

Hand hygiene using hand rub ethanol for disinfection preparation. Fact-finding regarding healthcare workers.

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Introduction

In guidelines for hand hygiene in the healthcare settings of the American Center for Disease Control and Prevention (Center for Disease Control and Prevention: CDC) announced in 2002, the first choice of hand hygiene was changed from "soap and running water" to "hand rub ethanol for disinfection preparation". WHO set "guidelines about hand hygiene in medical care" in 2009. WHO stipulated the following five occasions when hand hygiene procedures should be performed: 1) Before touching patients. 2) Before cleaning / aseptic processing manipulation. 3) When one might be exposed to blood or body fluids. 4) After having touched patients. 5) After having touched anything in the immediate area surrounding patients. It has been proposed that performing hygiene procedures on such occasions can reduce healthcare-associated infection. Many patients with muscular dystrophy and neurologic al intractable diseases are hospitalized in Tokushima National Hospital. It is difficult for most of the inpatients to change by oneself. Since finger infections of healthcare workers can trigger cross-infection, thorough hand hygiene is essential. We conducted hand hygiene procedures using hand rub ethanol for disinfection preparation on five occasions. This study shows the questionnaire findings that we obtained from the medical personnel who performed these procedures.

Subjects and methods

The study period was June 2015 to June 2018. The subjects were 276 people in total, including 13 physicians, 196 floor nurses, 11 outpatient nurses, 27 medical treatment assistants, five child instructors / childcare

persons, 17 physical therapists / occupational therapists / speech-language-hearing therapists, four medical technologist, and three radiographers. The number of questionnaires returned was 210 (recovery rate, 76%).

Disinfection technique

We focused on five occasions for performing hand hygiene procedures and made a question paper for self-assessment of the normal business routine. The self-assessment involved six phases. We modified the questionnaire to the type of job of subjects.

Results

Nursing staff had a high rate of use of hand washing when they might touch blood or bodily fluids. When they did not touch the patients, they tended to have a low rate of antiseptic use. They had a low rate of use before touching patients. The rate of antiseptic use of the member of nurses' aide / medical treatment assistance was low among nursing staff before and after entering the sickroom.

Discussion

Among nursing staff, the rate of antiseptic use when they might touch body fluids was high. The rate was low after having touched the neighboring environment of the patients. Among the reasons why hand washing was not conducted, there was the opinion "I washed my hands under soap and running water". The efficacy of the alcohol-based hand rub might not be adequately understood. The hand rub ethanol for disinfection preparation has fewer adverse effects such as drying or the abrasion of the skin than soap-washing. With this method,

clean water, soap and towels are unnecessary. It is thought that because this type of knowledge is lacking, the rate of use of hand washing is low. A future problem is to ensure medical staff understand the need for and timing of hand hygiene, and have adequate knowledge about it.