

149. Racial and ethnic characteristics in cases of intentional pharmaceutical exposure with concern for toxicity

Alexa Camarena-Michel^a and Benjamin Hatten^b ^aEmergency Medicine, Denver Health Medical Center, Denver, United States; ^bSection of Medical Toxicology, Department of Emergency Medicine, University of Colorado School of Medicine; On behalf of the Toxicology Investigators Consortium (ToxIC), Aurora, United States

Objective: There is little data examining intentional pharmaceutical ingestion characteristics across different ethnic and racial groups. Intentional pharmaceutical behaviors may be impacted by various sociocultural and biological factors. It is prudent to understand the population characteristics of intentional pharmaceutical exposures across different racial and ethnic groups.

Methods: Since 2010, the Toxicology Investigators Consortium (ToxIC) Registry records all clinical consults seen by an inter-national multi-center network of medical toxicologists in a standardized fashion. In an exploratory analysis, 2017 data from the ToxIC registry was examined. Specifically, intentional pharmaceutical use was queried, with consideration given to 4 reasons for intentional use: attempt at self-harm, misuse/abuse or no attempt at self-harm, therapeutic use (such as bradycardia after verapamil use) or other. This data were evaluated with regards to hispanic and non-hispanic patients as well as 8 racial groups including Asian, Black/African, American Indian/Alaska Native, Caucasian, Native Hawaiian or Pacific Islander, Mixed or other. Descriptive statistics were used to present basic epidemiology and chi-squared testing was performed to compare groups.

Results: Data from 3410 cases from 2017 were queried in the ToxIC database. Intentional pharmaceutical exposures were examined and there was found to be a correlation between reasons for intentional drug use (self-harm 69% versus 76%, misuse/abuse 19% versus 11% and therapeutic effect 6% versus 8%, $p .013$) and being non-hispanic (n 1811) or hispanic (n 251). Moreover, when different racial groups were queried, there was a statistically significant correlation between various racial groups and reasons for intentional pharmaceutical use ($p .018$). Similar rates of death were observed when comparing hispanics (0.3%) and non-hispanics (1.0%) and between the 8 racial categories (range 0–2%).

Conclusion: Given the dearth of available data, this represents an initial examination of racial and ethnic characteristics in cases of intentional pharmaceutical exposures. In the data analyzed, there are significant differences between racial groups and hispanics versus non-hispanics with regards to reasons for intentional pharmaceutical ingestion. However, survival is similar. Future work will be undertaken to explore racial and ethnic differences within the entire ToxIC dataset (2010–2017).