

# Increasing opioid prescription in Korea: a pressing public health concern and necessitating initiatives

Francis Sahngun Nahm<sup>1,2</sup>

<sup>1</sup>Department of Anesthesiology and Pain Medicine, Seoul National University Bundang Hospital, Seongnam, Korea

<sup>2</sup>Department of Anesthesiology and Pain Medicine, Seoul National University College of Medicine, Seoul, Korea

Received December 15, 2023; Revised December 16, 2023; Accepted December 18, 2023

Handling Editor: Ho-Jin Lee

Correspondence: Francis Sahngun Nahm

Department of Anesthesiology and Pain Medicine, Seoul National University Bundang Hospital, 82, Gumi-ro 173 Beon-gil, Bundang-gu, Seongnam 13620, Korea

Tel: +82-31-787-7503, Fax: +82-31-787-4063, E-mail: hiitsme@hanmail.net

Opioids have been used for centuries to relieve pain, dating back to the 4th century BC, when Hippocrates, the father of medicine, recognized their usefulness [1]. However, despite Hippocrates' warning to use them carefully and sparingly, the overuse of opioids has led to a global public health crisis.

The escalating worldwide issue of opioid overuse extends to Korea, prompting two timely investigations published in this issue of the Korean Journal of Pain (KJP). The first study analyzed the Korean National Health Insurance Service (NHIS) Database [2], while the second utilized the Korean Narcotics Information Management System (NIMS) data [3], offering valuable insights into opioid prescription practices within the Korean context.

Analysis of NHIS data from 2016 to 2020 reveals a concerning trend in Korea: 42% of failed back surgery syndrome patients received opioid prescriptions, with 11.4% becoming long-term users. Over this period, opioid prescription proportion, dosages, and utilization of potent opioids like oxycodone and fentanyl all demonstrably increased. This reinforces the well-recognized concern of a burgeoning opioid use in Korea, potentially amplifying associated problems like opioid use disorders.

Recognizing this critical point, multifaceted efforts have emerged to curb opioid overuse, including opioid stew-

ardship program and the NIMS. An opioid stewardship program is a coordinated initiative designed to optimize opioid use, minimize misuse, and ultimately improve patient outcomes [4]. The purpose of an opioid stewardship program is to improve prescription practices, mitigate opioid-related adverse effects, reduce inappropriate long-term use and dependence, and promote effective pain management strategies.

The NIMS stands as a cornerstone of Korean governmental initiatives to combat opioid abuse. This comprehensive computerized system meticulously monitors every facet of narcotic (including opioids) production, prescription, and distribution across Korea. Encompassing all hospitals, pharmacies, manufacturers, importers, and end-users, the NIMS has amassed a colossal dataset exceeding 64 million records since its 2018 inception—translating to over 10 million records annually and approximately 400,000 daily entries [5,6].

Leveraging this vast repository of big data, the NIMS empowers diverse functionalities; clinicians and patients alike can access medication histories, while research-grade big data facilitates the identification and prevention of opioid misuse, including over-prescription, duplication, and fraudulent prescription practices. Notably, an NIMS-based study reveals oral oxycodone as the most



prevalent opioid in Korea, predominantly prescribed within tertiary hospitals [3].

Although the efficacy of opioids for pain management is well-established, prescribing opioids in patients with chronic pain is a strong risk factor for opioid use disorder [7]. Therefore, it is imperative to actively pursue strategies that reduce opioid prescriptions in these patients, while simultaneously introducing and promoting alternative methods of pain management. Furthermore, enhancing the education and training of healthcare professionals who prescribe and administer these medications is essential, ensuring they are well-informed about the risks and equipped with the knowledge to make safer treatment decisions.

KJP remains acutely vigilant regarding the evolving landscape of opioid utilization. We firmly believe in the judicious application of medical opioids for pain management, while simultaneously advocating against indiscriminate opioid use. Achieving this critical balance necessitates comprehensive educational initiatives targeting not only medical professionals but also pharmacists and patients. Moving forward, KJP remains steadfast in its commitment to championing safe and responsible opioid use in Korea.

## DATA AVAILABILITY

Data sharing does not apply to this article as no datasets were generated or analyzed for this study.

## CONFLICT OF INTEREST

Francis S. Nahm is a current Editor-in-Chief of the Korean Journal of Pain; however, he has not been involved in the peer reviewer selection, evaluation, or decision process of this article. No other potential conflict of interest relevant to this article was reported.

## FUNDING

No funding to declare.

## AUTHOR CONTRIBUTIONS

Francis Sahngun Nahm: Writing/manuscript preparation.

## ORCID

Francis Sahngun Nahm, <https://orcid.org/0000-0002-5900-7851>

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