

# Assessment of knowledge, Practice and Barrier in use of Facemask among University Students

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## ABSTRACT

**Aim:** To find out the knowledge, practice and barriers among university students.

**Methodology:** A cross sectional descriptive study conducted on superior university Lahore.

**Result:** Study was conducted on 60 students; students who do not use facemask during period of infection 55%, majority of them were male 64.7%. Statistically significant association found in use facemask and people who have knowledge about benefit of using facemask. Most of source of knowledge of using facemask is through electronic media 46%, which is statistically significant associated ( $p < 0.05$ ). Barrier in use of facemask is irritation 43% and lack of knowledge about benefit is 23%.

**Conclusion:** facemask is necessary to implement for prevention of respiratory infections in mass gathering no matter how much science advanced until we do not know the barrier of people mind, attitude and availability we cannot succeed in promoting health education.

**Keywords:** Knowledge, attitude, barriers, practice.

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## INTRODUCTION

Respiratory infections are not simply words they have given real life threat to our society and become problematic in daily routine activity. According to studies Pakistan have student enrollment of 1.4 million in universities, including over 900 foreign students, the percentage of female students are around 40%<sup>1</sup>. The total numbers of teacher in universities are 70,053 and female registration is (49%) whereas male registration in the universities is (51%)<sup>2</sup>.

University is place of mass gathering and has potential to spread disease more rapidly, so maintain the good practice of personal hygiene and developing good attitude of wearing facemask during infection is important to control respiratory diseases. Every year epidemic of respiratory infection causing great loss of life, according to CDC Influenza Division, worldwide who perished from 2009 H1N1 virus infection died from range of 151,700 and 575,400<sup>3</sup>. People living in high risk area where influenza A(H1N1) virus can disseminate is to avoid such settings or simply wear facemask.

Faculty of universities is great source of developing preventive behavior among students and controlling of epidemics each year. Developing countries like Pakistan is highly vulnerable to risk of epidemics because of inadequate sanitation, poor socioeconomic status, over populated cities, low health awareness and improper vaccination

coverage<sup>4</sup>. Giving knowledge, developing awareness and knowing barrier in use of facemask is key of success in controlling respiratory infection.

The objective of the study was to find out the knowledge, practice and barrier in use of facemask among university students.

## METHODOLOGY

A survey was conducted in superior university Raiwind road Lahore during month of April to June 2017. After approval of ethical clearance from institutional review board (IRB), from three senior faculty member, participants were explained purpose of article and process of data collection. 37 male and 23 female willingly filled questionnaire. After collection, data was entered in computer, variable are made and association find by cross tabulation. Chi Square is applied to find statistically significance.

## RESULT

In our study we have 60 students with mean age of above 21, out of them male were 56.6% (Table 1). Students who know benefits of using facemask shows statistically significant association in using facemask (Table 2 & 3). Their most of source of knowledge about benefit of using facemask is through electronic media 46%, from medical practitioner 26% which is statistically significant associated in use of wearing facemask (Table 4 & 5). Barrier in use of facemask is irritation 43% and lack of knowledge about benefit is 23% (Table 6).

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Table 1: Gender and use of facemask (cross tabulation)

Use of face mask	Gender of Students		Total
	Female	Male	
No	11	22	33
Yes	15	12	27

Table 2: use facemask by knowing benefit of using facemask (cross tabulation)

Use of face mask	Knowledge about benefit of use of face mask		Total
	No	Yes	
No	11	22	33
Yes	1	26	27

Table 3: Chi-Square Tests.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.148	1	.004
Continuity Correction	6.402	1	.011
Likelihood Ratio	9.484	1	.002

Table 4: Effect of source of information in use of facemask

Use of face mask	Source of knowledge			Total
	Electronic Media	Public	Medical Practitioner	
No	15	13	5	33
Yes	13	3	11	27

Table 5: Chi-Square Tests

Chi-Square Tests	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.124	2	.017
Continuity Correction	8.586	2	.014
No. of Valid cases	60		

Table 6: Barrier in use of facemask

barrier in use of facemask	Frequency	Cumulative
Irritation	26	43.3%
Lack of knowledge	14	23.3%
Difficulty in breathing	13	21.7%
social embarrassment	7	11.7%

## DISCUSSION

During period of communicable diseases outbreak university can become very sensitive target of massive spread of disease. Our survey conducted on students of superior university which reflect their mind setup of use of preventive measures during period of respiratory infection. Use of facemask control respiratory infection by preventing direct flow of droplet to others and by stopping contact of mouth to hand indirectly. Our study reflects 55% of students do not use facemask and among of them male were in majority 64.7% (Table 1). Similar to our study conducted in university of Turkey shows intuitive understanding of male toward influenza outbreak was significantly lower than of female ( $p = 0.004$ )<sup>5</sup>.

Increased sensitivity to disease improved people compliance toward prevention. In our study students who know the benefit of wearing facemask shows statistically significant association in use of facemask (Table 3). Similar to our study conducted on behavior of American Adults, People with higher scores on health-related social networks, more knowledge or concern about A (H1N1), and those who have consulted their doctor were more likely than others to adopt NPIs<sup>6</sup>. Advancement in field of media and electronic helped to make people well aware, in our study significant association find in use of media and wearing facemask (Table 6). Similar information find in study of turkey students in which their main source of information regarding epidemic of influenza was mass media<sup>5</sup>. Barriers bind people mind and nullify every single effort, in our study barriers in use of facemask was irritation, lack of knowledge, difficulty in breathing and social embarrassment. Compared to our study another study shows similar result in which Perceived barriers include experience or perception of personal discomfort and sense of embarrassment<sup>7</sup>.

## CONCLUSION

Increasing threat of respiratory infection makes use of facemask necessary to implement for prevention in mass gathering but no matter how much science get advanced until we do not know the barrier of people mind, attitude and availability we cannot succeed. Our study shows there is great need to aware the people about risk of respiratory infection especially male. Promoting health education through mass media has proven best way to increased sensitivity and removing barriers in use of facemask.

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