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52. A five-year analysis of the Toxicology Investigators Consortium (ToxIC) core registry: descriptive differences among patients who identified as transgender compared to cisgender, 2017–2021

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Background: Persons who identify as transgender are at increased risk for a number of negative health outcomes, includ- ing substance use and suicide. Healthy People 2030 includes goals for reducing substance use and suicidal thoughts among persons who identify as transgender. We explored medical toxi- cology consultations from the Toxicology Investigators Consortium (ToxIC) Registry by gender identity (i.e., persons who identify as transgender/gender nonconforming, with a gender identity different than sex assigned at birth, [PWITG], compared to persons who identify as cisgender, with a gender identity matching sex assigned at birth [PWICG]). This data set captures information on hospital patients who had a consult requested by a treating physician for additional patient management related to suspected substance exposures, in many cases presenting with an overdose.

Methods: We conducted a descriptive analysis of consultations involving drug exposures where the patient knowingly ingested the substance (rather than accidental ingestions) in the ToxIC Registry from 2017 to 2021. Information on demographics, rea- son for drug exposure, drug class used (e.g., opioids, antidepres- sants), and clinical presentation was assessed by gender identity. All analyses were performed in SAS 9.4.

Results: A total of 19,606 toxicology consultations were identi- fied; 19,336 identified as cisgender, and 270 identified as trans- gender. Among cases involving PWITG, 166 (61.5%) were female- to-male, 69 (25.6%) were male-to-female, and 33 (12.2%) were gender nonconforming. The mean age for PWITG was 20 years (median =16) and 31 years (median =26) for PWICG. PWITG had a higher proportion of self-harm (87.8%) as compared to PWICG (63.1%). PWICG reported a higher proportion of misuse of pre-scription or OTC drugs/illicit substance use than PWITG (6.7%). PWITG had higher proportions of antidepressant exposure (34.1%) compared to PWICG (21.3%), while PWICG had higher proportions of opioid exposures (14.9%) compared to PWITG (4.4%). Other notable differences in drug exposures included higher proportions of analgesic in PWITG (38.9%) compared to PWICG (30.7%) as well as higher proportions of anticholinergic or antihistamine exposure in PWITG (21.5%) compared to PWICG (13.3%). Lower proportions of sedative hypnotic or muscle relaxer exposure were seen in PWITG (8.1%) compared to PWICG (14.5%). PWITG presented proportionally more often with tachy- cardia (15.6%) compared to PWICG (12.9%). Over half (51.1%) of PWITG, and 60.9% of PWICG presented with a nervous

system abnormality, the most common being coma or central nervous system (CNS) depression, where PWITG had a lower proportion (23.7%) compared to PWICG (35.9%).

Conclusions: We identified both similar and different drug consultations among patients who identified as transgender and those who identified as cisgender. Notably, PWITG had a higher proportion of exhibited drug use for self-harm than PWICG. This could be a result of both increased risk for suicide among PWITG generally and increased nonfatal suicide attempt risk among younger as opposed to older age groups. Further research exam- ining drug overdoses among PWITG may help prevent overdose and inform best care practices for this population. Screening for suicide risk and referral to both substance use and mental health services could simultaneously help prevent intentional and unin- tentional overdose.

KEYWORDS Transgender vs. cisgender; drug exposures; overdose