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Knowledge, attitude and practices of swine flu: A study on budding doctors

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Abstract
Background: Swine flu is a lethal respiratory infectious disease unless it is diagnosed and treated in appropriate time. Health care providers are at highest risk to be infected by influenza virus. Interns of a health institution are the backbone to provide health care and the final year MBBS students are at door step to enter internship. Adequate knowledge, attitude and practices of medical students are valuable to provide health services for public.
Material & Method: This study included 116 final year MBBS students after their consent. A self structured questionnaire was prepared and distributed among 146 students. 116 students responded properly to the questionnaire and these questionnaires were analyzed. The data was analyzed by Microsoft Excel and expressed in number and percentage form.
Result: Knowledge of students regarding the causative agent, risk factors, clinical features, diagnosis, treatment, prevention and complication was satisfactory but they have inadequate knowledge regarding mode of transmission, incubation period, contagious period and historical aspect of disease spread. After careful observation we found that the attitude of medical students towards swine flu is up to mark. Regarding the practice, they were well educated how to take prevention from spreading swine flu.
Conclusion: KAP of students means a lot for the purpose of swine flu transmission because they are the budding doctors who treat and prevent the sick. Thus this study provides valuable information for the betterment of public.

Keywords: swine flu, knowledge, attitude and practice

1. Introduction
Swine flu, a dangerous respiratory infectious disease caused by H_1N_1 and H_3N_2 virus is a public health problem in few years. There was an outbreak of H_1N_1 in year 2009 first in Mexico, followed by spreading throughout world [1]. World Health Organization (WHO) raised its highest pandemic alert level i.e. phase 6 in year 2009 in month of June [2], meaning that the H_1N_1 flu had spread in more than two continents and reached pandemic proportions. Around 13th, June2010, 18,172 deaths were there which was in more than 214 countries and overseas territories or communities [3]. When an influenza pandemic occurs, workers of health care providers and medical students are at the highest risk to exposure followed by transmission to the patients and relatives [4, 5]. Medical students, especially residents are the backbone of a health institution. They have substantial role in patient care and frequently comes in contact with patients in hospitals, and supposed to an important source of influenza transmission [6, 7]. Lack of adequate knowledge and perceived attitude of the above personnel may lead to failure in health care system in case of pandemic [6, 8, 9]. Final year students are at the door step to provide health service towards public concern because after completion of final MBBS examination they will enter to their new step of life i.e. internship. Therefore this study was conceived to assess the level of knowledge, attitude and practice (KAP) of final year students about swine flu, so that they can modulate themselves to optimum level for best health care to the society.

2. Material and Method
This study was conducted in a health university of Eastern India. The participants were the final year MBBS students of the university including both male and female. The study was conducted after taking consent of the students. For collection of data a self constructed questionnaire was distributed among the final year students. The questionnaire included different sections to assess the knowledge, attitude and practices regarding swine flu. Section A included demographic data. Section B included questions of knowledge, Section C included attitude and Section D included practices regarding swine flu. Some questions were open ended and some were close ended. Accordingly assessment was done in different sections. Participants were instructed to answer according to their awareness, not to copy or cheat, honesty should be maintained during answering the questions. Total 146 questions were distributed among students and 116 students responded to questionnaire properly. After their completion the questionnaires were collected and evaluation was done by investigators. Evaluation completion was followed by data analysis. The analysis was done by Microsoft excel. The data was presented in number and percentage form.

3. Result
An approach was done to assess the KAP of 116 final year medical students towards swine flu. The result of KAP was expressed in tabular and graphical forms. This result shows that in some aspect the students were optimum while in others they were poor.
The knowledge of students regarding the causative agent, risk factors, clinical features, diagnosis, treatment, prevention and complication was satisfactory but they have inadequate knowledge regarding mode of transmission, incubation

period, contagious period and historical aspect disease spread. After careful observation we found that the attitude of medical students towards swine flu is up to mark. Regarding the practice, they were well educated how to take prevention from spreading swine flu. But the lacuna was few were aware about isolation.

Table 1: Knowledge of medical students about swine flu

Sl. No.	Items	Satisfactory	Unsatisfactory
		Number (%)	Number (%)
1	What is swine flu?	62(53.4%)	54(46.6%)
2	What is the causative agent?	116(100%)	0(0%)
3	What is the mode of transmission of swine flu?	22(19%)	94(81%)
4	What is the incubation period of swine flu?	24(20.7%)	92(79.3%)
5	What is the contagious period?	6(5.2%)	110(94.8%)
6	What are the risk factors?	86(74.1%)	30(25.9%)
7	How long the swine flu does lasts?	14(12.1%)	102(87.9%)
8	What are the signs and symptoms?	100(86.2%)	16(13.8%)
9	What tests are done to diagnose swine flu?	66(56.9%)	50(43.1%)
10	What is the treatment of swine flu?	66(56.9%)	50(43.1%)
11	When it was first detected and where?	36(31%)	80(69%)
12	What are the methods of prevention?	72(62.1%)	44(37.9%)
13	What are the complications?	62(53.4%)	54(46.6%)

Data are expressed in number and percentage

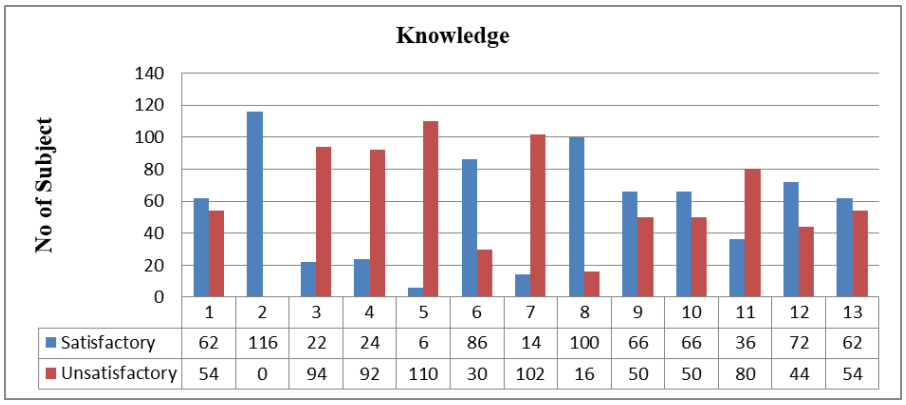

Fig 1: Graphical Representation of Knowledge

Table 2: Attitude of medical students towards swine flu

Sl. No.	Items	Score 1	Score 2	Score 3
		Number (%)	Number (%)	Number (%)
1	Importance to know mode of transmission	0(0%)	14(12.1%)	102(87.9%)
2	Importance to know the incubation period	30(26.3%)	50(43.9%)	34(29.8%)
3	Importance to know the contagious period	14(12.1%)	40(34.5%)	62(53.4%)
4	Importance to know the symptoms and signs	4(3.4%)	24(20.7%)	88(75.9%)
5	Importance to know the treatment	12(10.3%)	18(15.5%)	86(74.1%)
6	Importance to know the method of prevention	2(1.7%)	10(8.6%)	104(89.7%)
7	Importance to know the risk factors	4(3.4%)	44(37.9%)	68(58.6%)
8	Importance to know the complications	18(15.5%)	46(39.7%)	52(44.8%)

Data are expressed in number and percentage

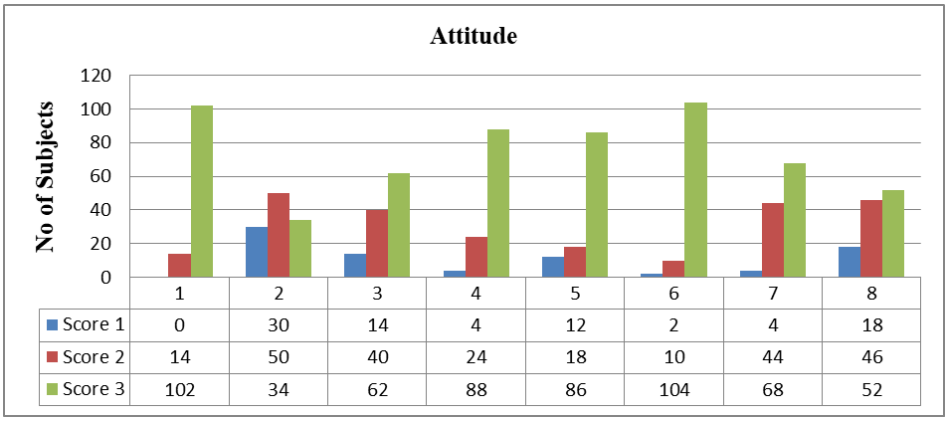

Fig 2: Graphical representation of attitude

Table 3: Practice of medical students towards swine flu

Sl. No.	Items	Yes	No
		Number (%)	Number (%)
1	Hand washing with soap and water or alcohol based sanitizer	116(100%)	0(0%)
2	Disinfection of household surface	70(60.3%)	46(39.7%)
3	Staying away from the infected person	86(74.1%)	30(25.9%)
4	Isolation in room	50(43.1%)	66(56.9%)
5	Have taken vaccine	74(63.8%)	42(36.2%)

Data are expressed in number and percentage

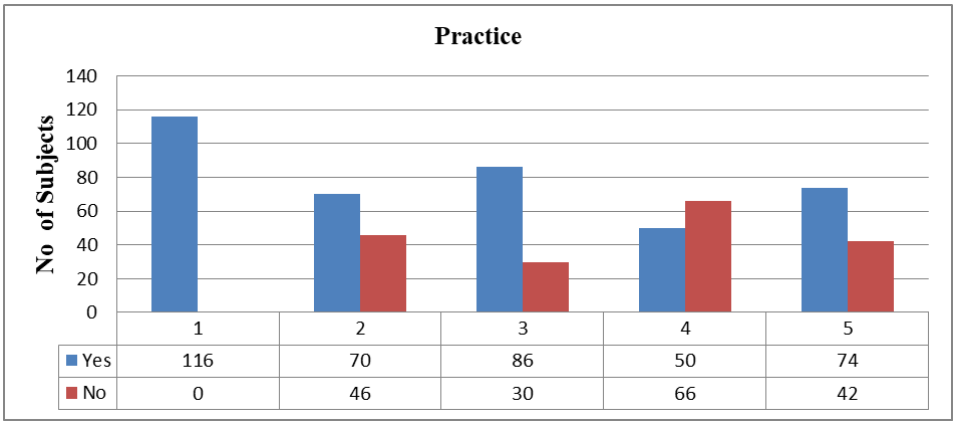

Fig 3: Graphical representation of Practice

4. Discussion

WHO has reported swine flu an acute respiratory disease is caused by influenza virus H_1N_1 and H_3N_2 strain. Hospital settings are potent source of transmission of infection. Therefore healthcare providers KAP act as a substantial attribute to prevent transmission of swine flu.

This study suggested that the knowledge of students regarding the causative agent, risk factors, clinical features, diagnosis, treatment, prevention and complication was satisfactory but they have inadequate knowledge regarding mode of transmission, incubation period, contagious period and historical aspect of disease spreading. After careful observation we found that the attitude of medical students towards swine flu is up to mark. Regarding the practice, they were well educated how to take prevention from spreading swine flu. But the only lacuna was a few were aware about importance of isolation.

Transmitting valid information to patients in hospital and to public about swine flu act as a mediator to prevent the spreading of disease [10]. Information about swine flu virus mostly conveyed to the medical students is by the professors in a health institution. Aken *et al.*, suggested that residents and students of a medical college learn mostly from their professors and internet [11]. During the period of epidemic health institutions are in close contact with the media. As a result health institutions easily transmit the knowledge by various form of media like print media, electronic media etc, so that it will be helpful towards public as well as residents and students of health institution [12]. Different literature reviews suggested that health care providers are one of the important risk group to infection and vaccination is priority for them [13]. Inspite of all above vaccination of health providers are low [13, 14].

5. Conclusion

This study was attempted to assess the KAP of final year medical students of a health university. We found that in some aspect students' KAP are at optimum level and in others are not. So necessary steps have been taken at this level to educate the students at point where they are weak, because good KAP of medical students and residents is essential for a healthy society.

6. References

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