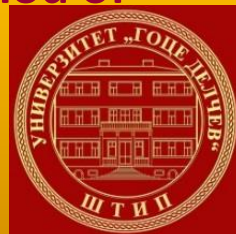


Analysis of used disinfectants in correlation with the occurrence and causes of hospital infections - a comparison of data for general hospital in Ohrid in the period of 2009 to 2013

Sofija Petkovska, Biljana Gjorgjeska

University Goce Delcev
Faculty of medical sciences



Introduction

Antiseptics and disinfectants are widely used in hospitals and other medical facilities for different topical application and hard surfaces. In the composition of disinfectants there is wide variety of active chemical agents (biocides) applied over hundreds of years and according to the chemical composition they represent alcohols, phenols, iodine and chlorine compounds.

Goals

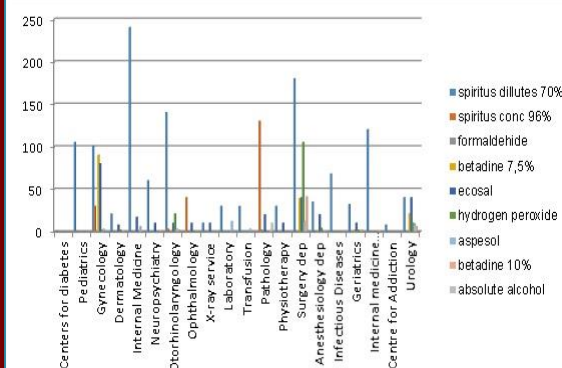
The purpose of this paper is to show the connection between the used disinfectants and antiseptics in "General Hospital" in Ohrid for period of five years, from 2009 to 2013 with the possible occurrence of hospital infections

Results

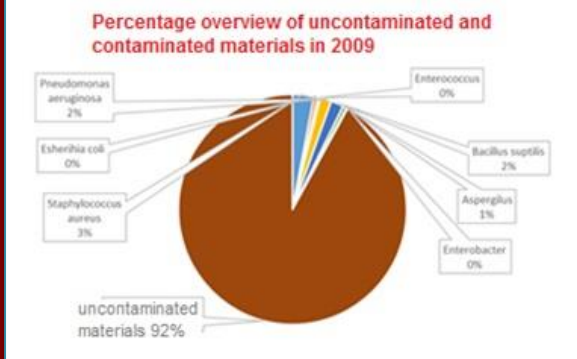
Total quantity of commonly used antiseptics and disinfectants in all departments in General Hospital Ohrid in 2009

	Cent	Ped	Gyn	Derr	Inter	Neur	Otol	Oph	X-ray	Label	Tran	Path	Physi	Surg	Anes	Infel	Ger	Inter	Cent	Urol
spiritus dilutes 70%	1	105	101	21	240	60	140	0	10	30	30	0	30	180	35	68	32	120	8	40
spiritus conc 96%	0	1	30	0	0	0	3	40	0	0	0	0	130	0	0	0	0	0	0	0
formaldehyde	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
betadine 7,5%	0	0	90	0	0	0	1	0	0	0	0	0	0	39	1	0	2	0	0	21
ecosal	0	0	80	8	17	10	10	10	10	0	0	0	20	10	40	20	0	10	0	40
hydrogen peroxide	0	0	2	2	0	0	21	1	0	0	0	0	0	105	4	0	2	0	0	10
asposol	0	0	3	0	6	0	3	0	0	12	3	0	0	12	0	0	0	0	0	9
betadine 10%	0	0	0	1	1	1	2	0	0	0	0	1	0	41	1	0	2	1	0	6
absolute alcohol	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0

Amount of spent antiseptics and disinfectants in all departments in General Hospital Ohrid in 2009



Percentage overview of uncontaminated and contaminated materials in 2009



Nosocomial, hospital infections

A great number of studies around the world show and prove that hospital infections are the major cause of morbidity and mortality. The high frequency of hospital infections is the evidence of the poor quality of health services and lead to unforeseen and unavoidable expenses. Many factors contribute to the incidence of hospital infections: hospitalized patients are often immuno-compromised. They are often subjected to invasive treatments and examinations and practical patient care in the hospital environment which can facilitate the transmission of microorganisms among patients. The intensive use of antibiotics promotes the resistance to them.

Materials and methods

The data used for antiseptics and disinfectants are derived from

- Annual Evidence List of "General Hospital" Ohrid. They are processed separately for each ward.
- Annual reports of 'Center for Public Health' Ohrid - Epidemiologic Service

Conclusions

The annual quantities of disinfectants and antiseptics show that full coverage and protection against the occurrence of infections in the hospital is achieved. The proper application in all departments, especially in those which are the most hazardous in terms of possible hospital infections indicates that the risk is minimal.