

Morningside Graduate School of Biomedical Sciences Clinical & Population Health Research Program

Announces the PhD Thesis Defense of

DANNI ZHAO

The Use of Gabapentinoids for Pain in the Ongoing US Opioid Epidemic: A Study Using Real-World Data

Thursday, December 30, 2021 at 10 a.m. Via Zoom Meeting

Background

Gabapentinoids (gabapentin and pregabalin), a class of FDA-approved antiepileptic medications with expanded indications for certain neuropathic pain conditions, have been prescribed off-label for almost all types of pain in the US opioids epidemic.

Methods

We used IBM® MarketScan® Research Databases (2015-2018) and collected primary data. In Aim 1, we described the geographic variation in gabapentinoids and opioids for pain by US state and metropolitan statistical area (MSA). In Aim 2, we implemented a controlled multiple baseline interrupted time series analysis and assessed the impact of including gabapentin in states' prescription drug monitoring programs (PDMP) and listing gabapentin as a Schedule V controlled substance. In Aim 3, we developed an algorithm to identify potential gabapentin misuse and/or abuse in administrative claims data.

Results

The pattern of the geographic variation in gabapentinoids was similar to that of opioids across states and MSAs. Including gabapentin in PDMPs and Schedule V controlled substance classification were effective in curbing the growth of gabapentin use and reducing opioid-related adverse events. Our algorithm identified approximately one in six patients with gabapentin use as having potentially misused and/or abused gabapentin. Multiple comorbidities and drug use were associated with gabapentin misuse and/or abuse.

Conclusions

Gabapentinoids may have been widely used as alternative or adjuvant analgesics to opioids for pain across the US. Policy makers should consider including gabapentin in proactive PDMPs and scheduling of gabapentin. Monitoring requirements and individualized safety measures should be put in place for patients who potentially misused and/or abused gabapentin.

Mentor

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