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Agents of Exposure in Transgender Patient Cases Managed by a Toxicologist: An Analysis of the Toxicology Investigator’s Consortium (ToxIC) Registry

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Study Objective
Little is known regarding trends in poisonings within the transgender community. We set out to review medical encounters managed by a medical toxicologist and provide descriptive data in trends among types of exposures within the transgender demographic.

Methods
The Toxicology Investigators Consortium database was created in 2010 by the American College of Medical Toxicology (ACMT) to compile data recorded by medical toxicologists. In January 2017 the data field for transgender (and, if transgender, male to female or female to male) was added to the ToxIC form. Between January, 2017–December, 2020 a retrospective ToxIC database review of transgender cases including descriptive demographics was performed.

Results
There were 195 transgender cases. Among these, 61.5% (N=120) were female-to-male, 32.8% (N=64) were male-to-female, and 5.6% (N=11) were gender nonconforming. In regards to race, 63.1% (N=123) were Caucasian, 6.2% (N=12) Black/African American, 3.6% (N=7) Asian, 2% (N=4) mixed race, 1% (N=2) American Indian/Alaskan Native, 0.5% (N=1) Native Hawaiian or Pacific Islander, and 23.6% (N=46) unknown. In regards to ethnicity, 7.2% (N=14) of cases were Latino/Hispanic, 62.6% (N=122) not Latino/Hispanic, and 30.2% (N=59) unknown. Of the 195 transgender cases, 49.7% (N=97) were 13-18 years old, 46.2% (N=90) 19-65 years old, 3.1% (N=6) 7-12 years old, and 1% (N=2) 66-89 years old. In this cohort there were no reported deaths.

Overall, 88.2% (N=172) of the poisonings involved pharmaceutical drugs – 98.3% (N=169) of which were intentional ingestions. Twenty-one percent (N=41) were analgesics, 20% (N=39) antidepressants, 8.7% (N=17) anti-cholinergic/anti-histamines, 7.2% (N=14) antipsychotics, 7.2% (N=14) anticonvulsants/mood stabilizers, 4.6% (N=9) cardiovascular medications, 4.1% (N=8) opioids, 3.6% (N=7) ethanol, 2.6% (N=5) sympathomimetics, 2.6% (N=5) household substances, 2% (N=4) cough & cold medications, 2% (N=4) sedative/hypnotic/muscle relaxants, 1.5% (N=3) other pharmaceuticals, 1% (N=2) psychoactive substances, 1% (N=2) diabetics, 1% (N=2) diuretics, 1% (N=2) other medications, 1% (N=2) toxic alcohols (specifically ethylene glycol and isopropanol), 0.5% (N=1) metals, 0.5% (N=1) herbal/dietary supplements/vitamins, 0.5% (N=1) Gl medications, 0.5% (N=1) envenomations, 0.5% (N=1) chemotherapeutic/immune medications, 0.5% (N=1) antimicrobials, 0.5% (N=1) anticoagulants, and 0.5% (N=1) unknown or not reported.

Conclusion
Among transgender patients with poisonings reported to the ToxIC registry, the majority were adolescent Caucasians who ingested either analgesics or psychotropic medications. These data may be helpful to develop poisoning prevention practices in this vulnerable population.

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