

To Study on Hand Hygiene Awareness Among Medical Students In A Teaching Hospital, Rajasthan.

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Abstract

Background- Healthcare-associated infections (HAIs) are of major concern when it comes to patient safety.

Methods- The present study was institution based observational epidemiological study. A total of 100 medical students were enrolled for the study. Knowledge was assessed using WHO hand hygiene questionnaire for health care workers.

Results- A total of 14 showed good knowledge of hand hygiene practices. Out of 100, 75 medical students had moderate knowledge and 11 medical students had poor knowledge.

Conclusion -The medical students should be educated on the importance of hand hygiene and should also encouraged to use hand sanitizers whenever delivering health care in any format. Further, medical colleges should also motivate to modify their curriculum so as to achieve good hygienic environment among the students.

Keywords- Hygiene, Medical Students, Healthcare-Associated Infections.

Introduction

Healthcare-associated infections (HAIs) are of major concern when it comes to patient safety. Hand hygiene remains the primary measure to reduce HCAI and the spread of antimicrobial resistance across all settings, from

advanced healthcare systems to local dispensaries in developing countries.¹ HAIs are the most adverse events arise due to stay in a hospital especially in underdeveloped countries. Hand hygiene is the most effective and practical aspect so as to reduce the HAIs. It has come up as a global effort with the launch of “SAVE LIVES: Clean Your Hands” campaign in 2009. It was an extension programme of WHO First Global Patient Safety Challenge: “Clean Care is Safer Care” for infection control universally so as to ensure patient safety and the reduction of HAIs.² Several authors have reported that the knowledge, attitude, and observance of hand hygiene by the undergraduate healthcare students is poor. Cross-disciplinary studies are limited and mainly focused on the comparison between medical and nursing students. There is a need to explore the concept of hand hygiene among the cross-disciplinary healthcare undergraduate students, in India. It is imperative to inculcate the knowledge and good attitudes regarding hand hygiene at the time of primary education of healthcare workers. Therefore, the present study was conducted to assess and compare the knowledge of hand hygiene among medical students during.

Material and Methods

The present study was institution based observational epidemiological study. A total of 100 medical students

were enrolled for the study. Knowledge was assessed using WHO hand hygiene questionnaire for health care workers.³ This questionnaire included multiple choice questions; “yes” or “no” and “true” or “false” questions. In the questionnaire, first 25 questions were to assess the knowledge about hand hygiene and 26 th question was to know the routine practice and awareness about ABHR (Alcohol based hand rub). 1 point was given for each correct response and maximum score was 26. A score of more than 75% was considered good, 50–74% moderate, and less than 50% was taken as poor knowledge. Before filling the questionnaire, study population was briefed about the purpose and nature of the study and their informed written consent were taken.

Results

Table 1: Table showing the status of knowledge of medical students for hand hygiene practices questions individually. Desired answers are given in brackets against each question.

S.No.	Question	Response (%)
1	Main route of transmission of potential pathogens between patients? (health care workers hands when not clean)	28
2	Most common source of pathogens responsible for health care associated infections? (germs already present on or within the patient)	13
3	Before attending/ touching a patient (yes)	52
4	Immediately after risk of body fluid exposure (yes)	48
5	After exposure to patient immediate environment (no)	24
6	Before a clean/aseptic procedure (yes)	54
7	After attending/ touching a patient (yes)	44
8	Immediately after a risk of body fluid exposure (yes)	57
9	Before a clean/aseptic procedure (no)	29
10	After exposure to patient immediate environment (yes)	34
11	Hand rubbing is more rapid hand cleansing method than hand washing (true)	46
12	Hand rubbing causes more skin dryness than hand washing (false)	33

13	Hand rubbing is more effective against pathogens than hand washing (false)	31
14	Both are recommended to be performed in sequence (false)	19
15	Minimal time required by alcohol-based hand rub to kill most germs on hands? (20 seconds)	21
16	Before palpation of the abdomen (rubbing)	26
17	Before giving an injection (rubbing)	33
18	After emptying a bed pan (washing)	46
19	After removing examination gloves (rubbing/washing)	50
20	After making a patient’s bed (rubbing)	32
21	After exposure to blood (washing)	45
22	Wearing jewellery (yes)	40
23	Damaged skin (yes)	52
24	Artificial fingernails (yes)	42
25	Regular use of a hand cream (no)	48
26	Do you routinely use alcohol based hand rub for hand hygiene? (yes)	6

A total of 14 showed good knowledge of hand hygiene practices. Out of 100, 75 medical students had moderate knowledge and 11 medical students had poor knowledge.

Discussion

In the era of rise in HAIs, there is an acute shortage of data with respect to factors contributing to this rise. During student life, each medical student is trained to deliver effective health care but safety is kept at least. A total of 14 showed good knowledge of hand hygiene practices. Out of 100, 75 medical students had moderate knowledge and 11 medical students had poor knowledge. Chatterjee et al. (2015)⁴ have also showed similar results in a study carried out among medical students. In this study moderate Knowledge of hand hygiene was reported among 76% of the total study population. Only 8% of participants had good knowledge and 16% showed poor knowledge with respect to hand hygiene practices.

In another study, Nair et al. (2014)⁵ demonstrated that both medical and nursing students of a tertiary health care centre at Raichur, Karnataka, India had moderate knowledge on hand hygiene. It depicts the real ground level situation where budding medical and nursing

students have moderate understanding of good hygiene practices. This moderate information may turn out as poor practices during their professional course.

This is a matter of concern because HAI are on increase and these medical students are the future health care providers. It's very important for them to incorporate the basic hand hygiene practice in their routine patient care. However, it cannot be achieved until they are not made aware about the significance of hand hygiene practice and how their little effort can save lives along with reduced health care costs and morbidity/ mortality.

Conclusion

The medical students should be educated on the importance of hand hygiene and should also encouraged to use hand sanitizers whenever delivering health care in any format. Further, medical colleges should also motivate to modify their curriculum so as to achieve good hygienic environment among the students.

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