

## Antibiotic consumption in intensive care unit of Bouali teaching hospital, Qazvin-Iran

E. Jannatabadi\*, F. Peiravian, S. Abotorabi, M. Rahimi-rahimabadi

*Vice Chancellor for Food and Drug, Qazvin University of Medical Sciences, Qazvin, Iran*

**Background and Aims:** this study was designed to investigate the pattern of antibiotics consumption in intensive care unit of Bouali teaching hospital (BH) within a standardized methodology.

**Methods:** To perform a standardized and repeatable study, the Anatomic-Therapeutic-Chemical classification and defined daily dose (ATC/DDD) methodology was used. The number of antibiotics prescribed for inpatients over a period of 6 months was converted to DDDs. DDD per 100 bed-days was used as a quantitative indicator. Data were compared with those of similar studies in Iran and other countries.

**Results:** Total prescription of systemic antibiotics was 106.13 DDD/100 bed-days of which 45.7 % related to broad-spectrum agents. The five most commonly used drugs were imipenem, ampicillin, ceftioxone, metronidazol and ciprofloxacin.

**Conclusions:** The Bouali hospital's intensive care unit used a significantly larger amount versus other Iranian's ICU and other countries's ICU. Pattern of antibiotics usage, High utilization rate and irrational prescription in intensive care unit of Bouali hospital and relation to inadequate hospital and national drug policies, loss of antibiotic multidisciplinary team and inadequate infectious specialist consultation are discussed. Drug utilization research study is a useful tool to highlight patterns of drug use.

**Keywords:** Antibiotics consumption; Daily defined dose; Intensive care unit