



A CAMPAIGN ON HAND HYGIENE

Microbiology

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ABSTRACT

Hand hygiene is a milestone of infectious disease control and its promotion has been recognized as an important public health measure. Due to constant relationship with patients, nurses play a paramount role in proper execution of hand hygiene. A study was conducted to assess the knowledge of nursing students and their performance was measured before and after the workshop. The knowledge score regarding hand hygiene was significantly improved from 4.34 ± 1.5 to 8.84 ± 0.9 . Emphasis on infection control to lower hospital acquired infections (HAI) should be considered as an important aspect and must be included as educational priority.

KEYWORDS

hand hygiene, infectious disease control, hospital acquired infections.

INTRODUCTION:

Hand hygiene is a milestone of infectious disease control and promotion of improved hand hygiene has been recognized as an important public health measure. It is also proved to be convenient, effective, simple and cost effective means of preventing communicable diseases.

According to the definition of WHO, hand hygiene is a general term referring to any action of hand cleansing, i.e., it is the act of cleaning ones hands with or without the use of water or another liquid or the use of soap, for the purpose of removing soil dirt or microorganisms.²

In developed countries, Health Care Associated Infections (HCAI) have been reported to affect 5-15% of hospitalized patients and 9%-37% of those admitted to intensive care units, while in developing countries where reliable data is limited, prevalence rates have been estimated to be between 14.8% and 19.1%.³

Aim and objectives:

- To assess the knowledge of hand hygiene among nursing students.
- To measure the performance before and after the workshop.

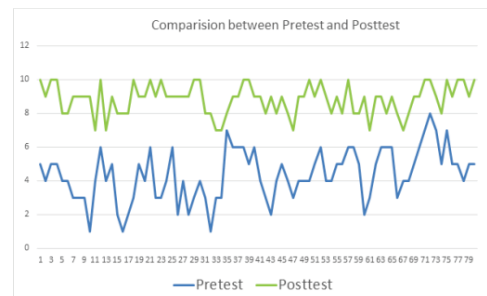
METHODOLOGY:

The study was conducted at Katuri Medical College and Hospital, Guntur among 80 nursing students in July 2018. Self administered questionnaire was based on guidelines by WHO. It includes evaluation phase (pretest and post test) and training phase (workshop).

The questions were given as pre test and then workshop is conducted by using audio and video visuals included in the power point followed by "life saver" tag to the students who performed well as a mark of appreciation. Post test was also conducted on the same questionnaire. The questionnaire consists of 10 questions of both multiple choice and yes or no. statistical analysis was done using SPSS version 21.

RESULTS:

Paired sample test was done (Table no: 1), p value less than 0.05 was considered significant. Except for the usage of alcohol based hand rub all the aspects proved to be significant. Usage of alcohol based hand rub was less may be due to its unavailability at that point.



Picture no 1: Comparison between pre-test and post-test evaluations

Table No 1: Paired Samples Test

		Paired Differences			95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	PRE TRAINING - POST TRAINING	-0.475	0.503	0.056	-0.587	-0.363	-8.454	79	0.000
Pair 2	PRE ALCOHOL BASED HANDRUB - POST ALCOHOL BASED HANDRUB	0.050	0.673	0.075	-0.100	0.200	0.664	79	0.508
Pair 3	PRE HAI SOURCE - POST HAI SOURCE	-0.425	0.569	0.064	-0.552	-0.298	-6.684	79	0.000
Pair 4	PRE GERMS TO PATIENTS - POST GERMS TO PATIENTS	-0.163	0.583	0.065	-0.292	-0.033	-2.491	79	0.015
Pair 5	PRE GERMS TO HCW - POST GERMS TO HCW	-0.262	0.689	0.077	-0.416	-0.109	-3.408	79	0.001
Pair 6	PRE TIME TO KILL - POST TIME TO KILL	-0.837	0.371	0.042	-0.920	-0.755	-20.178	79	0.000
Pair 7	PRE THINGS TO AVOID - POST THINGS TO AVOID	-0.750	0.436	0.049	-0.847	-0.653	-15.395	79	0.000
Pair 8	PRE PREFERENCE - POST PREFERENCE	-0.387	0.490	0.055	-0.497	-0.278	-7.070	79	0.000
Pair 9	PRE ASSESSMENT - POST ASSESSMENT	-0.488	0.503	0.056	-0.599	-0.376	-8.669	79	0.000
Pair	PRE 5 MOMENTS - POST 5 MOMENTS	-0.763	0.428	0.048	-0.858	-0.667	-15.926	79	0.000

DISCUSSION:

Present study proved that the training program on infection control strategies significantly improved the knowledge and compliance score of hand hygiene. The knowledge score regarding hand hygiene was significantly improved from 4.34 ± 1.5 to 8.84 ± 0.9 . (Picture no :1) Other studies done by Pinnapati S⁴, Deepak KK⁵, Schmitz et al⁶, shows similar improvement by conducting training programs and extended professional education to healthcare workers.

CONCLUSION:

Hand hygiene must become an educational priority. Emphasis on infection control by continuous monitoring should be considered as an important measure. Availability of liquid soap and free flowing tap water should be promoted. This study shows the importance of current training programs targeting hand hygiene practices among nursing students.

Recommendations:

The magnitude and scope of the HCAI burden worldwide appears to be very important and greatly underestimated. Methods to assess the size and nature of the problem exist and can contribute to correct monitoring and to find solution.

REFERENCES:

1. Maruf S, Rashidul AM, Abdul RS, Sarder MH. Hand hygiene knowledge and practice among university students. Evidence from private universities of Bangladesh. Risk management and policy 2016; 9:13-20.
2. WHO. Guidelines on hand hygiene in healthcare; 2009.
3. Immanuel A, Sozlema S, Joshi PC. A study to assess hand hygiene knowledge and practice among healthcare workers in a teaching hospital in Ghana IJSR 2016; 5(8):301-307.
4. Pinnapati S. To evaluate the effectiveness of a video assisted demonstration programme on knowledge and practice regarding maintenance of asepsis in labour room. A randomized control trial. 2013; 1(1):1-14.
5. Deepak KK, Kumar Y, Adkoli BV. Extending professional education to health workers at grass root level: an experience from All India Institute of Medical Sciences, New Delhi. IJCM. 2014; 39(1):38-42.
6. Schmitz et al. Effectiveness of a multimodal hand hygiene campaign and obstacles to success in Addis Ababa, Ethiopia: Antimicrobial resistance and infection control. 2014, 3(8):3-8.