

Gabapentin diversion and misuse: Data from law enforcement and substance users

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Objectives

1. Brief overview of gabapentin literature
2. Present data on diversion rates, 2002-2015
3. Present qualitative data from law enforcement
4. Present preliminary findings from gabapentin misusers

Law enforcement-derived data on gabapentin diversion and misuse:

Diversion rates 2002-2015 and qualitative research findings

Funding and Disclosure

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- The RADARS® System is supported by subscriptions from pharmaceutical manufacturers for surveillance, research, and reporting services, and RADARS® is the property of Denver Health and Hospital Authority, a political subdivision of the State of Colorado. Denver Health and Hospital Authority retains exclusive ownership of all data, databases, and systems. Subscribers do not participate in data collection or analysis, nor do they have access to the raw data.
- There are no conflicts of interest to report.

Gabapentin

- γ -aminobutyric acid (GABA)-analogue
- Treatment of epilepsy and neuralgia
- Prescribed off-label

- Low addictive liability level
- Prescription required
 - Mandatory reporting to PDMP in Ohio
- Not scheduled under CSA
 - Scheduled in Kentucky
- Brands – Neurontin, Horizant, Gralise



Gabapentin diversion

Prescription drug diversion involves the unlawful channeling of regulated pharmaceuticals from legal sources to the illicit marketplace.

- Doctor shopping
- Shared medication from family / friends
- Direct trade / sale in street markets
- Theft

Gabapentin misuse

Abuse and Diversion of Gabapentin Among Nonmedical Prescription Opioid Users in Appalachian Kentucky

Gabapentinoid Abuse in Order to Potentiate the Effect of Methadone: A Survey among Substance Misusers

Colin R.W. Baird^a Pauline Fox^b Lesley A. Colvin^a

Potentiation of the Effect of Buprenorphine/Naloxone With Gabapentin or Quetiapine

TO THE EDITOR: Although it is an effective treatment for opioid dependence, buprenorphine/naloxone may be misused. We report here a case of potentiation of buprenorphine/naloxone with gabapentin and quetiapine.

Gabapentin misuse, abuse and diversion: a systematic review

Rachel V. Smith^{1,2,3}, Jennifer R. Havens^{1,2} & Sharon L. Walsh^{1,4,5}

Prescription Medication Misuse Among Opioid Dependent Patients Seeking Inpatient Detoxification

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Nicholas Carrellas, BA,¹ Isela Catalina-Wellington, RN, BSN²

Aims

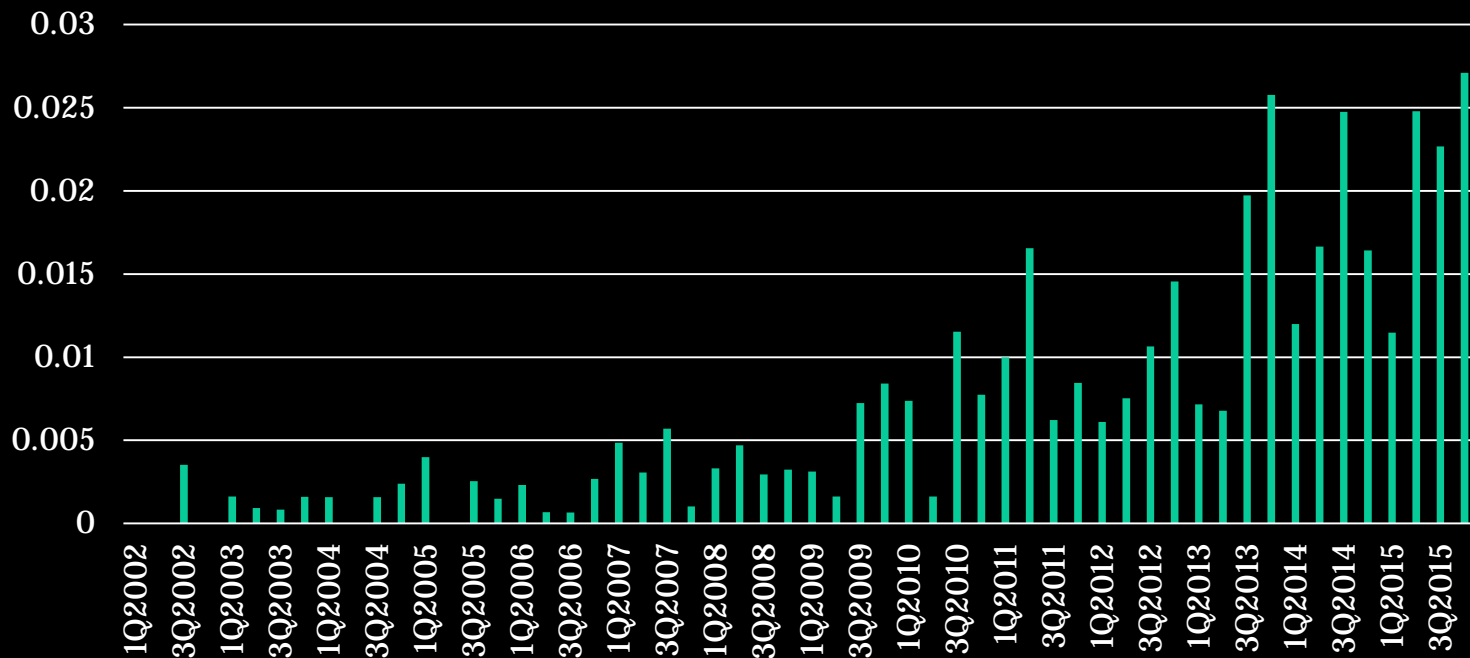
- Examine gabapentin diversion
 - National sample of law enforcement / regulatory agencies
 - 2002-2015
- Qualitative data on gabapentin misuse

Methods

- RADARS[®] Drug Diversion Program
- Quarterly survey of Rx drug diversion
- Includes approximately 250 investigators
- Covers 1/3 of the total U.S. population

- Qualitative questionnaire – April 2016
- *“Have you seen or heard anything about increases in the abuse or diversion of gabapentin in your jurisdiction? If so, can you please comment on the characteristics of abusers, modes of diversion, and street value of the drugs?”*

Rates of gabapentin diversion (per 100,000) by quarter, 2002-2015



Qualitative findings – Related to Rx opioids / heroin

- “Many abusers stated they would take it with opioids to increase the duration of the ‘high’.” – Tennessee
- “[Gabapentin] has been abused in conjunction with Suboxone (buprenorphine).” – Kentucky
- “It is our understanding that heroin users are mixing a combination of gabapentin and heroin and injecting the compound.” – Alabama
- “Drug users have been mixing gabapentin and heroin together and injecting.” - Louisiana

Qualitative findings – Diversion

- “We had two cases this quarter where gabapentin was reported stolen.” – Idaho
- “I had an overdose death of a 26 year old female... she was doctor shopping for gabapentin.” – Georgia
- “I did notice [gabapentin being an issue] when looking at my doctor shoppers and larceny of pill reports.” – North Carolina
- “We bought gabapentin once in the past year; sold via Craigslist.” – California

Qualitative findings – Street value

- “Many patients have learned of its street value and are selling or trading it for narcotics.” – Kentucky
- “Street value is about \$10.00 a pill.” – Michigan



Discussion

- Gabapentin diversion rates increased from 0 cases in 2002 to .027 cases (per 100,000) in 2015
 - Compare to:
 - .021 cases for OxyContin[®] in 2015
 - 2.5 cases for 6 Rx opioids in 2013
- Gabapentin is:
 - being used in conjunction with Rx opioids
 - combined with heroin and injected

Discussion

- Finding supports growing evidence of misuse:
 - 15-26% of Rx opioid misusers
 - Up to 65% of individuals with a gabapentin prescription
 - 2,950% increase in gabapentin misuse among Rx opioid misusers in Kentucky



Next steps


- Additional epidemiologic research
- Research conducted among gabapentin misusers
- Post-marketing surveillance of diversion



More information

- Buttram ME, Kurtz SP, Dart RC, Margolin ZR. Law enforcement-derived data on gabapentin diversion and misuse, 2002-2015: diversion rates and qualitative research findings. *Pharmacoepidemiol Drug Saf.* 2017;26:1083–1086. <https://doi.org/10.1002/pds.4230>

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BRIEF REPORT

Law enforcement-derived data on gabapentin diversion and misuse, 2002-2015: diversion rates and qualitative research findings

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Gabapentin initiation and misuse:

Preliminary data

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Aims

- Examine the decision to initiate gabapentin misuse
- Mixed method interviews with 60 gabapentin misusers

Methods

- 1-on-1 Qualitative interview
- 30-45 minutes
- Primary focus – initiation of non-prescribed gabapentin
- Related questions:
 - Motivation for initiation – get high; treat pain; etc.
 - Context – with others; how learned about gabapentin; prescription; etc.
 - Route of administration
 - Co-occurring substance use

Participants to date (N=6)

1. Hispanic man, age 43
2. Hispanic man, age 36
3. Black woman, age 23
4. White man, age 32
5. White man, age 25
6. White woman, age 22

Gabapentin used for self-detox (N=2)

- “First learned of gabapentin at a treatment center. “They gave me gabapentin. It kinda worked for the detox so from then on, I knew when I wanted to detox, I would go to my primary. I have a bad neck so he never had an issue giving me the gabapentin.”
- “It helped with the anxiety of, ‘I don’t have anything.’ It did help with the pain.”
- “It’s like the addict in me needing something.”
- “It’s a seasoned junky’s detox.”

-Hispanic man, age 43

Gabapentin used to mitigate withdrawal symptoms (N=2)

- “I would wake up in the morning with withdrawals from my drugs of choice [cocaine] and I didn’t have withdrawals after I woke up if I had taken gabapentin.”

-White woman, age 22

- “I had been using Percocets with this guy and he had a bunch of [gabapentin] – he was prescribed them - and so I ended up taking a handful to try to not be sick from withdrawal.”

-White man, age 32

Gabapentin used to get high (N=3)

- “That’s a cocktail. That’s a good one. It’s like Suboxone is a fire and gabapentin’s oil and you’re throwing oil on that fire. It feels like it enhances the buprenorphine so much.”
- “Gabapentin is cheap and easy. Suboxone’s kinda expensive if you don’t have an income. So, most of the times it was just gabapentin, but the preferred way was with Suboxone.”
- “I shot it up a couple of times. It was kinda difficult.”
- “I remember the first time I shot it up, it was like I had just taken heroin again. That first time came back to me.”

-White man, age 25

Key points from these participants (N=6)

- Gabapentin appears to be well-known among opioid users.
- Gabapentin is not a drug of choice to get high or mitigate withdrawal symptoms.
- Gabapentin prescriptions are easy to obtain – legitimate and not (e.g., feign nerve pain or anxiety).
- All participants reported a gabapentin prescription at some point (detox, jail, pain).

Continued research

- Gabapentin initiation.
- Relationship of gabapentin to Rx opioids/heroin.
- Social environmental measures related to gabapentin initiation (e.g., mental health, social support, neighborhood).
- In-depth interviews with prescribers and substance abuse treatment professionals.

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