

## A COMMUNITY PHARMACIES SURVEY ON PREVALENCE OF CONSTIPATION AND RISK FACTORS FOR LAXATIVE USE IN THE LOCAL HEALTH DISTRICTS OF VERBANIA AND MESSINA

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Aim: to assess over the counter laxatives pattern of use by patients attending community pharmacies.

Methods: A structured questionnaire was submitted to patients by pharmacists recruited during two different Continuing Medical Education courses organized in Messina and Verbania. The questionnaire aimed at investigating patients demographic characteristics, physical activities, dietary habits, concomitant diseases, and concomitant drug use. Cases were identified as those patients purchasing an OTC laxative during a two consecutive weeks period. Controls were identified as the first 10 patients/per day getting in the pharmacy during the second week, requiring any medicine but laxatives.

Results: 56 pharmacies were involved in the study (31 from Messina and 25 from Verbania). Overall, 3051 questionnaires were submitted to patients. The cases were 994, and the controls were 1957. Groups were matched according to age, BMI, and dietary habits. No statistical difference was identified regarding smoking, alcohol, tea, coffee and frizzy drink intake. Women [OR 1.22 (IC 95%1.00-1.50)], retired persons [OR 1.92 (1.53-2.40)], jobless [OR 2.09 (1.48-2.94)], sedentary people [OR 2.69 (1.67-3.68)], and patients in treatment with other drugs [OR 1.35 (IC 95% 1.09-1.67)], especially those in politherapy [OR 1.52 (1.23-1.87)], were more represented in cases than in controls. Diuretics [OR 2.77 (1.58-4.84)], antithrombotics [OR 1.94 (1.31-2.86)], lipid lowering drugs [OR 1.73 (1.20-2.50)], antihypertensives [OR 1.37 (1.03-1.81)], and benzodiazepines (p=0.0001) are more used by cases than controls. Looking at laxative use, glycerol (25.4% of cases), bisacodil (21.4%), lattulose (16.0%), and senna glycosides (12.5%) were the most used drugs. About 55% of cases took a laxative following a medical consult, 43% was using these drugs chronically, 27% of which for more than 5 years, while 9% declared some adverse effect (flatulence, abdominal pain/discomfort). Seventy percent of patients switched to another laxative drug or increased its dose as a consequence of the reduction of its efficacy over time. Moreover, 28% of patients attempted to discontinue laxative use because of the fear of becoming dependent.

Conclusion: this study confirms that female gender, physical activity and polipharmacotherapy are three important risk factors for constipation. In particular, multiple medications use represents a very important and still under estimated risk factor for laxatives use. Community pharmacies might play a crucial role in educating patients to the correct use of these and other over the counter drugs.