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Journal

JAMA Neurology, 76(4)

ISSN

2168-6149

Author

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Publication Date

2019-04-01

DOI

10.1001/jamaneurol.2019.0183

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Author manuscript

JAMA Neurol. Author manuscript; available in PMC 2020 April 01.

Published in final edited form as:

JAMA Neurol. 2019 April 01; 76(4): 508. doi:10.1001/jamaneurol.2019.0183.

Heroin Smoking Is Not Common in the United States

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To the Editor

The review by Alambyan and colleagues1 s an excellent and critical summary of the literature on leukoencephalopathy due to “chasing the dragon” (ie, heroin smoking). However, The review however misrepresents the urgency of the situation by getting a few issues on heroin source- forms and use incorrect, especially as they pertain to the US situation. There is no doubt that the United States is experiencing the consequences of an intertwined heroin and synthetic opioid epidemic of historic proportions,2 ; however, there is no evidence that heroin smoking, per se, is rising in the United States. Different chemical forms of heroin lead to different medical consequences.3 The predominant form of heroin in the United States is a powdered hydrochloride salt, and as such thus it is not easily sublimated and instead burns with heating, destroying the active properties and discouraging this use pattern. The article conflates different forms of inhalation, eg, such as nasal insufflation, which is readily done with heroin hydrochloride powders and vapor (pulmonary) inhalation, (aka ie, smoking), which is and much more feasible with base forms of heroin. Heroin base will vaporize prior to before burning upon gentle heating. Insufflation of Insufflating heroin is much more common in the United States than is smoking. The data cited in the review on US heroin treatment admissions is are correct in stating that 21% of admissions involved (nasal) inhalation, ; however, a deeper look at the Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration Treatment Episode Data Set report reveals that only 4.8% involved smoking heroin.4 The fact that insufflation is more common east of the Mississippi River is due to because of differences in distribution of heroin source- forms: , which include Colombian-sourced powdered heroin- hydrochloride salt to the east and a Mexican-sourced heroin- hydrochloride salt, an solid form called “black tar,” to the west. Heroin smoking is more common in Europe, which has base heroin sourced from Afghanistan. As final evidence to my point, most of the article’s cited literature on leukoencephalopathy is from Europe. Heroin use, dependency, and injury is are as complex an issue as any in medicine. Accuracy in reporting and the robust discussion of specific risk issues is necessary in the current crisis. Given the synthetic opioid overdose crisis, we should recognize the potential role of harm reduction advice in reducing risk, including the potential benefit of non-injection over injection routes of heroin use.5

References

1. Alambyan V, Pace J, Miller B, et al. The emerging role of inhaled heroin in the opioid epidemic: a review. JAMA Neurol. 2018;75(11):1423–1434. doi:10.1001/jamaneurol.2018.1693 [PubMed: 29987325]

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2. Ciccarone D Fentanyl in the US heroin supply: a rapidly changing risk environment. Int J Drug Policy. 2017;46:107–111. doi:10.1016/j.drugpo.2017.06.010 [PubMed: 28735776]
3. Ciccarone D Heroin in brown, black and white: structural factors and medical consequences in the US heroin market. Int J Drug Policy. 2009;20(3):277–282. doi:10.1016/j.drugpo.2008.08.003 [PubMed: 18945606]
4. Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. Treatment Episode Data Set (TEDS):2004–2014. National Admissions to Substance Abuse Treatment Services. BHSIS Series S-84, HHS Publication No. (SMA) 16–4986. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2016.
5. Mars SG, Ondocsin J, Ciccarone D. Toots, tastes and tester shots: user accounts of drug sampling methods for gauging heroin potency. Harm Reduct J. 2018;15(1):26. doi:10.1186/s12954-018-0232-z [PubMed: 29769132]

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