P0367
Poster Session I
Antibiotic consumption data

EVALUATION OF INJECTABLE ANTIBIOTIC PRESCRIPTIONS IN TURKEY IN 2011

F. Isli[1], A. Alkan[1], E. Sakalli[1], H. Gursoz[1], A. Sahin[1], M. Aksoy[1], P. Gobel[1], C. Seckin[1], D. Celik[1], B. Melik[1]

[1]Department of Rational Drug Use and Drug Supply Management, The Ministry of Health of TurkeyTurkish Medicine and Medical Devices Agency, Ankara, Turkey

Top 5 and Bottom 5 Provinces in terms of the proportion of Injectable Antibiotic Containing Prescriptions and Their Relevance to Certain Indicators of Drug Use

Provinces	% Injectable Antibiotic Containing Prescriptions	% Injectable Antibiotic/Total Antibiotic	% Antibiotic Containing Prescriptions	% Injectable Drug Containing Prescriptions
ŞIRNAK	5.9	11,59	50.91	10.67
HATAY	5.14	10,13	50.71	11.53
KİLİS	5.14	10,69	48.07	10.87
BATMAN	5.12	10,46	48.99	9.8
ŞANLIURFA	4.87	9,40	51.78	8.96
TURKEY	1.98	5,68	34.94	6.26
TUNCELİ	1.09	3,43	31.7	4.6
ZONGULDAK	0.97	3,50	27.83	6.22
BALIKESİR	0.9	3,34	27.03	5.88
ARTVİN	0.85	4,04	21.14	4.74
GİRESUN	0.82	3,20	25.77	4.48

OBJECTIVES

Proportion of antibiotics and injectable forms of drugs in prescriptions are universally accepted indicators to audit prescriptions in terms of rational prescribing. Excessive antibiotics as well as drugs in injectable forms in prescriptions, are generally considered as indicatives for irrational prescribing that are required to be improved. In this study, we aimed to investigate injectable antibiotic prescription patterns of Turkish family physicians in primary care health services.

METHODS

E-prescrition data of Turkish Family physicians included all protocols formed by physicians with or without a prescription, diagnosis and prescriptions in the year 2011 were obtained by Family Physician Information System (FPIS) and evaluated retrospectively by Prescription Information System (PIS). The ratio of prescriptions that contain injectable antibiotics to all prescriptions and the ratio of injectable antibiotic containing prescriptions to all antibiotic prescriptions, both for country wide and for provinces, were calculated. Injectable antibiotic prescription patterns of family physicians were compared between provinces. In addition to this, we determined most commonly prescribed injectable antibiotics. Also the average costs of prescriptions that contain antibiotics (oral and/or injectable) and the average cost of prescriptions that contain injectable antibiotics were calculated and compared with each other. For the cost analysis, we used drug resale prices for the year 2010.

RESULTS

It was shown that in the year 2011, 56.73% of all visits (229.077.787) to primary care family physicians in Turkey were resulted with prescriptions. Among these prescriptions, proportion of those containing injectable drug forms were 6.26%. The ratio of injectable antibiotic containing prescriptions to the prescriptions that contain antibiotics were 5.67% in country-wide. Provinces with the highest proportion of injectable antibiotic prescriptions were also found to prescribe injectable drugs higher than the average value of Turkey (Table 1). Also in these provinces, the proportion of prescriptions containing injectable antibiotics among all antibiotic containing prescriptions and the proportion of antibiotic containing prescriptions among all prescriptions were higher than the average (Table1). Opposite statements were true for the provinces with lowest proportion of injectable antibiotic prescriptions. Most commonly prescribed injectable antibiotics were cefazolin(23.39%), ceftriaxone(21.20%) and benzathine benzylpenicillin (20.77%). The average cost of prescriptions containing injectable antibiotics were 15.92 TL.

CONCLUSIONS

In this study, we observed important differences between provinces of Turkey in terms of injectable antibiotic prescriptions and that the proportion of injectable antibiotic use may be associated with irrational antibiotic use. First of all, the most commonly prescribed injectable antibiotics, cefazolin and ceftriaxon were evaluated as an indicative of irrational use in primary care. Secondly, the provinces with highest proportion of prescriptions that contain injectable antibiotics were also among highest antibiotic and highest injectable drug products (all kinds) prescribers in Turkey.