup>) constant support in term health education and update health related information at classroom level [7].

### Conclusion

The conclusion of the study the majority of under-five children has been facing the various health issues like communicable diseases. The government of India has been initiated the various health programs related to mothers and child so that health care personnel should be educated the parents regarding the government schemes, policies and program are integrated with child and mother welfare. Therefore peripheral health care system is the backbone for implementation health-related policies. Understand the mother knowledge, myths, practice and attitude regarding disease pattern, and also educated them and removed misconceptions regarding swine flu, therefore health education is an integral part of the health care system.

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