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058. Trends in Pregnancy and Overdose Reported to the Toxicology Investigators Consortium (ToxIC) Core Registry 2014-2021

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Background: According to the annual report of the American Association of Poison Control Centers' National Poison Data System, 18.2% out of the 6,199 exposures during pregnancy were intentional in 2020.

Research Question: What are the characteristics of acute intentional exposures during pregnancy that were reported to the Toxicology Investigators Consortium (ToxIC) Core Registry between January 2014 – December 2021?

Methods: This is a prospective analysis of all intentional overdoses in pregnant women identified from the ToxIC database from 2014-2021. We considered cases to be intentional if the patient expressed self-harm or suicidality. Each case was reviewed for age, exposure type, number of exposures, clinical signs and symptoms, and treatment. Age was further categorized into four groups: 10-19, 20-29, 30-39, and 40-49 years. Exclusions included age over fifty years and any false positive pregnancy tests. Categorical variables were compared using chi square tests.

Results: Of the 13,316 cases of intentional exposures in women, 123 cases included pregnant patients. In total, over-the-counter analgesics were the most common class of ingestion (28.1%), followed by antidepressants (15.1%), and sedative-hypnotics/muscle relaxants (11.4%). The majority of pregnant patients were ages 20-29 (72.1%). More than a third of patients ingested more than one class of medication or agent. Patients aged 10-19 years were more likely to ingest five or more medications (p = 0.03). About two-thirds of the patients developed signs and symptoms of toxicity, with the majority developing CNS depression, followed by agitation, and tachycardia (heart rate >140 bpm). N-acetylcysteine was the most common antidote administered.

Conclusion: The majority of intentional drug exposure in pregnant women included non-opioid analgesics and sedative-hypnotics/muscle relaxants in women less than 29 years. Further studies should investigate the risks of fetal harm and outcomes in intentional overdoses during pregnancy.