



AWARENESS AND PRACTICES ON HAND HYGIENIC AMONG MEDICAL PROFESSIONALS IN A TERTIARY CARE HOSPITAL

Microbiology

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ABSTRACT

BACKGROUND: Hand hygiene, is the act of cleaning hands for the purpose of removing soil, dirt, and micro organism. Medical hand hygiene refers to hygiene practices related to medical procedures. Hand washing before administering medicine or medical care can prevent or minimize the spread of disease. Since Interns are in constant relationship with patients they play a paramount role in proper execution of hand hygienic practice among health personal.

OBJECTIVES: To assess the knowledge of hand hygienic practice among medical professionals and to find out their awareness about hand hygienic practices.

MATERIALS AND METHODS: A cross sectional study was conducted at sree mookambika institute of medical sciences among 2013 CRRI batch.

RESULTS: Among the study population of 75, 33 were males and 42 were females. 46% interns routinely use handrub, 42% interns believe the frequent source of germs is hospital air, 56% of study population practice hand hygienic methods before touching the patient to prevent transmission of germs to patient, 53% of study population practice hand hygienic methods after the exposure of body fluids to prevent transmission of germs to health care workers

CONCLUSION: Hand hygienic practice protects and also prevents from infections. Among the study population though the knowledge about the hand hygienic practices are good, but they are not following in day to day practice.

KEYWORDS

Hand Hygiene, Prevention Of Transmission Of Germs, Hand Rub, Hand Wash

INTRODUCTION:

Hand washing with soap consistently at critical moments during the day prevents the spread of diseases like diarrhoea and cholera which are transmitted through faecal-oral route. People can become infected with respiratory disease such as influenza or the common cold, for example, if they do not wash their hands before touching their eyes, nose, or mouth.^{1,2,3} Hand washing with soap is the single most effective and inexpensive way to prevent diarrhoea and acute respiratory infections (ARI), as automatic behaviour performed in homes, schools, and communities worldwide pneumonia, a major ARI, is the number one cause of mortality among children under five years old, taking the life of an estimated 1.8 million children per year. Diarrhoea and pneumonia together account for almost 3.5 million child deaths annually.^{4,5} According to UNICEF, turning hand washing with soap before eating and after using the toilet into an ingrained habit can save more lives than any single vaccine or medical intervention, cutting deaths from diarrhoea by almost half and deaths from acute respiratory infections by one-quarter.⁶ Hand washing is usually integrated together with other sanitation interventions as part of water, sanitation and hygiene programmes.⁷ Hand washing also protects against impetigo which is transmitted through direct physical contact.⁸ A possible small detrimental effect of hand washing is that frequent hand washing can lead to skin damage due to drying of the skin. Excessive hand washing is commonly seen as a symptom of obsessive-compulsive disorder.^{9,10}

AIMS & OBJECTIVES

1. To assess the knowledge of hand hygienic practice among medical professionals
2. To find out their awareness about hand hygienic practices

METHODOLOGY:

STUDY DESIGN: Cross Sectional study.

STUDY SETTING: The study was conducted in the Sree Mookambika Institute of Medical Sciences (SMIMS), Kulasekharam, Kanyakumari district, Tamilnadu.

STUDY POPULATION: The study population included all the interns of 2103 batch

SAMPLE SIZE: All the interns belongs to 2013 batch were taken into consideration. There fore the sample size was 75.

PERIOD OF STUDY: 3 months (August -October 2018)

INCLUSION CRITERIA: All interns who are willing to participate in the study and willing to give informed consent were included

EXCLUSION CRITERIA: Interns who are not willing to take part were excluded from the study.

DATA COLLECTION: A pretested semi structured questionnaire is used to collect data for the study.

STATISTICAL ANALYSIS: Data was entered in MS Excel sheet and was analysis by using SPSS version 16.0

RESULTS:

Among the study population of 75 interns of which 33 were females and 42 were males. Of which 46 % had the practice of routinely using a handrub whereas 54 % did not have the habit of using a hand rub. 48% of them believe that the main route of transmission of infection among hospitalised patients is via sharing of non-invasive objects and 23 % believe that due to health workers hand when not clean. 56% think that hand hygiene practice before touching the patient prevents transmission of germs to the patient. 21% believe that hand hygiene actions immediately after a risk of body fluid exposure and 13 % believe that after exposure to the immediate surroundings of a patient and 20% believe that hand hygiene immediately before a clean/aseptic procedure prevents transmission. 31% think that hand hygiene after touching a patient actions prevents transmission of germs to the health-care worker. 53 % believe that hand hygiene immediately after a risk of body fluid exposure and 8 % believe that hand hygiene immediately before a clean/aseptic procedure. 57 % think it is true that hand rubbing is more rapid for hand cleansing than hand washing. 40 % of the study population believe that hand rubbing causes skin dryness more than hand washing. 39% of the study population find that hand rubbing is more effective against germs than hand washing. 61 % find that Hand washing and hand rubbing are recommended to be performed in sequence.

70 % chose that the minimal time needed for using a alcohol based hand rub is 1 min whereas 2 % believe that it is for 3 seconds. 53 % believe that no hand hygienic practice is required before palpation of

abdomen and 20 % believe in using hand rub before palpation of abdomen. 47 % believe in hand rubbing before giving an injection and 30 % believe that no hand hygiene is required before giving an injection. 55% believe washing is needed after removing examination gloves and 25 % believe that no hand hygiene practice is required after removing examination gloves. 94 % believe that hand washing is needed after visible exposure to blood and 6 % believe hand rubbing is enough after exposure to blood. 65 % believe that wearing jewellery increases the likelihood of colonisation of germs in hand. 60 % think that damaged skin can cause colonisation of germs. 46% believe that the minimum time needed for hand wash is 40- 60 seconds and 6% believe that minimum time needed for hand wash is 20-30 seconds.

DISCUSSION:

Among the study population a great majority of the interns are aware of proper hand hygienic practices. This reveals that unlike the general population, the lack of knowledge regarding hand hygiene is not the reason for following proper hand hygienic practices. Though their knowledge is adequate, the attitude towards hand hygienic practices is unfavourable. Even among interns majority wanted to use hand rub but still they are not routinely using alcohol based hand rub.

From the study done by Glad Mohesh, et al ¹¹ shows lesser differences existed between students in the knowledge and attitude of hand hygienic practices. But in practice there was a difference. As the year of study advances, due to increasing knowledge and better attitude towards special responsibility, there is an increase in the practice of hand hygiene. In our study though the knowledge about hand hygiene is good they are not following in day to day practices.

Dr Kumaril Goswami et al ¹² study shows majority of medical and nursing students had good knowledge and attitude towards hand hygiene and also majority follows proper hand hygienic practicing procedures. But there is lack of knowledge and practice regarding all six steps of hand washing. In our study though the knowledge about hand hygiene is good but they are not following in day to day practices.

CONCLUSION:

Among the study population a great majority of the interns are aware of the hand hygienic practices. Proper health education regarding proper hand hygienic practices atleast once in a year. The availability of hand rubs, soaps, water facility must be increased and world health organization hand wash charts must be displayed in each ward, though the knowledge regarding hand hygienic practices is good but the attitude towards day to day practices is not adequate.

LIMITATIONS

Sample size taken is small. The study covers only one institution. It can be extended to more number of institutions.

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