

## Evaluation and monitoring of isotretinoin use in Iran

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**Background and Aims:** Isotretinoin is used for treatment of nodular cystic acne unresponsive to conventional acne therapy. It is an expensive and potent teratogenic drug with serious Adverse Drug Reaction (ADRs). Recently, the use of this drug is increased in Iran. To Date, there is no published data about using of isotretinoin in Iran. So, this study was conducted to assess isotertinoin utilization in Iran.

**Methods:** This was a prospective, cross-sectional DUE study conducted in the Institutional Community Pharmacy Services affiliated with College of Pharmacy, Tehran University of Medical Science. All patients had complete medical history. Drug prescription, administration and evaluation of appropriateness were recorded and compared with standard protocols. Then collected data were analyzed in SPSS software.

**Results:** A total of 274 out patients receiving isotretinoin entered the study. Daily doses of isotretinoin in 51.3% of the patients were under the usual recommended doses of 0.5 mg/kg/day. It was reported that 33.5% of the patients were given total doses of less than 100 mg/kg ( $72.4 \pm 17.2$  mg/kg) and 12.2% of them were received more than 150 mg/kg. Regarding to teratogenic effect of isotretinoin, only 6.8% of the couples used the two contraception methods ( $P=0.001$ ).

**Conclusions:** The most important findings of this study are that the doses of Isotretinoin are not correct in many cases. This would decrease the efficacy of drug and increase the risk of relapse. In addition patients were not oriented about isotretinoin teratogenicity and seriousness of side effects.

**Keywords:** Isotretinoin; Acne; Drug utilization evaluation; Adverse drug reactions (ADRs)