ADRESSING PROBLEMATIC OPIOID USE IN OECD COUNTRIES

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Both prescription and illegal opioids contribute to the crisis

Illegal opioids

- Opioid use is fuelled by illicit markets.
- Heroin has been the most prevalent illicit opioid worldwide.
- Recently, much stronger analogues have taken the scene. Carfentanil that can be 10,000 times stronger than morphine.

Prescription opioids

- They are used in the therapy of moderate to severe pain, palliative care and opioid use disorders.
- Over-prescription and misuse can lead to abuse and dependence.
Opioid-related deaths have grown by 20% since 2011

Note: Canada’s data corresponds to 2018.
Source: EMCDDA for European countries and country responses to OECD opioid data questionnaire 2018.
Four main factors fuelling the opioid crisis

**Opioids prescription and over-prescription in health systems**
- Uncorroborated claims of prescription opioids safety and risks
- Opioid manufacturers’ influence
- Poor opioid prescribing practices and insufficient education
- Insufficient alternatives for pain management

**Dynamic illicit market of opioids**
- Availability of low cost and high purity illicit opioids
- Polysubstance use and abuse
- Prison post-release period

**Treatment of opioid use disorder patients**

**Macroeconomic and social conditions**
Availability of analgesic opioids grew almost 110% in the 2000s

Mean availability of analgesic opioids in OECD countries 2011-2016. S-DDDs per million inhabitants per day

Note: This does NOT include illicit opioids. Source: INCB 2018
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**Treatment of opioid use disorder patients**
- Barriers to access medication assisted therapies
- Predominance of abstinence-only rehabilitation therapies
- Inadequate access to evidence-based harm minimisation interventions

**Macroeconomic and social conditions**
- Unemployment
- Housing
- Social exclusion
- Stigma
Addressing problematic opioid use: 4 areas of policy action

Health system actions

Social policies

Opioid prevention and control

Regulation and enforcement

Information and knowledge
Social support and medical treatment are most common areas of policy action

Note: Countries in alphabetical order within each category. National level implementation in dark blue, sub-national level of implementation in light blue.
Source: OECD 2018 survey on opioids control
## Regulation and enforcement actions

<table>
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<tr>
<th>Customs</th>
<th>Medication diversion</th>
<th>Law enforcement officials</th>
<th>Criminal justice system</th>
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| Identification of high risk shipments:  
• Registration of precursors  
• Pre-load or pre-arrival air security  
• Open low-weight mail (30g or less in Canada) |  
• Inspection and education of regulated parties (e.g. storage)  
• Prescription monitoring programmes |  
• First responders (e.g. training, availability)  
• Public health perspective and promotion of interventions.  
• Internet monitoring with machine learning techniques |  
• Drug treatment courts  
• Good Samaritan laws  
• Legal status of drug use and possession for personal consumption |
Better research is needed for pain relief

Relatively small number of analgesic drugs approved in the last three decades

**Opioid analgesics**

- 1982: Pethidine
- 1968: fentanyl
- 1947: methadone
- 1943: hydrocodone
- 1926: hydromorphone
- 1914: morphine
- 1911: dihydrocodeine
- ~1900: codeine

**Non-opioid analgesics**

- 1950: acetaminophen
- 1965: aspirin
- 1973: diclofenac
- 1974: ibuprofen
- 1976: naproxen
- 1986: ketoprofen

**Timeline**

- 1900-1989
  - 1996: oxycodone
  - 1995: tramadol

- 1990-1999
  - 1998: celecoxib

- 2000-2018
  - 2008: tapentadol
  - 2006: tilidine
  - 2002: buprenorphine

**Note**: The timeline includes the main Mu opioid agonists, Acetaminophen, Nonsteroidal anti-inflammatory drugs (NSAIDs) approved by the F.D.A. (first approval date) and still marketed. The timeline does NOT include adjuvant analgesics or co-analgesics (e.g. anticonvulsants and tricyclic antidepressants) and local or topical anesthetics. **Source**: Authors’ elaboration on FDA and NCBI information.
In summary

Opioid use disorders should be considered as a **chronic health condition**, guiding the design of both short- and long-term health system, social policy and law enforcement strategies.

**Better prescribing**
- Improving **prescribing practices**, limiting over-prescription and enhancing opioid-related **literacy**.

**Better care**
- Expanding evidence-based **MAT and harm minimisation** with **quality** improvement and measurement strategies.

**Better intersectoral coordination**
- Between **health, social and criminal justice systems**, facilitating access to patient care and support.

**Better knowledge & research**
- Big **data** with advanced **analytics**, impact **evaluations** and **R&D** for pain and OUD care.