

Improving hand hygiene compliance among nurses in Chest Medicine Intensive care unit

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Introduction

The hand hygiene compliance among medical worker was low. Their hands can be vectors for microbes. Hand hygiene is the easiest and cost-effective way to prevent cross-infection or cluster infection. The hand hygiene compliance of ICU was 61%, during July, 2019 to June, 2020. Therefore, we organized a specialized team to promote the hand hygiene compliance up to 90%

Present analysis

We observed the hand washing situation of 39 nurses during the process of carrying out nursing activities, including "before contacting patients", "before performing cleaning/Aseptic technique technology", "after the risk of violent contact with human body fluid", "after contacting patients", and "after contacting patients' environment". We observed that the hand hygiene accuracy was 100%, the hand hygiene compliance rate was 65%, In order to understand the understanding level of nursing staff towards the five timing of hand washing, six composite "Nurse Hand hygiene Five moments Situational Cognition Questionnaire" were designed for common nursing activities in the ward. The situational content included sputum extraction, assisting CVP insertion, and answering phone calls to nursing stations during the care process. 42 nursing staff were asked to fill out the questionnaire, and the accuracy rate of the questionnaire was 68% (Figure 1).

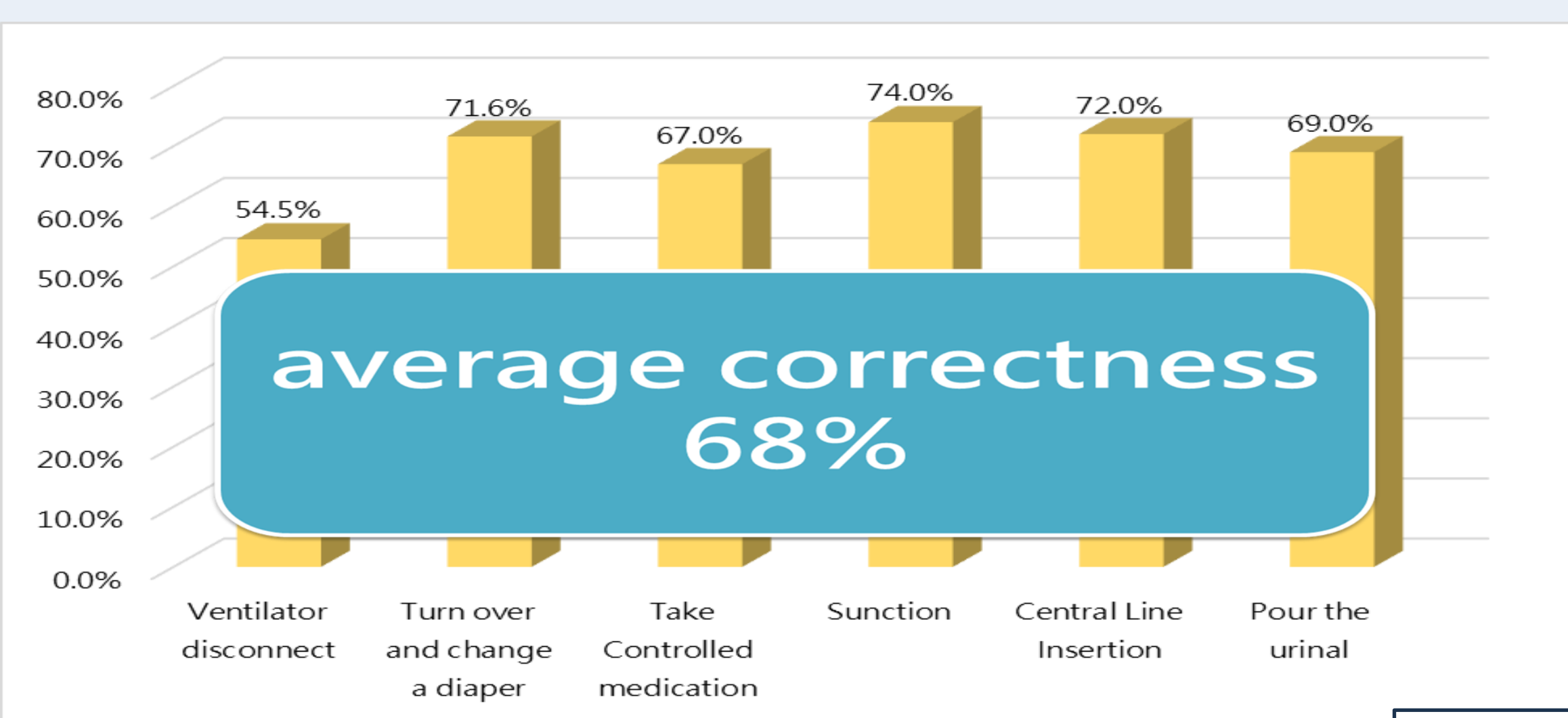


Figure 1

Strategy

- We through those policies to upgrade” hand hygiene compliance”.
1. Taking washing indication video: Shooting video of correct and wrong five Moments during the periods: Diaper changing on bed and expectoration , Central Venous Cannulation and change a medical prescription.
 2. Design a screensaver of five indications of hand hygiene: Making three images of five indications and principles of hand hygiene to be the screen saver for reminding colleague about five indications of hand hygiene and the importance .
 3. Conduct a lecture of hand hygiene: it includes that playing wrong indication of hand hygiene video , through the contest make colleagues to find wrong points then playing correct indication of hand hygiene video to leave impression on colleagues.



Handwashing Five Moments Video



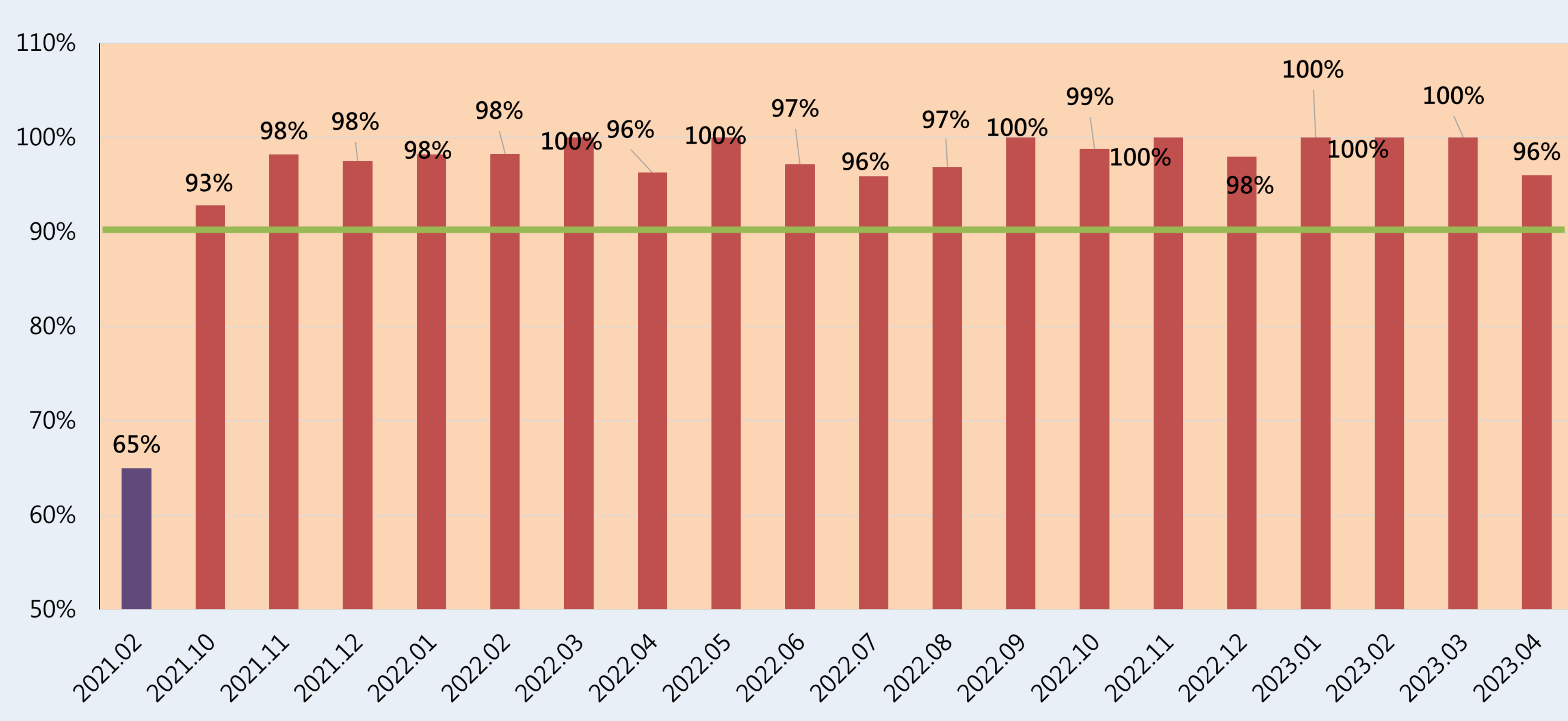
Handwashing Five Moments Video



hands computer screen saver picture

Result

From October 2021 to April 2023, after the implementation of the strategy, the hand hygiene compliance rate was re audited, and the compliance rate increased from an average of 65% before implementation to 97.3%. 42 nursing staff conducted the "Five moments for Nursing Staff to Wash Hands Context Cognition Questionnaire" test again, and the average accuracy rate increased from 68% to 90.4%.



improve hand hygiene compliance before and after

Problem established

We found out the major problems for the lower hand hygiene compliance that were misunderstand of five moments for hand hygiene, waited for hands to dry after washing before putting on gloves, and the frequent hand-wash caused skin irritation of hands.

Aim

Referring to the average hand washing compliance rate of 87% in random checks by the Infection Control Department of our hospital from July 2019 to June 2020, it is expected that the compliance rate of hand washing will increase by more than 90% after the implementation of the project.