

## A drug utilization evaluation of captopril in two coronary care unit wards of Namazi hospital, Shiraz, Iran

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**Background and Aims:** drug utilization evaluation (DUE) provides insight into aspects of drug use and prescribing such as pattern of use, quality and outcomes. Captopril is one of the most important medicines which prescribed for managing cardiovascular disorders. So its appropriate prescription, dosage and other drug-related factors of captopril has indispensable importance in management of cardiovascular disorders. Therefore a DUE study on captopril would provide a strategy for optimizing captopril use.

**Methods:** This cross-sectional survey was conducted in two coronary care unit wards of Namazi hospital, Shiraz University of Medical Sciences (SUMS), Shiraz, Iran. After approval a standard guideline for captopril usage by pharmacy and therapeutics committee, Twelve study criteria include indications, contraindications, drug interactions, dosage, dosing adjustment, pretreatment considerations, and monitoring parameters including blood pressure, angioedema, cough, blood potassium level, serum creatinine and Blood Urea Nitrogen (BUN) were evaluated for each patient and recorded in questionnaire designed by clinical pharmacist. Each correct item was scored as 1 and otherwise as zero and then statistical analysis was performed.

**Results:** Eighty-four patients include 52.4% (44) men and 47.6% (40) women with Mean±SD age of 61.47±16.45 were participated in this study. More than 85 percent of patients have correct indications for captopril prescription. The Mean±SD of hospitalization duration was 7.15±4.09 days. Monitoring statistical analysis revealed that in 14.3% (n=12) of patients the blood potassium level was in unacceptable range. For serum creatinine and BUN the percentages were 19.0 (n=16) and 22.6 (n=19), respectively. Finally, the mean±SD score for 84 patients included in this study was 10.55±1.32 out of 12.

**Conclusions:** According to results, in order to achieve better therapeutic outcome, further educating to specialists, using captopril prescription guidelines and suitable monitoring methods are recommended.

**Keywords:** Captopril; Drug utilization evaluation; Coronary care unit