Abuse of Pregabalin and Gabapentin in the US

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Introduction

Abuse of prescription opioids in the United States has decreased since 2011.

In contrast, abuse of other prescription drugs such as anticonvulsants is increasing.

We evaluate the abuse of gabapentin, pregabalin, and prescription opioids in the United States using three different perspectives.

Methods

National estimates of prescription drug abuse were obtained from four sources:

- 1) RADARS System Survey of Non-Medical Use of Prescription Drugs (NMURx) Program, a confidential and anonymous web-based survey that provides population-based estimates
- 2) RADARS System Treatment Center Programs Combined, which surveys patients entering treatment for opioid use disorder
- 3) American Association of Poison Control Centers National Poison Data System (NPDS), which records cases received by poison centers

Descriptive analyses of gabapentin, pregabalin and opioid analgesics combined were performed.

Limitations

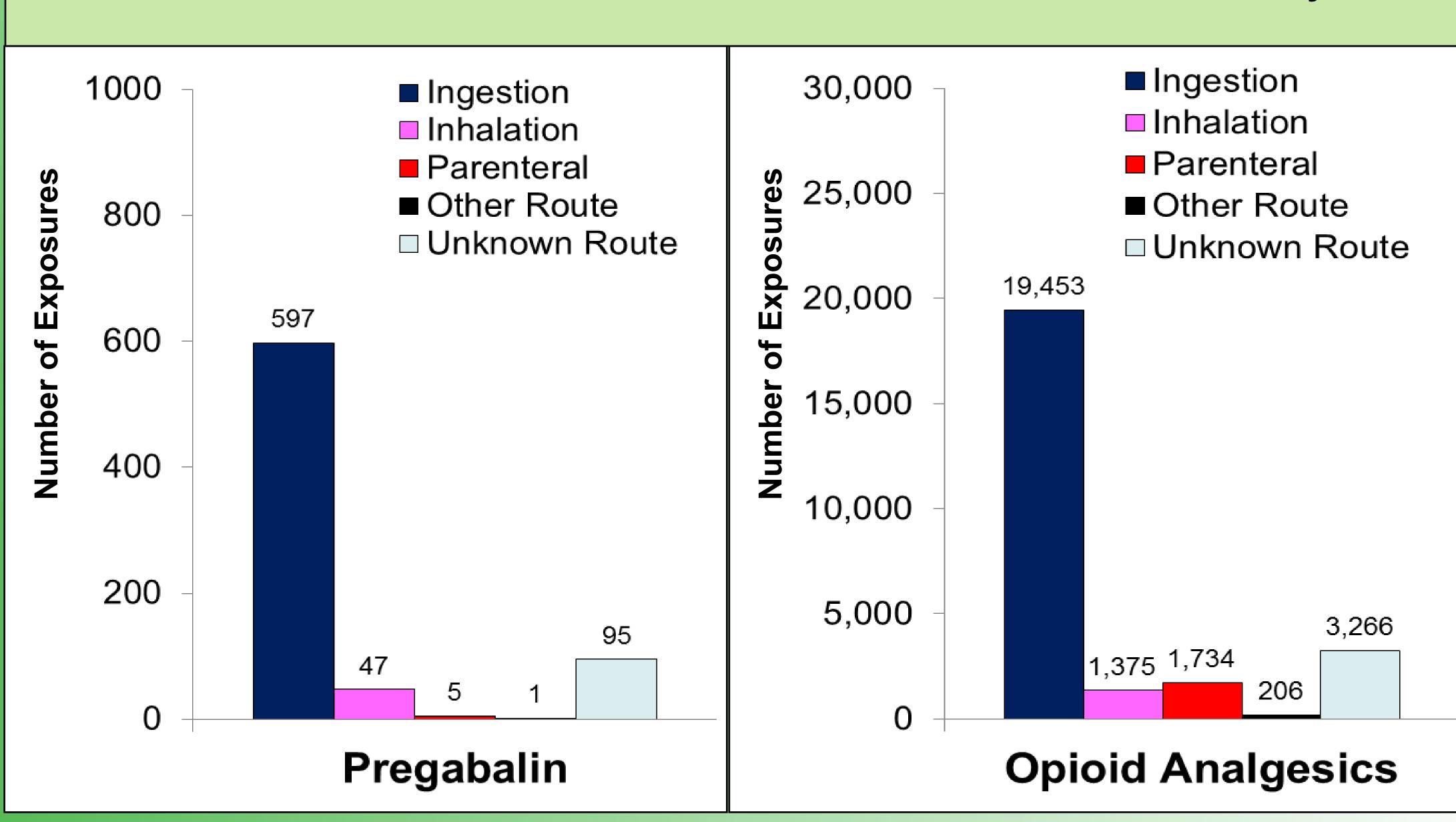
Limitations

- -Data from NMURx and Treatment Center Programs Combined involve self-report
- Data from Poison Centers involve spontaneous self-report
- This study was funded by Pfizer Inc
- The RADARS System is supported by subscriptions from pharmaceutical manufacturers, government and nongovernment agencies for surveillance, research and reporting services. RADARS System is the property of Denver Health and Hospital Authority, a political subdivision of the State of Colorado. Denver Health retains exclusive ownership of all data, databases and systems. Subscribers do not participate in data collection nor do they have access to the raw data.

Results

Abuse of Pregabalin, Gabapentin in Three Surveillance Programs			
		Treatment Center	National Poison
	NMURx	Programs	Data System
		Combined	(NPDS)
Drug Group	Lifetime Abuse Prevalence 2017Q3 % (95% CI)	Past Month Abuse Rate per 100,000 Population 2017Q3 – 2017Q4 (95% CI)	Abuse Exposure Rate per 100,000 Population 2017Q3 – 2017Q4 (95% CI)
Gabapentin	0.4 (0.32, 0.47)	0.12 (0.11, 0.13)	0.06 (0.06)
Pregabalin	0.4 (0.36, 0.52)	0.01 (0.01, 0.02)	0.01 (0.01, 0.01)
Opioid Analgesics	5.3 (5.08, 5.61)	0.79 (0.76, 0.82)	0.40 (0.39, 0.40)

Routes of Administration Among Abuse Exposures 1st Quarter 2013 through 4th Quarter 2017 American Association of Poison Control Centers - National Poison Data System



Conclusions

- •Both gabapentin and pregabalin are abused but at rates that are 6X 56X less frequent-than for opioid analgesics.
- Gabapentin is generally more frequently abused than pregabalin.
- •Abuse is primarily oral. In contrast, opioid analgesics are abused much more frequently and more frequently by non-oral routes





