

RELATION BETWEEN QUANTITY OF DISINFECTANTS USED AND APPEARANCE OF INTRA-HOSPITAL INFECTIONS IN SELECTED HOSPITALS



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Introduction

Intra-hospital infections are clinically manifested from 48 to 72 hours after the infection.

Goals

The aim of this study was to review of the use of antiseptics and disinfectants in selected hospitals in Republic of Macedonia over five years period in relation to appearance of intra-hospital infections.

Materials and methods

The data were collected from hospitals in Strumica, Ohrid, Veles, Stip and Kavadarci over five years. The data from the annual reports for disinfectants and antiseptics (Bactosal, Ecosal, Dezintal, Betadine, Hydrogen peroxide, Formaldehyde, Ethanol) used on the selected departments for gynecology, surgery and transfusion were collected. The results of microbiological testing conducted by the public health centers in Strumica, Ohrid, Veles, Stip and Kavadarci over five years were collected and used. Routine testing period for microbiological controls in hospitals was 15 days.

Results

The results indicate that the amount of disinfectants and antiseptics consumed comparing with the microbiological data indicates their rational utilization starting from 2012. and significant reduction of contamination with conditionally pathogenic bacteria.

Figure 1 . Quantity of antiseptics and disinfectants, consumed on the departments annually and cumulatively in five years expressed in liters

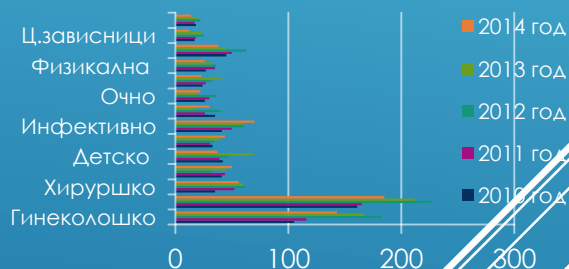
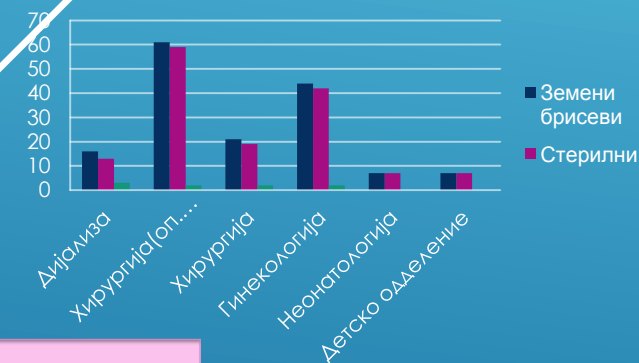


Figure 2 . Annual report for taken swabs and air samples for control of intra-hospital infections in 2012



Conclusions

In general the disinfectants and antiseptics are used optimally and correctly according to the needs of the hospitals investigated. The amount of disinfectants and antiseptics consumed comparing with the microbiological data indicates their rational utilization starting from 2012. Use of disinfectants according to the standardized procedures established by the IHI times allows current daily care for patients and staff in the hospitals investigated. The processed data from public health centers confirm the above and point out the precautions to be taken when conditionally pathogenic bacteria have been detected. It is pointed out the role of IHI times in the hospitals, as well as the role of hospital pharmacists. We would like to suggest the implementation of disinfection process validation as standardization measure as well as more often routine microbiological controls in the hospitals.