

Strong Opioid Prescribing Patterns and Factors Linked to Long-term Strong Opioid use in Non-Cancer Pain Patients in UK Primary Care-A Population Based Study using CPRD

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Background: The study aimed to describe the characteristics and prescribing patterns of non-cancer pain patients using strong opioids long-term, and explore factors associated with the utilisation.

Method: This retrospective, longitudinal study used the Clinical Practice Research Datalink (CPRD). Prescriptions of four strong opioids (morphine, buprenorphine, fentanyl and oxycodone) issued to adult patients (aged ≥ 18 years) between 2000-2010, who were without a cancer diagnosis 12 months within the first prescription use were included. Total number of prescriptions, total day's supply and total oral morphine equivalent dose were calculated for each patient per year. Long-term strong opioid supply was defined as ≥ 90 days in a year and high dose use as an average oral morphine equivalent dose >120 mg/day in a year. Baseline (demographics, pain condition, comorbidity, socioeconomic status, geographic region) and time-dependent (number of GP visits, co-prescribing psychotropic medications) associated with long-term use were assessed using the generalized estimating equations.

Results: Of the 113, 428 non-cancer strong opioid users included in the study, 26, 703 (23.54%) were long-term users with a mean follow up of 4.48 ± 3.02 years. Majority (64.99%) of long-term users were females, and the mean age was 65.31 ± 17.07 years. Their mean annual opioid treatment duration was 249.81 ± 90.39 days and the mean annual OMED was 95.88 ± 109.02 mg/day. Twenty-six (n=6, 945) percent of long-term users received high-doses. Their mean annual OMED was 221.19 ± 148.07 mg/day and mean duration of supply was 277.05 ± 84.55 days/year. After adjusting for age, gender and geographic region; high Townsend deprivation score (aOR: 1.13; 95% CI: 1.06, 1.20), greater numbers of GP consultations per year (aOR: 3.66; 95% CI: 3.50, 3.83), co-prescriptions of psychotropic medications including antidepressants (aOR: 1.80; 95% CI: 1.75, 1.86) and benzodiazepines (aOR: 1.07; 95% CI: 1.03, 1.11) were associated with long-term strong opioid use per year, significant at $p < 0.001$.

Conclusions: Long-term strong opioid use was linked to a number of socio-demographic factors and a subgroup of long-term users received high mean daily dose that was 1.5 times greater than recommendations in British guidelines. Further research is needed to establish risks and benefits of strong opioid use in primary care.

Biography:

Dr. M Adan is a qualified Pharmacist and a Research fellow. She graduated from the University College London gaining a Master of Pharmacy degree and completed her Pre-registration training in 2008 in a split placement between Quays and St'thomas and Queen Mary's hospital in London. Muna subsequently worked in various community pharmacies as a Pharmacist before pursuing a doctoral degree from the University of Nottingham in late 2012. Her thesis focused on analyzing long-term prescribing patterns and outcome measures of strong opioid use in patients with non-cancer pain (such as back pain and fibromyalgia). She gained her PhD in 2017 from the University of Nottingham.