



Service Priorities and Programmes
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Enhancement of Infection Control - Disinfection of Equipment in Physiotherapy Department

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Introduction

Exercise machines in Physiotherapy (PT) Department, Shatin Hospital are frequently used for patient training. Each exercise machine is used by 25 patients daily on average. Therefore, effective disinfection of exercise machine is very important for infection control. Staffs have reported that cleansing of the exercise machines with uneven surface or covered with sponge is difficult. In addition, previous departmental audit on equipment cleansing in 2Q 2017 found that the effectiveness of cleansing the machine handles which were covered with sponge or uneven surface was only 45%, while the effectiveness of cleansing other equipment surface was 86.7%. The results showed that disinfection was not effective in uneven surface or surface with sponge, and should be replaced by smooth, durable and water-proof materials.

Objectives

The objectives of the CQI is to improve the effectiveness in disinfection of exercise machine handles with uneven surface or covered with sponge.

Methodology

All handles of exercise machines with uneven surface or covered with sponge were identified in all PT gymnasium, Shatin Hospital. They were wrapped with heat-shrinkable, best-fit and smooth plastic coating. The effectiveness of disinfection of exercise machine handles wrapping with plastic coating was evaluated by a departmental surprise audit on equipment cleansing. "Fluorescence dye" was applied on the exercise machine handles one day before the audit. Effective equipment cleansing was indicated by clearing up of the dye at the end of the audit day after equipment cleansing was done between each gymnasium session, and also thoroughly cleaned at the end of the day.

Result

Totally 22 exercise machine handles wrapping with plastic coating were randomly

selected for auditing in PT gymnasiums. The results showed that the fluorescence dye in 20 handles was completely cleared up. The effectiveness of disinfection of exercise machine handles wrapping with plastic coating was 90.9%, as compared with 45% effectiveness in the previous auditing for cleansing of machines handle with uneven surface or covered with sponge. It is highly recommended that the smooth and water-proof coating should be applied to exercise machines with uneven surface or covered with sponge in order to enhance infection control.