30	urnal or p OR	IGINAL RESEARCH PAPER	Management
Indian	A ST PARIPET	TUDY ON COMPLIANCE HAND WASHING CTICES IN INTENSIVE CARE UNITS	<b>KEY WORDS:</b> hand hygiene, Quality, Intensive care unit
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TRACT	Introduction: Hospital-acquired infection also known as nosocomial infection — is an infection that is contracted from the environment or staff of a healthcare facility. It can be spread in the hospital environment, nursing home environment, rehabilitation facility, clinic, or other clinical settings. Aim: The aim of this study is to investigate the compliance of Hand Hygiene among the Nurses and Doctors in intensive care units <b>Methods:</b> 30 ICU staffs were accessed using a questionnaire regarding hand wash. <b>Results:</b> Overall compliance of hand hygiene in purses was 68.2% Nurses mostly prefer to wash their hands after touching a		

**Results:** Overall compliance of hand hygiene in nurses was 68.2%. Nurses mostly prefer to wash their hands after touching a patient (84.6%). Overall compliance of hand hygiene in doctors was 61.9%. Doctors mostly prefer to wash their hands after touching a patient (65.5%)

**Conclusion:** Good infection control is essential but the complex nature of infection means that it is not always easy to achieve. Continuous training and monitoring will prevent infections.

## INTRODUCTION

Hospital acquired infections (HAIs) are common in intensive care unit (ICU) patient and are associated with increased morbidity and mortality. It may not be possible to eradicate all hospital-related infections. However, an effective infection control program provides optimum protection. Infection transmission through contaminated hands of health care workers (HCW) is a common pattern seeing in most healthcare settings [1, 2]. Failure to perform appropriate hand hygiene practices is a leading cause of health care-associated infections (HCAI) and the spread of multi resistant organisms and has been recognized as a significant contributor to outbreaks of infectious diseases by the World Health Organization (WHO) [3]. WHO recognizes that washing hands of HCWs with soap can prevent infection in patients and is the most effective and inexpensive way to prevent transmission. The United Nations General Assembly designated 2008 as the International Year of Sanitation [4]. To reinforce the United Nation's call for improved hygiene practices, the Global Public-Private Partnership for Hand washing declared 15 October 2008 as the first Global Hand washing Day with the objective of promoting a global culture of hand-washing with soap [5]. This campaign was initiated mainly to reduce mortality rates related to diarrheal diseases by introducing simple behavioral changes. As part of a major global effort to improve hand hygiene in health care, the WHO in 2009 launched a global campaign named "SAVE LIVES: Clean Your Hands" [6]. Interestingly a directive for healthcare workers to practice hand hygiene was made as far back as 1847 by Ignas Semmelweis in Vienna [7]. In spite of the wisdom of Semmelweis, poor handwashing compliance rates continue to exist in the general population [8] and in health care settings.

## AIM

The aim of this study is to investigate the compliance of Hand Hygiene among the Nurses and Doctors in intensive care units

## MATERIALS AND METHODS

The study was primarily conducted to assess the factors responsible for noncompliance of hand wash techniquesawareness and practices. Primary data were collected through questionnaire on awareness and practices about hand contamination infection. The tools were prepared based on the hospital-acquired infection guidelines provided by the World Health Organization (WHO) and Centre for Disease Control (CDC). The tools were pre-tested before data collection and proper approval was obtained from the appropriate authority prior to the study. The limitation of the study was that the HAI control practices could not be observed but evaluated based on a self designed questionnaire and interview schedule.

# RESULTS

Overall compliance of hand hygiene in nurses was 68.2%. Nurses mostly prefer to wash their hands after touching a patient (84.6%) [71.1% by hand washing with soap and water and 23.4% by hand hygiene with disinfectant], secondly, after touching patient surroundings (60.1%) [45.5% by hand washing with soap and water and 24.6% by hand hygiene with disinfectant], thirdly, prior to touching the patient (53.8%) [31.0% by hand washing with soap and water and 32.8% of by hand hygiene with disinfectant], fourthly, after body fluid exposure risk (26.8%) [10.3% by hand washing with soap and water and 9.4% of hand hygiene with disinfectant], and lastly prior to a clean/aseptic procedure (14%) [8.3% by hand washing with soap and water and 8.7% by hand hygiene with disinfectant].

Overall compliance of hand hygiene in doctors was 61.9%. Doctors mostly prefer to wash their hands after touching a patient (65.5%) [27.7% by hand washing with soap and water and 37.7% of by hand hygiene with disinfectant], secondly, before touching patient (58.7%) [21.9% of by hand washing with soap and water and 36.8% of by hand hygiene with disinfectant], thirdly after touching patient surroundings (38.5%) [21.9% of by hand washing with soap with disinfectant], fourthly, after body fluid exposure risk (32.7%) [28.1% of by hand washing with soap and water and 4.5% of by hand hygiene with disinfectant], and lastly before a clean/aseptic procedure (12.5%) [8.2% by hand washing with soap and water and 6.2% of by hand hygiene with disinfectant].

#### DISCUSSION

Patients in the intensive care units (ICUs) are more likely to be infected by multidrug-resistance microorganisms and most of these infections are spread by carriage of microorganisms on the healthcare workers' (HCWs) hands [9]; outbreaks of infections resulting from cross-transmission are frequent [10]. Hand hygiene, before and after all patient or patient environment contact, before aseptic procedure, and/or after body fluid exposure, which are WHO indications, is recommended in all published infection control and public health guidelines and is considered the standard of care for all HCWs [11,13]. On the other hand, compliance with hand washing is still poor [14]. The present study aimed to determine the compliance with HH among health workers. There are many studies that document the compliance hand hygiene among HCWs. In Europe compliance to HH differs in the reports ranging from 33 to 65% [15,16]. In Turkey, there are few studies that evaluate the compliance of HH. In the study of Karabey et al., the frequency of hand washing was 12.9% among medical personnel in an intensive care unit [17]. Sacar et al. observed that

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hands were washed both before and after venipuncture in only 41 (45.1%) cases [18]. These compliance rates are very low similar to the data in the literature.

#### CONCLUSION

Good infection control is essential but the complex nature of infection means that it is not always easy to achieve. Accurate surveillance that provides information to clinicians about where improvements can be made, comprehensive education, regular updates, and good hospital policies are all necessary to control the spread of Hospital acquired infections.

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