GENDER AND AGE-RELATED DRUG PRESCRIPTION PATTERNS IN THE VARESE LOCAL HEALTH AUTHORITY

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Aim of the study: to investigate the influence of age and gender on patterns of drug prescription in a representative population of the Lombardy Region. **Methods:** All drug prescriptions reimbursed by the National Health Service filled over the period January-December 2005 in the Varese Local Health Authority were analysed, reflecting a population of about 825.000 inhabitants (51,6% females; 48,4% males). Population ages ranged from <1 to more than 100 years; each inhabitant was assigned to 1 of 22 five-year age categories. In each age category the percentage of males and females was calculated and drug prescriptions were analysed by volume, expenditure and types of medication (classified according to the WHO ATC code). Discussion of results was based on clinical, rather than statistical, significance. **Results:** Drug prescription progressively rise with age in both sexes, with the highest rates in very old individuals, ageing between 80-84 years (41,6 per capita packages). Elderly subjects (>65 years) account for 52,5% of total drug expenditure and 56,7% of total packages prescribed; in this age group the mean number of per capita packages is 9,8 times greater than in the 15-44 years age group (31,8 vs 3,2). Over 65 years drug expenditure and volume of prescriptions are higher in men than in women (514 €per capita vs 366 €and 33,3 per capita packages vs 28,5). Most gender differences in drug prescription appear after 50 years. Women are more likely to use several classes of drugs, including antimicrobials (mainly in middle age groups), musculo-skeletal drugs (probably for the treatment of osteoporosis), antidepressants (in particular, selective serotonin reuptake inhibitors). Except for antihypertensives such as ACE inhibitors and sartans associated to diuretics, men use more cardiovascular drugs and at an earlier age than do women. Respiratory drugs are more prescribed to older men with a peack in 75-79 age group, probably due to the treatment of chronic obstructive pulmonary disease. Furthermore, older men receive more prescriptions than women for 'drugs for blood', such as antiplatelets and antithrombotics. Overall, prescription of drugs for chronic conditions increases with older age categories for both genders. Antihyperlipidemics are the most prescribed therapeutic group, accounting for 8,1% total drug expenditure, followed by antiulcer drugs (7,1%) and calcium-channel blockers (4,8%). **Conclusion:** These results suggest that gender and age are important factors for the pattern of drug prescription; furthermore, several gender-based differences in terms of drug classes prescribed have been observed in the most age categories.