RSNA Radiological Society of North America
RADIOLOGICAL SOCIETY OF NORTH AMERICA
820 JORIE BLVD, OAK BROOK, IL 60523
TEL 1-630-571-2670 FAX 1-630-571-7837
RSNA.ORG
NEWS

Analyzing the Prevalence of Injury and Violence in Transgender Patients Using Radiology Reports

PURPOSE

The study aims to investigate the prevalence of injuries and violence disparities between transgender female and cisgender female patients by analyzing radiology reports.

METHODS AND MATERIALS

We utilized our institution's Research Patient Data Registry to identify 263 transgender female patients and 525 age, race, and ethnicity matched cisgender women. Adjusted incidence rate ratios (aIRR) and Odds ratios were calculated to compare imaging and injury patterns. Two radiologists blinded to the purpose assessed the likelihood of intimate partner violence (IPV) based on radiology reports. EMR was reviewed for violence documentation in all patients with radiologically evident injuries.

RESULTS

In our cohort, 25.4% (67/263) of cases sustained 141 injuries, compared to 14.7% (77/525) of controls with 98 injuries. Injury rates were higher in cases (aIRR: 3.3 [2.5-4.3] $P<0.0001$), especially for cranial (7.8 [2.1-29.1] $P<0.0001$), facial (36.4 [8.6-153.8] $P<0.0001$), and thoracic injuries (4.9 [1.4-17] $P=0.01$), with 78.9% of facial fractures (15/19) involving the midface. The percentage of imaging studies in the emergency departments among cases was significantly higher in cases than in controls (OR = 5.3 [3.3, 8.3]) ($P<0.0001$). Radiologists suspected IPV in 12 cases and 1 control with 75% of cases confirming violence and 50% specifically reporting IPV. A higher number of cases with radiologically evident injuries reported experiencing IPV (OR 4.0; [2.6-10.2]; $P=0.003$) and other types of violence (OR=4.8 [2.1-7.7]; $P=0.010$) compared to controls with only 14.9% of cases denying violence compared to 39% of controls. However, no IPV screening was documented in 37.3% of cases and 46.8% of controls.

CONCLUSION

Transgender females experience significantly higher injury rates, particularly to the head, face, and chest, with frequent presentations to the emergency departments, indicating an elevated risk of violence and gaps in preventive care. By recognizing these patterns, radiologists can help identify at-risk patients and facilitate timely IPV screening and support.

CLINICAL RELEVANCE/APPLICATIONS

The clinical significance of our study lies in its revelation of heightened injury rates among trans-female patients despite the underutilization of imaging services. The prevalence of musculoskeletal and neurological imaging among trans females indicates a propensity to seek medical attention primarily for injury-related concerns, potentially influenced by obstacles in healthcare access and hesitancy toward preventive healthcare measures. Addressing these disparities is pivotal for delivering equitable and comprehensive healthcare services to the transgender community, thereby fostering improved health outcomes and well-being.