Gabapentin and Prescription Opioids

Report 2018

UTAH DEPARTMENT OF HEALTH
Violence & Injury Prevention Program

The greatest threat of gabapentin occurs when used with a prescription opioid.

Gabapentin prescriptions increased dramatically from 39 million prescriptions in 2012 to 64 million prescriptions in 2016, making gabapentin the 10th most prescribed medication in the United States.[1]

In 2016, 35 Utahns died from an overdose where both gabapentin and an prescription opioid were present.

Females accounted for 64% of the overdose deaths involving gabapentin and a prescription opioid from 2014-2016, in Utah.

45-54 Years

Gabapentin and prescription opioid overdose death rates were highest among Utahns aged 45-54 from 2014-2016.

Background

Gabapentin is an anticonvulsant drug commonly used for the treatment of chronic pain and is widely perceived as a safe alternative to opioids.[1,2] When gabapentin is taken with other medications such as opioids, muscle relaxants or anxiety medications, it enhances the side effects in the central nervous system causing similar effects as heroin to the body.[2] The greatest threat of gabapentin occurs when used with an opioid because both drugs can suppress breathing, which can be fatal.[2] If gabapentin is taken with an opioid there is a 49% higher risk of dying.[3] Since both gabapentin and opioids are commonly prescribed to treat chronic pain, co-prescription is highly likely. It appears that there has been an increase of prescribing gabapentin in inpatient and outpatient settings to provide a safer opioid alternative; however when gabapentin is co-prescribed with an opioid, it increases the risk of fatality.

United States and Utah Statistics

Gabapentin prescriptions increased dramatically from 39 million prescriptions in 2012 to 64 million prescriptions in 2016, making gabapentin the 10th most prescribed medication in the United States.[1] In 2016, at least 56% of gabapentin users were also taking opioids; 27% of gabapentin users were also taking opioids, muscle relaxants, or anxiety medication, and 8.6% of gabapentin users were also taking illicit substances.[1] In 2016, 1% of Americans were misusing gabapentin and 22% were also misusing gabapentin.[1] One out of every 25 adults regularly use gabapentin and one out of every five opioids users take gabapentin illicitly in the United States.[4]

Figure 1 shows the number of overdose deaths with gabapentin and a prescription opioid in Utah by year. Regular screenings for overdose deaths of gabapentin and prescription opioids started to occur in 2012 and 2013 in Utah. Prior to 2012, gabapentin was only screened for in cases where there was evidence to suggest it played a role in an overdose, therefore the counts for 2012 and 2013 may be underestimated. In 2013, there were fewer than five prescription opioid and gabapentin overdose deaths. In 2015, 42 Utahns died from an overdose where both gabapentin and a prescription opioid were present, that number decreased in 2016 to 35.

Figure 1: Number of Overdose Deaths with Gabapentin and a Prescription Opioid by Year, Utah 2012-2016[5]

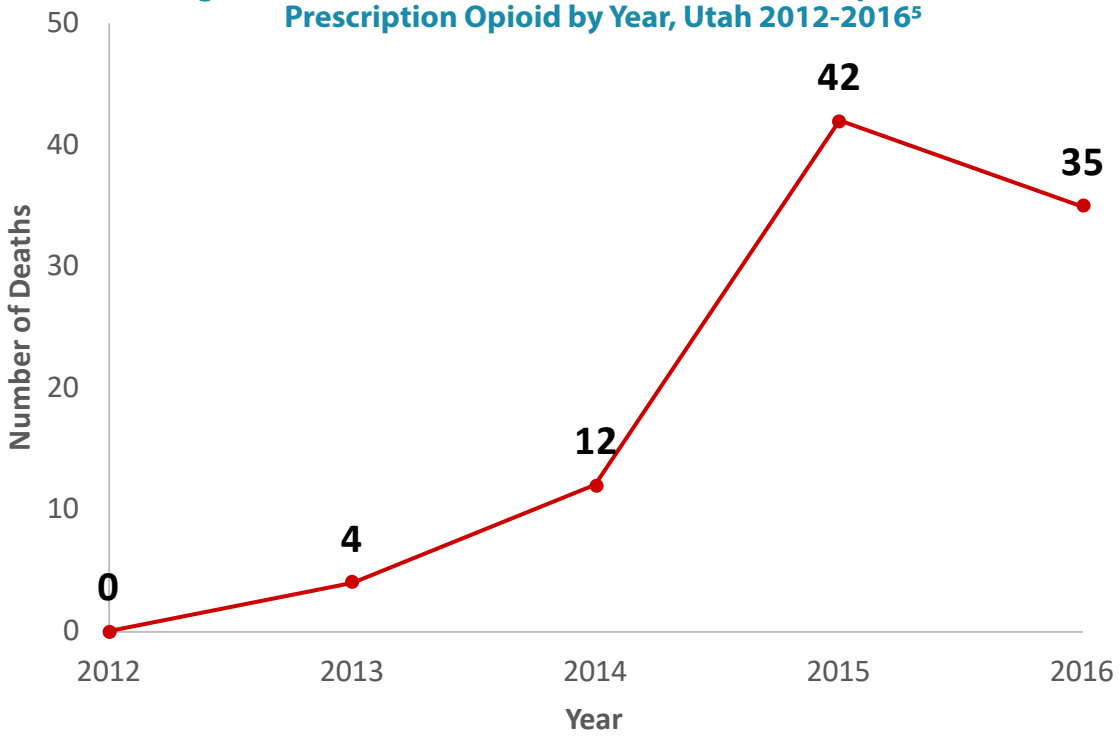


Figure 2 shows the percentage of overdose deaths with gabapentin and a prescription opioid by sex. From 2014-2016, females accounted for 64% of the overdose deaths involving gabapentin and a prescription opioid in Utah.

Figure 2: Percentage of Overdose Deaths with Gabapentin and a Prescription Opioid by Sex, Utah, 2014-2106[5]

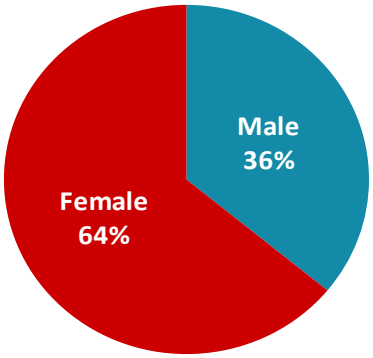
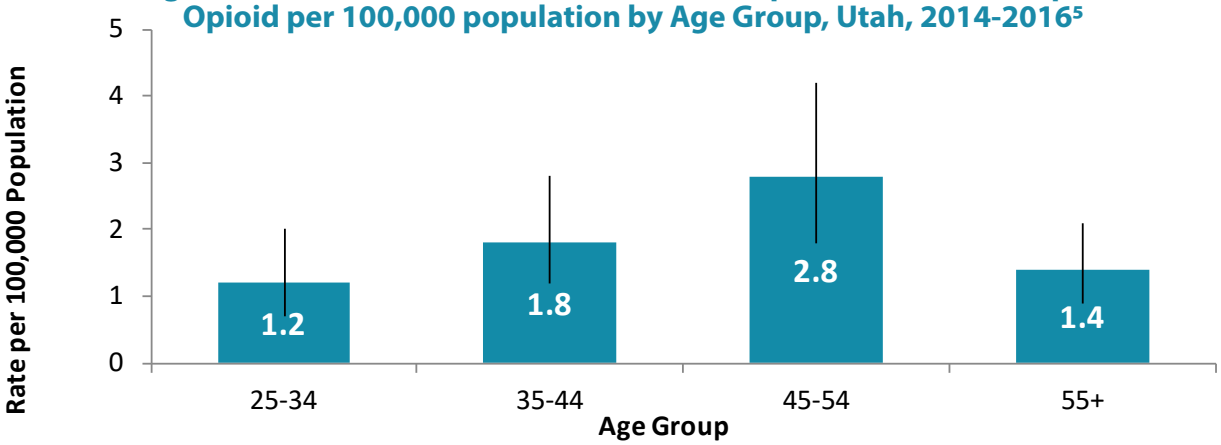


Figure 3 shows the rate of overdose deaths with gabapentin and a prescription opioid per 100,000 population by age group in Utah. From 2014-2016, gabapentin and prescription opioid overdose death rates were highest among Utahns aged 45-54.

Figure 3: Rate of Overdose Deaths with Gabapentin and a Prescription Opioid per 100,000 population by Age Group, Utah, 2014-2016[5]



Opioid Fatality Review Committee

In response to the growing opioid epidemic, an Opioid Fatality Review Committee (OFRC) was established in 2017. This committee meets monthly to review opioid overdose deaths focused on specific populations at risk for overdose. The primary purpose of the OFRC is to establish effective strategies for preventing and responding to opioid overdose. The committee is made up of representatives from the following agencies:

- University of Utah Medical Center
- Utah Attorney General's Office
- Utah Department of Commerce Division of Professional Licensing
- Utah Department of Corrections Adult Probation and Parole
- Utah Department of Health Department of Epidemiology
- Utah Department of Health Emergency Medical Services
- Utah Department of Health Office of Vital Records
- Utah Department of Health Violence and Injury Prevention Program
- Utah Department of Human Services Division of Child and Family Services
- Utah Department of Human Services Division of Substance Abuse and Mental Health
- Utah Department of Public Safety Statewide Information and Analysis Center
- Utah Office of the Medical Examiner
- Utah Poison Control Center

Recommendations

The Opioid Fatality Review Committee examined overdose deaths in Utah involving opioids and gabapentin in the spring of 2018. Based on a review of the gabapentin and opioid overdose deaths, the following recommendations were made:

- Conduct research to better understand gabapentin misuse.
- Survey patients who use gabapentin and prescribers of gabapentin to understand prescribing practice, use, trends, prevalence, attitudes, and beliefs. Use survey results for public awareness messaging for gabapentin users and prescribers.
- Educate physicians on the increased prevalence of gabapentin misuse and the risk of co-prescribing gabapentin and opioids.
- Expand toxicology testing to include gabapentin and provide support to the Utah Public Health Laboratory and the Utah Office of the Medical Examiner to continue enhanced testing.
- Co-prescribe naloxone with any opioid prescriptions.
- Establish procedures between local mental health authorities and correctional facilities to ensure proper hand off and continuity of care for parolees who need to transition from a correctional facility to treatment.
- Provide discharge guidance to individuals and their family members at the time of release from jail, prison, or in-patient treatment regarding risk of overdose due to tolerance changes.
- Increase outreach to treatment facilities to encourage naloxone education and distribution at the time of discharge.
- Develop and implement a universal screening tool to identify, reduce, and prevent problematic use, abuse, and dependence on illicit and prescription opioids.
- Screen for mental health and substance abuse prior to any surgery. Safety planning and follow-up care should be provided for patients identified at high risk for an overdose.
- Increase public awareness of the signs and symptoms of an overdose, how and when to intervene, and the dangers of "normalizing" signs of overdose, naloxone use and access, especially in rural areas.
- Provide outreach and education regarding the "Good Samaritan" law to populations at risk for illicit drug use and encourage help-seeking behaviors.

References

1. Gomes T, Juurlink DN, Antoniou T, Mamdani MM, Paterson JM, Brink WVD. Gabapentin, opioids, and the risk of opioid-related death: A population-based nested case–control study. Retrieved from http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002396. OCtober 2017.
2. Goodman CW, Brett AS. Gabapentin and pregabalin for pain – is increased prescribing a cause for concern? *New England Journal of Medicine*. 2017 Aug 3;377(5):411-414.
3. Kapil V, Green JL, Le Lait MC, Wood DM, Dargan PI. Misuse of the gammaaminobutyric acid analogues baclofen, gabapentin and pregabalin in the UK. *British Journal of Clinical Pharmacology*. 2014 July;78(1):190-191.
4. Mack A. Examination of the evidence for off-label use of gabapentin. *Journal of Managed Care Pharmacy*. 2003;9(6):559-56.
5. Utah Department of Health, Office of the Medical Examiner.

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