

## Pharmacoeconomic evaluation of the antibiotic prophylaxis in orthopedic surgeries

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## INTRODUCTION

Infections in orthopedic surgery are large problem in the medicine and are present all around the world. The main objective of the antibiotic prophylaxis in orthopedic surgeries is to prevent infection during the surgical intervention with antimicrobial agent that is safe, effective, and has a spectrum of activity that covers the most common pathogens that may occur during surgical procedures. Rational use of antibiotic prophylaxis in orthopedic surgeries has an important role in the prevention of the surgical infection.

The aim of this study was to estimate the consumption and cost of antibiotics at Public

Hospital – Orthopedic – Shtip in comparison with antibiotic therapy for orthopedic prophylaxis recommended by The Guides for Evidence-Based Medicine published by Ministry of health – Republic of Macedonia.

## **MATERIALS AND METHODS**

Retrospective pharmacoeconomic study has been carry out in orthopedic patients. For evaluation of rationale use and cost of antibiotics for surgery prophylaxis are used relevant literature data and recommendations: guidelines for evidence-based medicine issued by the Ministry of Health of RM, guides from European and American associations and recent published research





	Almost	50000 40000			Public
	fourfold	40000			Hospital –
	higher	30000			Orthopedic –
	amount	20000			Shtip than the
ו	More	0			cost for
	expensive		COST OF PROPHYLAXIS THERAPY	COST OF PROPHYLAXIS THERAPY IN	antibiotic
	and less		RECOMMENDED BY THE GUIDES FOR EVIDENCE-BASED MEDICINE	PUBLIC HOSPITAL – ORTHOPEDIC – SHTIP	therapy
	effective		Cost of prophylaxis therapy recommended by The	Cost of prophylaxis therapy in Public Hospital –	recommended
	therapy		Guides for Evidence-Based Medicine	Orthopedic – Shtip	
		Average price	35174,18	85055,01	by MBD.

Our recommendation is to follow the guide from MBD for rational use of antibiotics to achieve better and cheapest treatment for Infections in orthopedic surgery

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