

# Quantity of disinfectants and antiseptics used in general hospital in Gevgelija in relation to appearance of intra-hospital infections



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## Introduction

Intra-hospital infections are clinically manifested from 48 to 72 hours after the infection. Mechanical cleaning before applying the disinfectant is essential. The mechanism of action of disinfectants is summarized in a number of papers published and available to the entire scientific community.

## Materials and methods

The data were collected from the general hospital in Gevgelija over five years, from 2010 till 2014. The data from the annual reports for disinfectants and antiseptics (Bactosal, Ecosal, Dezintal, Betadine, Hydrogen peroxide, Formaldehyde, Ethanol, Gigazyme, Deconex, Gigasept, Deconex, Microzid, Plivasept etc.) were collected. The data of microbiological testing over five years were collected.

## Conclusions

In general disinfectants and antiseptics were used optimally and correctly according to the needs. It is pointed out the role of intra-hospital infection 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.

## Goals

The aim of this study was to review of the use of antiseptics and disinfectants in general hospital in Gevgelija in Republic of Macedonia over five years period, to make analysis of the amount of antiseptics and disinfectants consumed annually on each department in the hospital, to analyze of the total amount of consumed antiseptics and disinfectants for five years and to compare the results to the data obtained from the microbiological evaluations conducted periodically in each department in five years. Routine testing period for microbiological controls in hospital 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

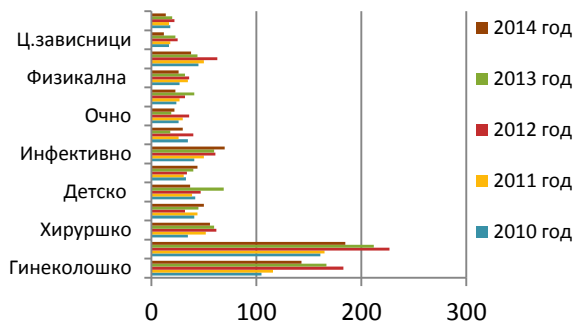


Figure 2 . Annual report for taken swabs and air samples for control of intra-hospital infections in 2012

