Study to Develop a Structured Teaching Programme Regarding Use of Different Types of Mask and Assess Its Effectiveness in Terms Of Gain in Knowledge, Attitude and Practice among Nursing Students

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ABSTRACT

Masks are a type of personal protective equipment used to prevent the spread of respiratory infections. A present study was aimed to assess the effectiveness of developed structured teaching programme regarding use of different type of mask in terms of gain in knowledge, attitude and practice among nursing students, New Delhi. Quantitative research approach was used, and research design was pre-experimental one group pre-test post-test design. Purposive sampling technique was used to collect 53 nursing students. Structured knowledge questionnaire, 5-point Likert scale and observational checklists was used to assess the knowledge, attitude, and practice score respectively. It shows that the calculated t-test score for knowledge was 10.48 which indicate the significant difference between pre-test and post-test knowledge score at 0.05 level of significance. Mean difference between pre-test and post-test of attitude score is 0.68. The calculated t-test score was 5.33 which indicate the significant difference between pre-test and post-test attitude score at 0.05 level of significance. Mean difference between pre-test and post-test of practice is 4.04. The calculated-test score was 11.19 which indicate the significant difference between pre-test and post-test score of practice at 0.05 level of significance. The introduction of Structured Teaching Programme was effective to increase the knowledge, develop positive attitude and improve practice regarding the uses of different types of mask among nursing students.

Keywords: Assess, knowledge, attitude, STP

1 Introduction

Mask can be used to prevent disease condition like SARS Co-V, Influenza, common cold, whooping cough, etc. It is to recognize that the optimal way to prevent airborne transmission is to use s combination of intervention from across the hierarchy of control, not just PPE. N95 respirators and surgical masks are examples of persona; protective equipment that are used to protect the wearer from airborne particles and from liquid contaminating the face. [1]

2 Statement of the Problem

A study to develop a structured teaching programme regarding use of different types of mask and assess its effectiveness in terms of gain in knowledge, attitude, and practice among nursing students in a selected college of New Delhi

3 Objectives

1. To assess the effectiveness of structured teaching programme in terms of gain in knowledge of different types of mask used by nursing students in selected college of New Delhi.
2. To assess the effectiveness of structured teaching programme in terms of attitude towards different types of mask used by nursing students in selected college of New Delhi.
3. To assess the effectiveness of structured teaching programme in terms of practice in different types of mask used by nursing students in selected college of New Delhi.

4 Research Methodology

Research approach: Quantitative research approach.

Research design: Pre-experimental one group pre-test post-test research design.

Setting of the study: Holy family hospital, New Delhi

Population: Nursing students

Sample: B.Sc. 2nd year students

Sample size: 53 students

Sampling technique: Purposive sampling technique

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5　Results and Discussion

Section 1: analysis of homogeneity of group regarding demographic variables in term of frequency and percentage distribution

Majority of samples i.e. 46 (86.79%) are 18 – 20 years old of age. All are studying in 2nd B.Sc. (100%). Majority of samples i.e.42 (79.25%) live in urban area. Majority of sample that is 31(58.49%) had mass media as the source of information, Majority of sample's mother that is 16(30.19%) was health workers. Majority of sample's father that is 28(52.83%) had private job. Majority of sample's family income that is 23(43.40%) was 60,001 and above.

Section 2: findings related to knowledge score

Table 1: frequency and percentage distribution of level of knowledge among nursing students. N=53

Categories	Pre-test		Post-test	
	f	%	f	%
Good knowledge	10	18.87	40	75.47
Fair knowledge	42	79.24	13	24.53
Poor knowledge	1	1.89	0	0

Table1. shows that out of 53 students 42(79.24%) had fair knowledge level while 10 (18.87%) had good knowledge and 1 (1089%) of the sample had poor knowledge in pre-test and in post-test knowledge out of 53 students 40(75.47%) have attained good knowledge and 13(24.53%) of the sample had fair knowledge and none of the samples had poor knowledge.

Table 2: Comparison between pre- test and post-test knowledge score by using t- Test method in terms of mean, median, mean difference, SD, and t score.N=53

Knowledge level	Mean	Median	Mean difference	SD	T score
Pre-test	14.43	13	4.14	2.2	10.48
Post-test	18.57	17		2.6	

Data presented in above table reveals the tabulated value is 2.00 at p>0.05 level of significance so the calculated't' value 10.48 is greater than tabulated value, hence research hypothesis is accepted. This indicates that there is significant difference between the pre-test and post -test score of knowledge among nursing students after the structured teaching programme at 0.05 level of significance.

Section 3: Findings related to attitude score

Table 3: Frequency and percentage distribution of pre-test and post-test attitude　　N=53

Categories	Pre-test		Post-test	
	f	%	f	%
Good attitude	44	83.01	48	90.56
Fair attitude	9	16.99	5	9.44
Poor attitude	0	0	0	0

Table 3 shows that out of 53 students 44(83.01%) had good attitude level while 9 (16.98%) had fair attitude and none of the sample had poor attitude whereas in post-test 48(90.56%) have good attitude and 5(9.43%) of the sample had fair attitude and none of the samples had poor attitude.

Section 4: findings related to practice score
Table 4: Comparison between pre- test and post-test attitude score by using t-test method. N= 53

Knowledge level	Mean	Median	Mean difference	SD	t score
Pre-test	40.47	38	0.68	2.88	5.33
Post-test	41.15	41		4.15	

Data presented in above table reveals the tabulated value is 2.00 at p>0.05 level of significance so the calculated't' value 5.33 is greater than tabulated value, hence research hypothesis is accepted. This indicates that there is significant difference between the pre-test and post -test score of attitudes among nursing students after the structured teaching programme at 0.05 level of significance

Table 5: Frequency and percentage Distribution of pre-test and post-test practice score. N=53

Categories	Pre-test		Post-test	
	f	%	f	%
Good knowledge	1	1.88	35	66.04
Fair knowledge	28	52.83	18	33.96
Poor knowledge	25	145.28	0	0

Table 5 shows that in pre- test practice score majority of the sample that is 28(52.83%) had fair practice level while 24 (45.28%) had poor practice and 1(1.88%) of the sample had good practice whereas in post -test practice score, majority of the sample i.e. 35(66.03%) have attained good practice

and 18(33.96%) of the sample had fair practice and none of the samples had poor practice.

Table 6: Comparison between pre- test and post-test practice score by using t -test method.

Knowledge level	Mean	Median	Mean difference	SD	t score
Pre-test	4.75	6	4.04	1.90	11.19
Post-test	8.79	9		1.94	

Data presented in above table reveals the tabulated value is 2.00 at p>0.05 level of significance so the calculated't' value 11.19 is greater than tabulated value, hence research hypothesis is accepted. This indicates that there is significant difference between the pre-test and post -test score of practice among nursing students after the structured teaching programme at 0.05 level of significance.

A study was conducted by Jagdish Kumar Batheja, Muhammad Sought Katto to assess the knowledge, attitude, and practice of healthcare workers regarding the use of facemask to limit the spread of corona virus in the year 2020 on 392 healthcare workers. Around 35.2% of participants had good knowledge, 43.6% had good practice and 88.2% had good attitude regarding the use of mask, whereas our study was conducted to assess knowledge, attitude and practice regarding the use of different types of mask among nursing students in the year 2021 on 53 B.Sc. 2nd year nursing students. In our study 18.87% of nursing students had good knowledge, 83.01% had good attitude and 1.88% had good practice regarding the use of different types of mask in our pre-test. We also administered a structured teaching programme on different types of mask and the post results were 75.47% had good knowledge, 90.56% had good attitude and 66.04% had good practice.[2]

A similar study was conducted by Tahesse, Tariku Tesfaye et.al. From June to July 2020 to assess healthcare workers knowledge, attitude and practice of proper face mask utilization and associated factors in police health facilities of Addis Ababa Ethiopia. Where 408 healthcare workers working in the police force were taken as sample and the results of the study shows that the overall knowledge, attitude, and practice of the healthcare provider towards proper face mask utilization were 98 (33.5%), 185 (45.3%), and 272 (33.3%) respectively.[3]

6   Conclusion

In the present study major of the student have fair knowledge regarding uses of different types of mask and had poor in practice and majority of nursing student had good attitude towards it. Therefore, there is a need of proper teaching regarding proper uses of masks to prevent and control spread of airborne disease.

References

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