Thesis Title

Usage of Disinfectants in Community Hospital Phrae Province

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Abstract

Chemical disinfection of medical equipments is an important method to prevent nosocomial infections. Personnel on duty must follow the instructions correctly in every step of disinfection. The purposes of this descriptive study were to examine type and cost of disinfectants, explain how the personnel use those disinfectants and problems on the usage of disinfectants in 7 Community Hospitals in Phrae Province. Data were collected from April to June 1997. The samples were 7 heads of pharmaceutical department, 35 personnel who used disinfectants which were selected by purposive sampling. The research instruments were interviewing form and observation form which were developed by researcher. Data were obtained by interviewing the heads of pharmaceutical department regarding types and expense of disinfectants used in the hospitals. The personnel who used disinfectants were interviewed and observed including. Data were analyzed by descriptive statistics and content analysis.

The results of this study revealed that:

There were 11 disinfectants used in Community Hospitals. Each hospital, used 5-7 disinfectants, 72.7 percent was in intermediate level, 18.2% was in high level. Alcohol 70%, Savlon® 1:30 and Savlon® 1:100 were used in all Community Hospitals. The average cost of disinfectants in 30-bed and 10-bed Community Hospitals during the fiscal year of 1994-1996 were 142,262 and 61,919 baht per year respectively.

In practices, 50.0% and 26.1% of personnel cleaned and dried medical equipments before immersed in disinfectants respectively. About fifty-three percent appropriately selected disinfectants to disinfect medical equipments. About seventy-three and thirty-four percent used proper container and kept disinfectants in appropriate place respectively. About forty-four percent could calculate the proportion of disinfectants and water correctly. Only 5.9% showed the expired date of disinfectants on the container. Only 15.9% used correct time for disinfection. About fifty percent kept disinfected medical equipments in clean container or sterile container. About twenty-one percent used protective barriers while using disinfectants.

Forty percent of personnel used to get accidents. Arms, eyes and hands were affected 81.2%, 12.5% and 6.3% respectively, with Lysol® 100%, Glutaraldehyde 2%, Virkon® 0.5%, Sodium hypochlorite 0.5% and Savlon® 1:100. Personnel took care themselves according to the type of accidents, 85.7% of them did not report to the head of their department.

The crucial problems in usage of disinfectants were the lack of policy, no manual and guideline in usage disinfectants, insufficient budget, no proper place to prepare and store of disinfectants, personnel had poor knowledge in usage of disinfectants and got chemical hazard while working.

The result of this study emphasized that it is necessary to give more education to personnel who involve in usage of disinfectants. Hospital administrator should establish policy and guidelines in usage of disinfectants. Supervising and monitoring of disinfectants' usage should be performed continuously and consistently.