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## 70. Toxicologic exposures in transgender patients during the SARS-CoV-2 pandemic

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**Background:** About 0.3% of Americans identify as transgender (male-to-female, female-to-male and gender nonconforming). In the 2019 Toxicology Investigators Consortium (Toxic) Registry annual report, 0.8% of cases involved transgender patients. There are many hypotheses as to why transgender patients may experience disparities in the healthcare system including but not limited to: stigma, lack of healthcare providers' awareness, and insensitivity. The COVID-19 pandemic has had multiple effects leading to worsening bio-psycho-social effects, such as isolation, decrease in social support structures and an increase in stressors. Therefore, the purpose of this study was to characterize cases reported in the Toxic database involving transgender patients before and during the COVID-19 pandemic.

**Methods:** This is a retrospective database analysis reviewing cases involving transgender patients from 2017 to 2020. Cases during the year of 2020 were considered to be during the COVID pandemic. Inclusion criteria were: all ages, transgender sex, single- and multi-agent exposures, acute or chronic ingestions. Variables investigated included the frequency of exposures, intent or reason for exposure, type of exposure, and severity of (i.e, more ICU encounters, more treatments rendered). Descriptive statistics were performed to describe types of exposures, rates of hospitalization, and outcomes.

**Results:** A total of 195 cases involving transgender patients were reported to the Toxic registry between 2017 and 2020. The total number of cases involving transgender patients continually climbed over the 4-year period: case numbers were 36 in 2017, 40 in 2018, 57 in 2019, and 62 in 2020. The youngest recorded case was 10-years-old and the oldest was 76-years-old, and median age was 18. Female-to-male gender identity was most common (n/4 120, 62%), followed by male-to-female (n = 64, 33%) and gender-nonconforming (n = 11, 6%), most patients were in the 13-18 year-old age group. Caucasian was the most frequently identified race. Intentional pharmaceutical overdose was the most common reason for toxicology consult, with attempt at self-harm being the primary reason, for all year. Analgesics and antidepressants were the most common xenobiotic exposure for all years. Overall, 45% of encounters were in the emergency department. Encounters in a floor (29%) or ICU (24%) were similar and did not differ between years. Some form of treatment was given in 66% of cases. The percentages of cases where treatment was given were 64%, 70%, 60%, and 71% for each individual year, respectively. Antidotal treatment was more frequent in 2020, and the most used antidote was Nacetylcysteine.

**Conclusion:** There is a trend of increasing number of cases of exposure involving transgender patients between 2017 and 2020. There is not a significant change in the reason for encounter between years. This is similar for location of consultation and rates of treatment. Despite potential worsening bio-psycho-social effects of the COVID pandemic, there did not appear to be a significant change in frequency, severity, or reasons of toxic exposures in transgender patients beyond the already concerning growing trend overall. Regardless, given the increasing trend additional awareness, support, and targeted resources for this population group will grow increasingly important.