



Z-DRUGS USE IN ELDERLY 老年人 Z-DRUGS 的使用

Yu IW², Wu PL², Lin CH², Chang CK², Wu HC², Lin CC², Lin HW^{1,2}

于怡文²、吳博倫²、林志學²、張欽凱²、吳錫金²、林正介²、林香汶^{1,2}

¹中國醫藥大學藥學系、²中國醫藥大學附設醫院

Background: With the advantage of more favorable safety profiles of non-benzodiazepine hypnotics (in terms of Z-drugs), the use of Z-drugs is incremental, in particular for the elderly. Although the evidence showed the risk of dependence of Z-drugs for continuing use more than 2 weeks, it is a lack of study examining patterns of Z-drugs use among the elderly in Taiwan.

Objective: A secondary data analysis was performed to describe the utilization of Z-drugs available in Taiwan among the elderly patients for quality improvement of medical care.

Methods: A population-based cross-sectional assessment was conducted using the 2006-2007 National Health Insurance (NHI) databases. The subjects for analysis were those NHI beneficiaries with age of more than 65 year-old, and prescribed with Z-drugs (zolpidem, zopiclone and zaleplon). All relevant data include demographic information, visits toward physician clinics, outpatient departments, the corresponding sleep disturbance (i.e., ICD9: 307.4, 327, 780.5) and use of medications in the datasets of ambulatory care. Number of Defined daily dose (DDD) was calculated. The descriptive analysis was performed to examine the utilization patterns for elder patients.

Results: Of all Z-drug users (38,573 beneficiaries), 28% were elder patients who were ever prescribed with at least one of the fifteen brands of zolpidem and zopiclone in 2007. Compared to in 2006, the elder users of Z-drugs increased by 24%. In 2007, female was predominated (58% vs. 42%), and average age of Z-drug users was 75.0 (\pm 6.6) year-old. Zolpidem was the mostly common prescribed Z-drug (accounted for 95%) in elderly. Only 15.6% were prescribed Z-drugs with coded sleep disorders. In average, those elder users were prescribed with 133 DDDs of Z-drugs (\pm 158) yearly whereas 7.6% exceeded 365 DDDs. 0.1% of 63833 prescriptions with Z-drugs was dosing over the recommended daily dose, which were mainly prescribed by family medicine (33.3%),



internal medicine (27%) and otolaryngology (18%). There was no data about Zaleplon since it has not been reimbursed before 2009.

Conclusions: The number of Z-drugs prescription receivers is increasing among the elderly in Taiwan. High prevalence of inappropriate use on Z-drugs should be warranted among elderly.