Are we facing an opioid crisis in Europe?

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Over the past 15 years, an increasing use of opioids has been reported in the USA and Canada, coinciding with an increase in opioid addiction, opioid-related morbidity, and opioid-related mortality. Indeed, in the USA approximately 130 patients die from an overdose of prescription opioids each day.[1] The opioid epidemic has been well documented in the USA and Canada, but fewer data are available for Europe.[2]

In *The Lancet Public Health*, Kalkman and colleagues[3] report important results from a retrospective, multi-source database study investigating opioid use as well as proxies for opioid misuse in the Netherlands between 2008 and 2017. The authors show that, over this 10-year period, the overall number of opioid prescriptions nearly doubled, mainly because of an increase in oxycodone users from 574 to approximately 2500 per 100 000 inhabitants. Misuse of prescription opioids also grew. The authors report increases in the number of hospital admissions related to prescription opioid intoxication, in the proportion of patients receiving addiction care for prescription opioid use disorder, and in prescription opioid-related mortality over the study period. In this same period the number of patients receiving addiction care for heroin use disorder and substitution therapy decreased whereas the mortality rate and hospitalisation for heroin and substitution therapy remained stable. Nevertheless, opioid misuse in the Netherlands is still substantially lower than in the USA and Canada. Data from the 2018 report by the International Narcotics Control Board show that the USA is the number one consumer of narcotic drugs, with 40 240 defined daily dosages of opioids per million inhabitants per day. In second place is Germany with 28 862 defined daily dosages per 1 million inhabitants, followed by Canada with 26 029. The Netherlands is in ninth place, with 16 114 defined daily dosages per 1 million inhabitants. Although the USA is the number one consumer, a 13% decrease in consumption was observed compared with the previous report from 2014–16, whereas an 8% increase was observed for the Netherlands. This suggests that preventive measures taken in the USA such as physician awareness and new policies for opioid prescribing are starting to pay off.[4,5]

In the Netherlands, 83 individuals died because of prescription opioid overdose in 2017, with an incidence of 0·5 deaths per 100 000 inhabitants. In the USA, opioid-related mortality is ten times higher, with 5·2 deaths per 100 000 inhabitants in 2016.[6] This lower mortality in the Netherlands might be related to differences in health-care access, better patient monitoring, and avoidance of chronic opioid use, which is a known risk factor of misuse and overdose.[4] Although Kalkman and colleagues[3] could not investigate the duration of opioid use, a recent paper[7] on extramural opioid use in the Netherlands reported that most opioids (79%) were prescribed for short durations (<4 months). Thus, although the use of opioids (in particular oxycodone) is on the rise in the Netherlands, epidemic proportions have not yet been reached.

The opioid epidemic in the USA has been attributed to multiple factors, including the publication of influential reports stating that opioids were safe, aggressive marketing, existence of so-called pill mills (pharmacies or clinics that inappropriately dispense opioids), and new attitudes towards pain management.[2,8] This situation is different from the Netherlands, where public marketing by pharmaceutical companies is not allowed and pill mills do not exist. Instead, the increase in opioid use has been related to easy access to opioid drugs (through GPs and specialists, and for legitimate medical needs), aversion to non-steroidal anti-inflammatory drugs, and more attention to pain therapy. Indeed, opioids are no longer only used to treat cancer pain, but also for the symptomatic relief of non-cancer related chronic pain. Moreover, patients are being discharged sooner after surgery for health economic purposes, so acute pain relief has become more important. Adequate pain relief is one of the quality indicators used by the Dutch government to benchmark hospitals.[9]

For more on the **International Narcotics Control Board** see https://www.incb.org/

A limitation of the study by Kalkman and colleagues[3] is that the authors were not able to investigate risk factors for opioid misuse, as information on patient sex, age, and mental health status, type of prescriber, and indication of use was not available. Additionally, codeine was excluded from all analyses because it is not exclusively prescribed for pain relief, and the paracetamol-codeine combination tablet is no longer reimbursed in the Netherlands since 2013.

Safe and appropriate use of opiates is crucial, and the findings presented by Kalkman and colleagues[3] are a call

for action. In the Netherlands more than 80% of opioids are prescribed by general practitioners, so the primary care standard on chronic pain was recently updated to highlight the importance of an interdisciplinary approach to pain management and of restricting the indication of opioids. Other key topics for research are non-addictive painkillers stronger than paracetamol or NSAIDS, and evidence-based methods to effectively treat opioid addiction in those who misuse these drugs. Finally, the public perception of pain treatment should be addressed—discussing the pros and cons, informing patients, and agreeing on realistic goals might prevent addiction.

Katia M C Verhamme, Arthur M Bohnen
Department of Medical Informatics (KMCV) and Department of General Practice (AMB), Erasmus MC,
3000 CA Rotterdam, Netherlands
k.verhamme@erasmusmc.nl

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