Gabapentin misuse among young adult opioid users in substance abuse treatment

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Gabapentin

- γ-aminobutyric acid (GABA)-analogue
- Treatment of epilepsy and neuralgia
- Prescribed off-label
- Low abuse liability
- Prescription required
- Not scheduled under CSA
- Brands – Neurontin, Horizant, Gralise
Gabapentin misuse

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

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

Gabapentin misuse, abuse and diversion: a systematic review

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.

Prescription Medication Misuse Among Opioid Dependent Patients Seeking Inpatient Detoxification

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

• Exploratory examination of gabapentin misuse
  • Route of administration
  • Motivations
  • Prescription history
Methods

• Mixed methods interviews with substance abuse treatment clients (N=33)

• Eligibility
  • Age 18 or over
  • Report past year gabapentin misuse
  • Report past year Rx opioid / heroin (mis)use

• Data collection and analyses are ongoing
## Participant characteristics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
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<tbody>
<tr>
<td><strong>Age (mean; SD)</strong></td>
<td>32.6</td>
<td>(10.470)</td>
</tr>
<tr>
<td><strong>Race/ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>1</td>
<td>3.0%</td>
</tr>
<tr>
<td>White</td>
<td>19</td>
<td>57.6%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>12</td>
<td>36.4%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>3.0%</td>
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<tr>
<td>Female</td>
<td>10</td>
<td>30.3%</td>
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<tr>
<td>Secondary education</td>
<td>30</td>
<td>90.9%</td>
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Routes of administration and motivations

<table>
<thead>
<tr>
<th>Gabapentin route of administration (N=33)</th>
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<tbody>
<tr>
<td>Swallow whole pill</td>
</tr>
<tr>
<td>Sniff/snort</td>
</tr>
<tr>
<td>Inject</td>
</tr>
<tr>
<td>Chew pill</td>
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<tr>
<td>Parachute</td>
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<tr>
<td>Drink</td>
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<th>Primary motivations for initiation (N=33)</th>
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<tbody>
<tr>
<td>Mitigate withdrawal symptoms</td>
</tr>
<tr>
<td>Get high</td>
</tr>
<tr>
<td>Limited availability of other drugs</td>
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Gabapentin used to mitigate withdrawal symptoms (N=14)

• “I’ve taken gabapentin and Neurontin, mainly when I didn’t have opioids or was withdrawing from opioids. It helped.”
  - White man, age 19

• “So the first time I went to detox, I was prescribed gabapentin for anxiety. So once I left there, I just stuck with it...”
  - Mixed race woman, age 28
Gabapentin used to mitigate withdrawal symptoms (N=14)

• 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 care physician]. 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 [any drugs to use].’ 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 get high (N=10)

• “A friend of mine, he took it for seizures, but he never really took ‘em so he just had bottles and bottles of that stuff, so he would just give ‘em to me, you know. So, you know, somebody told me that, it prolongs the effects of heroin if you take it so that’s when I first started taking it..”
  
  -White man, age 35

• “I was using them to... as an additive to the opiates I was using at the time.”
  
  -White man, age 29
Gabapentin used to get high (N=10)

• “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.”

   -White man, age 25
Gabapentin used when availability of other drugs is limited (N=9)

• “I did it a few times ‘cause I was on the Vivitrol shot (injectable naltrexone) and I was stuck at my dad’s house so there was no thing else to do. I was pretty much willing to do anything to feel.”

  -White man, age 25

• “It was actually in a halfway house, I had no clue what gabapentin was, but one of the kids there was prescribed it... it was one of those things that just kind of fell in my lap, like, ‘Here, you want one?’ I was like, ‘Alright.’

  -White man, age 24
Gabapentin used when availability of other drugs is limited (N=9)

• “After I got out of treatment, they prescribed me gabapentin in the treatment center. Everybody [at the halfway house], just started eating them, like 10 at a time. So we were stuck out in [rural small town] in this big house with a pool, and we would just eat gabapentin and drink Red Bulls and stuff.”

- White man, age 32
<table>
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<tr>
<th>Gabapentin prescription history (N=33)</th>
<th>N</th>
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<tbody>
<tr>
<td>Received prescription <em>before</em> initiation of misuse</td>
<td>14</td>
<td>42.4%</td>
</tr>
<tr>
<td>Received prescription <em>after</em> initiation of misuse</td>
<td>6</td>
<td>18.2%</td>
</tr>
<tr>
<td>Never prescribed</td>
<td>13</td>
<td>39.4%</td>
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Received prescription *before* initiation of misuse (N=14)

• “Gabapentin was prescribed at a halfway house. I took them the first time as prescribed... I knew I had friends that were on it for that reason too and I knew they abused it. I was like, “Let me try it because they say it gets you high without actually getting high.”

  -Black woman, age 23
Received prescription after initiation of misuse (N=6)

• After misusing gabapentin as a teenager, 8 years later, one participant was co-prescribed gabapentin and buprenorphine/naloxone for opioid addiction. He said, “I figured out very quickly that if you take Suboxone and gabapentin at the same time you could get a little buzz.”

  -White man, age 32

• One participant described misusing gabapentin because, “it added to the euphoria of the opiates.” Later, she says, “I messed up my ankle and I was able to get a doctor to prescribe them to me. I would take more than what was prescribed.”

  -White man, age 29
Key points from these participants

• Gabapentin appears to be well-known among opioid users. The most common route of administration is swallowing a whole pill.

• Gabapentin is used to mitigate withdrawal symptoms, get high, and appears to be obtained and misused in transitional living facilities (halfway houses).

• Many participants have been prescribed gabapentin for nerve pain, anxiety, and withdrawal symptoms in detox and treatment; prompting some participants to rationalize and continue to misuse later on.
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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