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Attitudes toward Social Issues Related to Opioid Use among Palliative Care Physicians

In Cheol Hwang, M.D., Ph.D., Seong Hoon Shin, M.D., Ph.D.*, Youn Seon Choi, M.D., Ph.D.[†], Myung Ah Lee, M.D., Ph.D.[†], DaeKyun Kim, M.D., Ph.D.[§] and Kyung Hee Lee, M.D., Ph.D.[¶]

Department of Family Medicine, Gil Medical Center, Gachon University College of Medicine, Incheon, *Division of Oncology, Department of Internal Medicine, Kosin University Gospel Hospital, Busan,

†Department of Family Medicine, Korea University Guro Hospital, Busan,

†Division of Oncology, Department of Internal Medicine, Seoul St. Mary's Hospital,
College of Medicine, The Catholic University of Korea, Seoul,

§Department of Family Medicine, Incheon St. Mary's Hospital,
College of Medicine, The Catholic University of Korea, Incheon,

Oncology Division, Department of Internal Medicine, Yeungnam University College of Medicine, Daegu, Korea

Purpose: This study investigated palliative care physicians' attitudes regarding social issues related to opioid use. **Methods:** An email survey was sent to 674 physicians who were members of the Korean Society for Hospice and Palliative Care (KSHPC). **Results:** Data from 66 physicians were analyzed (response rate, 9.8%). About 70% of participants stated that their prescribing patterns were not influenced by social issues related to opioid use, and 90% of participants thought that additional regulations should be limited to non–cancer pain. Under the current circumstances, pain education for physicians is urgently needed, as well as increased awareness among the public. Half of the respondents identified the KSHPC as the primary organization responsible for providing pain education. **Conclusion:** Palliative care physicians' prescribing patterns were not influenced by social issues related to opioid use, and these issues also should not affect cancer pain control.

Key Words: Opioids analgesics, Opioid-related disorders, Palliative care

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Correspondence to Seong Hoon Shin

ORCID

https://orcid.org/0000-0002-5745-560X E-mail: ssh1533@daum.net

Youn Seon Choi

ORCID

https://orcid.org/0000-0003-2406-5848 E-mail: younseon@korea.ac.kr

INTRODUCTION

The issue of celebrity drug abuse often shocks the public [1]. In Korea, drug addiction is becoming an increasingly serious problem, as evidenced by the rise in drug-related offenders—from over 10,000 in 2015 to nearly 18,050 by 2020 [2]. Research suggests that only approximately 1 in 30 illicit drug users are detected, underscoring the seriousness of the situation [3]. Particularly troubling is the fact that some of the drugs involved were legally prescribed by hospitals as opioid analgesics. In 2021, about 40 teenagers were found to have illegally

used fentanyl patches, and similar incidents continue to be reported [4].

The number of opioid prescriptions in Korea has risen sharply, approximately 1.5–fold, from 348 cases per 1,000 people in 2009 to 531 in 2019 [5]. Opioids are highly effective for managing both cancer–related and non–cancer chronic pain, but they are associated with a range of side effects and a risk of addiction [6]. A Korean study involving 258 patients who were treated with opioids for non–cancer pain found that about 21% exhibited signs of dependency [7]. In Western countries, it is common for individuals to begin misusing opioids after be–

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ing prescribed them [8]. Although no domestic data are available, legitimate prescriptions can lead to an increased risk of addiction or even death if not managed correctly. The recent surge in drug use, along with tighter social surveillance and regulation, has sparked concerns about potential disruptions to normal prescription and distribution practices, highlighting the need for preventive measures.

Hospice care often necessitates the prescription of substantial quantities of opioids for active pain management, which carries a risk of drug misuse. Therefore, this study explored the perspectives of palliative care physicians on social issues related to opioid use to collect baseline data that will inform future management strategies and countermeasures.

METHODS

The questionnaire was developed following several discussions among six experts selected from the Korean Society for Hospice and Palliative Care (KSHPC) and was granted prior approval by the Institutional Review Board of Gachon University Gil Medical Center (GCIRB2023-407). The survey participants were 674 physician members of the KSHPC as of November 2023, with a total of 66 respondents yielding a response rate of 9.8%. Data collection spanned a 15-day period starting on November 20, 2023, and was conducted via a Google Survey that was emailed to the participants. The survey was designed to ensure anonymity as it contained no personally identifiable information and was only administered after obtaining the consent of the participants. To encourage higher participation rates, reminder emails were sent out twice, with a 5-day interval between them, not counting the initial start date.

The demographic information and survey results were analyzed using Stata/MP version 17.0 statistical software. This analysis utilized descriptive statistics to calculate means and standard deviations, as well as to determine frequencies and percentages. Variables, including the type of hospital, length of experience in hospice and palliative care (HPC), and proportion of HPC work, were categorized into two groups based on their distribution for comparative purposes. Statistical analyses were conducted using the chi–square test, with the Fisher exact test applied to cells with a frequency of less than 5. A significance level of P<0.05 was established.

RESULTS

The average age of participants was 46.6±9.0 years, with men comprising 53% of the group. Approximately 79% were employed in the capital region and Gyeongsang Province. Family Medicine was the most represented department, with 35 participants (53.0%), while hematology/oncology was the second most common, including 21 participants (31.8%). Participants had been engaged in HPC for an average of 9.6±6.4 years, and 49.4% of their work was dedicated to HPC. General characteristics of the participants and their questionnaire responses can be found in Supplementary Table 1.

About 70% of participants with over 5 years of experience in prescribing opioids reported no change in prescribing patterns, while approximately 82% indicated that their suspicions of opioid addiction remained constant or decreased (Figure 1). As key strategies to combat opioid addiction, 59% of the respondents considered education on pain management for healthcare professionals to be crucial, and 32% advocated for public awareness campaigns, Furthermore, 95% concurred that future

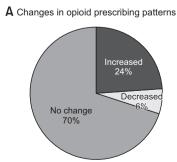
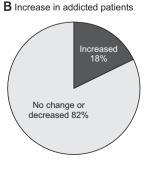
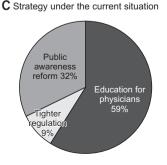


Figure 1. Main results of the survey.





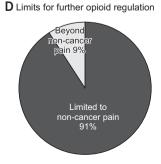




Table 1. Subgroup	Analysis of the	Main Ouestions	in the Survey	(NI-66)
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	Prescribing patterns influenced by opioid issues			Who should provide pain education			Topic to focus on in pain education		
	Yes (n=20)	No (n=46)	P value	KSHPC (n=33)	Others (n=33)	P value	Proper use (n=50)	AE with misuse (n=16)	P value
	n (%)			n (%)			n (%)		
Length of HPC experience (yr)									
<10	12 (60.0)	25 (54.4)	0.671	16 (48.5)	21 (63.6)	0.215	29 (58.0)	8 (50.0)	0.575
≥10	8 (40.0)	21 (45.7)		17 (51.5)	12 (36.4)		21 (42.0)	8 (50.0)	
HPC work proportion (%)									
<50	14 (70.0)	19 (41.3)	0.032	16 (48.5)	17 (51.5)	0.806	21 (42.0)	12 (75.0)	0.042
≥50	6 (30.0)	27 (58.7)		17 (51.5)	16 (48.5)		29 (58.0)	4 (25.0)	

 $KSHPC: Korean \ Society for \ Hospice \cdot Palliative \ Care, \ AE: \ adverse \ events, \ HPC: \ Hospice \cdot Palliative \ Care.$

P values were from χ^2 tests (Fisher's exact test as appropriate).

opioid regulations should be restricted to non-cancer pain.

The responses to the education body were categorized for analysis into two groups: KSHPC and others (Table 1). Approximately 70% of participants indicated that social issues associated with opioids did not influence their prescribing practices. Half of the respondents believed that the KSHPC should be the primary provider of pain management education, and about 76% concurred that the appropriate use of opioids should be emphasized in future educational initiatives. Those who dedicated more than 50% of their professional time to HPC felt less impacted by issues related to opioids and placed a higher emphasis on proper usage rather than on addressing side effects or misuse. No significant differences were observed in relation to the length of time individuals had been involved in HPC.

DISCUSSION

This study explored the perspectives of physician members of the KSHPC on social issues related to opioids. The key findings are as follows. First, a significant number of physicians engaged in HPC appear to be unaffected by these issues and support the idea of restricting additional opioid regulations to non-cancer pain management. Second, in light of current concerns, the prioritization of pain education for medical professionals emerged as the most critical need, followed by the necessity for public awareness campaigns. When it comes to educational topics, there was a clear preference for focusing on

the proper use of opioids rather than on side effects or misuse, particularly among those intensely involved in HPC.

Active symptom management is a significant focus in hospice and palliative care (HPC) settings. The National Hospice Center's 2022 annual report indicates that patient satisfaction with pain management improved from 55% before receiving hospice care to 71% afterward [9]. The use of opioids is essential in hospice care, especially for managing chronic pain conditions like cancer pain, where the risk of addiction is markedly low [10]. Moreover, the primary objective of preventing and treating addiction is to facilitate the maintenance of a normal life, which reduces the relevance of addiction concerns in the hospice setting.

Patients with non-cancer pain are highly susceptible to opioid addiction, as this study has also shown. More than 90% of participants concurred that future regulations should prioritize the management of non-cancer pain. Recent research, utilizing seven years of data from the Health Insurance Review and Assessment Service, revealed that 16.2% of patients with non-cancer pain had at least one encounter with non-injectable opioid analgesics, and 15.7% of these instances were potentially associated with inappropriate opioid prescribing [11]. Long-term use by patients with non-cancer pain poses a risk of addiction, as 8.6% of these patients had been prescribed opioids for more than a year [12]. In contrast, research on the use of fast-acting fentanyl products for cancer pain has shown a dependency rate of only about 1.45% [13], while other Korean research has identified the high-risk group for opioid-



related abnormal behaviors to be just 0.2% [14].

This study underscored the importance of pain management education for medical professionals. Their prescribing habits are directly linked to the prolonged use and potential misuse of opioid analgesics [15,16]. Therefore, education should start with a critical evaluation of the need for opioids, especially given their limited efficacy in treating chronic non-cancer pain [17,18]. If a doctor decides to write a long-term opioid prescription, it is crucial to have a thorough discussion with the patient about the treatment objectives, benefits and risks, the possibility of stopping the medication, and the appropriate timing for doing so. It is also vital to conduct regular evaluations of the patient's pain level, the impact of pain on their daily functioning, and any side effects from the medication [19]. Prescribing opioids at the lowest effective dose is important to minimize the risk of addiction associated with higher doses, and careful tapering off the medication when discontinuing is a key practice [20].

Given the social implications of the drug problem, it is essential for there to be cross-disciplinary collaboration within the medical community. The prevailing attitude toward opioids has been largely passive [21]. However, with the increasing number of prescriptions, there is an urgent need to develop educational strategies for specialties where pain education is currently limited. Half of the participants recommended that the KSHPC take the lead in providing future education on pain management. As a result, it is crucial to engage in discussions with the Korean Society of Anesthesiologists [22], which has demonstrated significant research interest in and concern about opioid misuse. Collaboration with the field of psychiatry is also necessary, as many patients suspected of addiction also suffer from mental health disorders. Furthermore, addressing and reducing pain-related negative emotions can help alleviate chronic pain [23].

This study has several limitations. First, the response rate of approximately 10% raises concerns about the representativeness of the sample of palliative care physicians in Korea. Second, the simplification of the survey to improve response rates resulted in a lack of detailed reasons or justifications for the responses provided. Third, the findings are reliant on the participants' recollections and experiences, which may not accurately reflect current clinical prescribing practices. Despite

these limitations, the survey is a pioneering effort to explore the attitudes of palliative care physicians towards issues related to opioids. There is an urgent need for more comparative studies with physicians from other specialties who prescribe opioids, as well as research to estimate the prevalence of misuse in the clinical management of both cancer and non-cancer pain.

While opioid analgesics are effective, they also pose a significant societal risk due to their potential for misuse and addiction. Therefore, it is important to reinforce and clarify the regulations governing their prescription and distribution. More importantly, medical professionals must be fully cognizant of these risks. Additionally, to ensure that new regulations do not hinder appropriate pain management in patients with advanced cancer, the medical community should adopt a proactive self-regulatory approach. This could include comprehensive pain management education and public awareness campaigns. By taking these steps, medical professionals can preserve and even enhance the high level of trust that society places in them.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

ORCID

In Cheol Hwang, https://orcid.org/0000-0003-4677-5525
Seong Hoon Shin, https://orcid.org/0000-0002-5745-560X
Youn Seon Choi, https://orcid.org/0000-0003-2406-5848
Myung Ah Lee, https://orcid.org/0000-0002-1204-0574
DaeKyun Kim, https://orcid.org/0000-0002-8712-8394
Kyung Hee Lee, https://orcid.org/0000-0003-0462-2512

AUTHOR'S CONTRIBUTIONS

Conception or design of the work: ICH, SHS. Data collection: ICH. Data analysis and interpretation: all authors. Drafting the article: ICH, SHS, YSC. Critical revision of the article: SHS, YSC. Final approval of the version to be published: all authors.



SUPPLEMENTARY MATERIALS

org/10.14475/jhpc.2024.27.1.45.

Supplementary materials can be found via https://doi.

REFERENCES

- 1. Kim JE. The film industry, sparked by drug controversy, is there no way to stop illegal activities by celebrities? Dong-A Ilbo [Internet]. 2023 Nov 7 [cited 2023 Nov 13]. Available from: https://www.donga.com/news/article/all/20231107/122071229/1.
- 2. Prosecution Service. White paper on opioid-related crime [Internet]. Seoul: Prosecution Service; 2021 [cited 2023 Nov 13]. Available from: https://www.spo.go.kr/site/spo/ex/board/List.do?cbldx=1204.
- 3. Park SS, Baik MS. A qualitative study on the hidden crime rate measurement of drug crimes. KPSR 2019;18:151-70.
- 4. Lee EY, Jeon YK. A study on the actual conditions of new drug offenders in Korea. KAACR 2022;12:85-102.
- 5. Cho NR, Chang YJ, Lee D, Kim JR, Ko DS, Choi JJ. Trends in opioid prescribing practices in South Korea, 2009–2019: Are we safe from an opioid epidemic? PLoS One 2021;16:e0250972.
- 6. Arthur J, Hui D. Safe opioid use: Management of opioid-related adverse effects and aberrant behaviors. Hematol Oncol Clin North Am 2018;32:387-403.
- 7. Castaneda AM, Lee CS, Kim YC, Lee D, Moon JY. Addressing opioid-related chemical coping in long-term opioid therapy for chronic non-cancer pain: A multicenter, observational, cross-sectional study. J Clin Med 2018;7:354.
- 8. Robinson CA, Wilson JD. Management of opioid misuse and opioid use disorders among youth. Pediatrics 2020;145 (Suppl 2):S153-S164.
- 9. Ministry of Health and Welfare. 2022 Annual report for hospice palliative care in Korea. Sejong: Ministry of Health and Welfare: 2023.
- 10. National Cancer Center & Ministry of Health and Welfare. The 7th Cancer pain management guideline. Goyang; Sejong: National Cancer Center & Ministry of Health and Welfare; 2023.
- 11. Noh Y, Heo KN, Yu YM, Lee JY, Ah YM. Trends in potentially inappropriate opioid prescribing and associated risk factors among Korean non-cancer patients prescribed non-injectable opioid analgesics. Ther Adv Drug Saf 2022;13:20420986221091001.
- 12. Health Insurance Review and Assessment Service. The assessment for prescription pattern of opioid analgesics in Korean patients with chronic non-cancer pain [Internet]. Wonju: Health Insurance Review and Assessment Service; 2018 [cited 2023 Nov 13]. Available from: https://repository.hira.or.kr/handle/2019.oak/1461.
- 13. Choi A, Geum MJ, Ko JH, Kim JS, Son ES, Kwon KH. Recent statistics and risk factors of Fentanyl Buccal Tablet related opioid dependence tendency at a tertiary hospital in Korea. JKSHP 2019;36:476–85.
- 14. Oh SY, Park K, Koh SJ, Kang JH, Chang MH, Lee KH. Survey of opioid risk tool among cancer patients receiving opioid analgesics. J Korean Med Sci 2022;37:e185.
- 15. Jani M, Birlie Yimer B, Sheppard T, Lunt M, Dixon WG. Time trends and prescribing patterns of opioid drugs in UK primary care patients with non-cancer pain: A retrospective cohort study. PLoS Med 2020;17:e1003270.
- 16. Barnett ML, Olenski AR, Jena AB. Opioid-prescribing patterns of emergency physicians and risk of long-term use. N Engl J Med 2017;376:663–73.
- 17. Krebs EE, Gravely A, Nugent S, Jensen AC, DeRonne B, Goldsmith ES, et al. Effect of opioid vs nonopioid medications on pain-related function in patients with chronic back pain or hip or knee osteoarthritis pain: The SPACE randomized clinical trial. JAMA 2018;319:872–82.
- 18. Busse JW, Wang L, Kamaleldin M, Craigie S, Riva JJ, Montoya L, et al. Opioids for chronic noncancer pain: a systematic review and meta-analysis. JAMA 2018;320:2448-60.
- 19. Dowell D, Haegerich TM, Chou R. CDC Guideline for prescribing opioids for chronic pain—United States, 2016. JAMA 2016;315:1624-45.
- 20. Gostin LO, Hodge JG Jr, Noe SA. Reframing the opioid epidemic as a national emergency. JAMA 2017:318:1539-40.
- 21. Baik JS. Guidelines for prescribing opioids for chronic non-cancer pain in Korea: can you overcome "opiophobia"? Korean J Pain 2017;30:1-2.
- 22. Kim ED, Lee JY, Son JS, Byeon GJ, Yeo JS, Kim DW, et al. Guidelines for prescribing opioids for chronic non-cancer pain in Korea. Korean J Pain 2017;30:18–33.
- 23. Jones CM, McCance-Katz EF. Co-occurring substance use and mental disorders among adults with opioid use disorder. Drug Alcohol Depend 2019;197:78-82.