



DARWIN EU® Drug utilisation study of prescription opioids before, during and after the COVID-19 pandemic

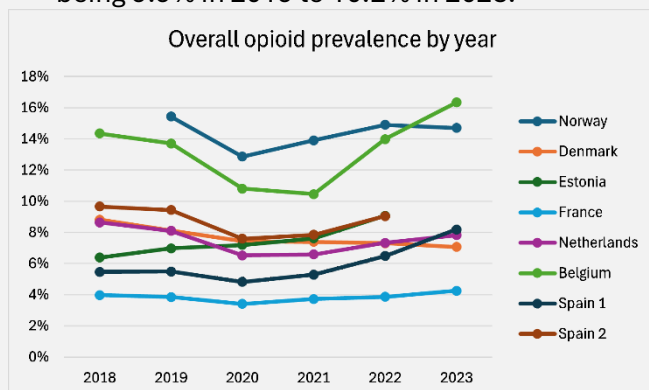
Despite their effectiveness for severe pain, there is growing concern about the potential misuse of prescription opioids in the EU. This DARWIN EU® drug utilisation study aimed to quantify the annual incidence and period prevalence of prescription opioid use, stratified by recent cancer history, potency, route of administration, and active ingredient. Here, we highlight results for Norway.

Study overview

- Design: Population-level drug utilisation study in databases across Belgium, Denmark, Estonia, France, Netherlands, Norway, and Spain.
- Population: Individuals in Norway (2019–2023) with ≥ 1 year of prior observable data (N = 5.78 million).
- Medication: Opioids, naloxone, and fixed opioid–naloxone combinations.
- Outcomes: Incidence and prevalence of opioid use, indications, duration of opioid use and patient level- characterisation.

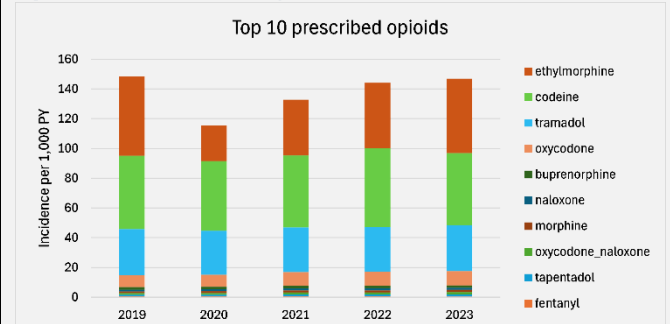
Opioid utilisation in Norway

- Overall prevalence between 2019-2023 was 14.7%–15.4%, with weak-opioid prevalence being 9.9% in 2019 to 10.2% in 2023.



- Incidence mirrored prevalence, with a marked dip during 2020-2021, particularly for weak opioids (e.g. codeine, tramadol).
- Use was dominated by non-cancer prescriptions, which largely drove overall trends.
- COVID-19 pandemic related drop was less pronounced for cancer-associated opioid use.

Patient characteristics and patterns of new opioid use in Norway



- Oral formulations dominated opioid prescriptions.
- After age stratification, cancer-opioid incidence increased from 394–495 per 100,000 PY (41–50) to 3,547–4,104 (>80), and prevalence from 0.6%–0.7% (41–50) to 5.5%–5.8% (>80).
- For non-cancer use, Norway also showed high utilisation across younger and middle-aged groups in cross-database comparisons.
- Stratification by opioid potency and by opioid ingredient showed increasing potent opioid use and increasing oxycodone incidence.

Data & Methods notes

- To limit misclassification of prevalent use as incident use, Norwegian analyses start in 2019.
- In most databases including Norway, opioid indication was not recorded (except Denmark). Likely indications were inferred from recorded conditions and procedures in the month/week prior to opioid dispensation.
- Low-dose codeine is available OTC in some EU member states (e.g., Denmark, Estonia), subject to dose and pack-size limits.

How was this useful?

This study provides insight into trends in prescription opioid use and the characteristics of opioid users in Norway. It adds detail on opioid potency and routes of administration. Compared with other participating databases, Norway consistently showed higher opioid utilisation, with overall prevalence (14.7%–15.4%) among the highest across the study period. These findings can inform further evaluation of the appropriateness of opioid use under existing guidelines. They also help interpret the impact of the COVID-19 pandemic; notably, the decline observed in 2020–2021 was largely driven by non-cancer opioid use.

Access to the full report

[DARWIN EU® - RR1 Drug Utilisation Study of prescription opioids](#)

Contact

Hedvig Nordeng:
h.m.e.nordeng@farmasi.uio.no

