The pattern of prescribing in Zanjan province of Iran, 2011

M. Noubarani¹, M. Moharramkhani^{2,*}

Background and Aims: Inappropriate drug prescription and use of medicines are common in both developed and developing countries. The aim of the present study was to assess the prescribing pattern and drug utilization in Zanjan province of Iran.

Methods: In this study, all medical prescriptions information collected from main Iranian public insurance organisations in Zanjan province. The data was processed and presented using a medical prescriptions processing software. Totally 1182379 issued prescriptions during 1 year period (2011) in Zanjan province were investigated for the number of drugs per prescription and the most frequently prescribed drugs.

Results: The mean number of drugs per prescription was 2.94. Twelve percent of prescriptions have more than four medicines. Antimicrobial, injectable and corticosteroid drugs were prescribed in 44, 41 and 22% of all patients, respectively. Central Nervous System (CNS) drugs were the most frequently used drugs (49%) followed by antimicrobials (44%), respiratory drugs (30.18%), hormones (26.72), corticosteroids (22.23%) and cardiovascular medications (12.53%). Dexamethosone (12.21%), cold preparations (5.99%), and cefixime (5.33%) were among the most frequently used drugs by patients.

Conclusions: The present study showed that the mean number of drug per prescription is almost equal with the reported value in developing countries however; it is much higher than developed countries (1.3–2.2 drugs per prescription). Percentage of patients receiving antimicrobial, injectable and corticosteroid drugs indicates the need for more efforts to logical use of these medicines.

Keywords: Prescribing pattern; Medication use; Zanjan

¹Department of Pharmacology and Toxicology, Faculty of Pharmacy, Zanjan University of Medical Sciences, Zanjan, Iran ²Drug and Poison Information Center, Vice-chancellor for Food and Drug, Zanjan University of Medical Sciences, Zanjan, Iran