

Secular trends of dispensed opioid prescriptions in Catalonia, Spain, 2007-19: a population-based cohort study of over 5 million individuals

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ABSTRACT (2,277/ 2,350 characters)

Background: Although opioids use is increasing in Europe, mostly in Northern and Central European countries, there is a scarcity of data regarding the Southern European countries.

Objective: To this study aims to comprehensively characterize the long-term secular trends in dispensed opioid prescriptions in Catalonia (Spain).

Methods: This population-based cohort study included all individuals aged 18 years or older, registered in the Information System for Research in Primary Care (SIDIAP), which covers >75% of the population in Catalonia, Spain, from January 1, 2007, to December 31, 2019. The exposures were all commercialized opioids and their combinations (ATC-codes): codeine, tramadol, oxycodone, tapentadol, fentanyl, morphine, and other opioids (dihydrocodeine, hydromorphone, dextropropoxyphene, buprenorphine, pethidine, pentazocine). The main outcomes were the annual figures per 1,000 individuals of (1) opioid users, (2) dispensations, and (3) oral morphine milligram equivalents (MME). Results were stratified separately by opioid types, age (five-year age groups), sex (male or female), living area (rural or urban), and socioeconomic status (from least, U1, to most deprived, U5). The overall trends were quantified using the percentage change (PC) between 2007 and 2019.

Results: From 2007 to 2019, the number of opioid users, dispensations and MME per 1000 individuals increased 12% (PC: 95% CI 11.9% to 12.3%), 105% (83% to 126%) and 339% (289% to 390%) respectively. Tramadol represented the majority of opioid use in 2019 (61%, 59%, and 54% of opioid users, dispensations, and total MME, respectively). Individuals aged 80 years or over reported the sharpest increase regarding opioid users (PC:162%), dispensations (PC:424%), and MME (PC:830). Strong opioids were increasingly prescribed for non-cancer pains over the years.

Conclusions: Despite the modest increase of opioid users, opioid dispensations and MME increased substantially, particularly among the older population. In addition, strong opioids

were incrementally indicated for non-cancer pains over the years. These findings suggest a transition of opioid prescriptions from intermittent to chronic and from weak to strong and call for more rigorous opioid stewardship.