



Pediatric Hand Trauma in Underserved Populations

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BACKGROUND

- Underserved populations are disproportionately affected by trauma and include patients from racial minorities, low-income, and rural residence.
- This study describes pediatric hand injuries in these groups and assesses their risk of injury.

METHODS

- 1311 patients had hand trauma from 2010-2020.
- Retrospective review was conducted.
- Area Deprivation Index (ADI) was calculated and stratified by the top 50% (most disadvantaged) and bottom 50% (least disadvantaged) neighborhoods.
- Binomial regression used for relative risks.



Figure 1. Area Deprivation Index.

RESULTS

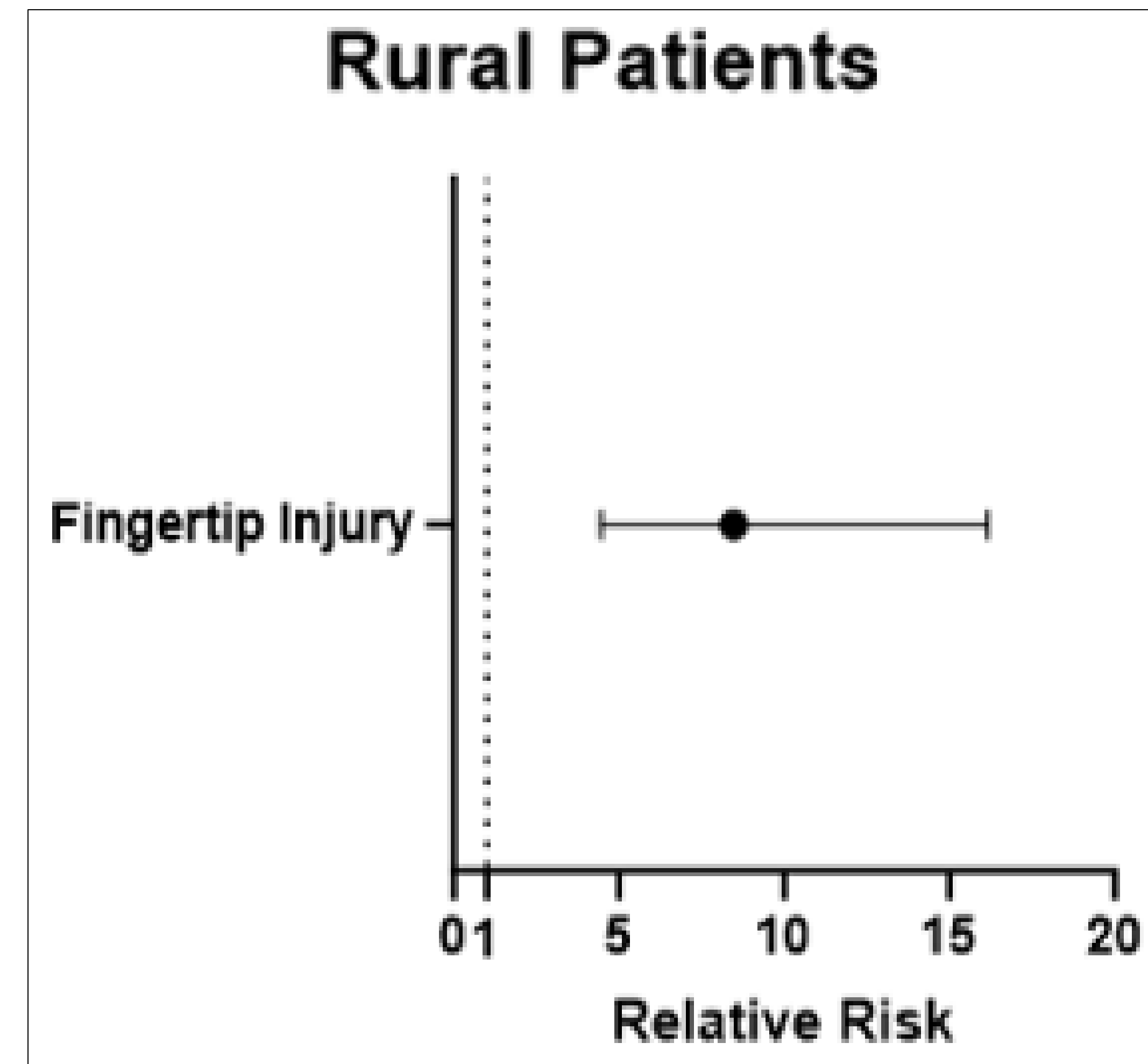


Figure 2. Hand trauma risk factors in rural patients.



Figure 3. Hand trauma risk factors in disadvantaged neighborhoods.

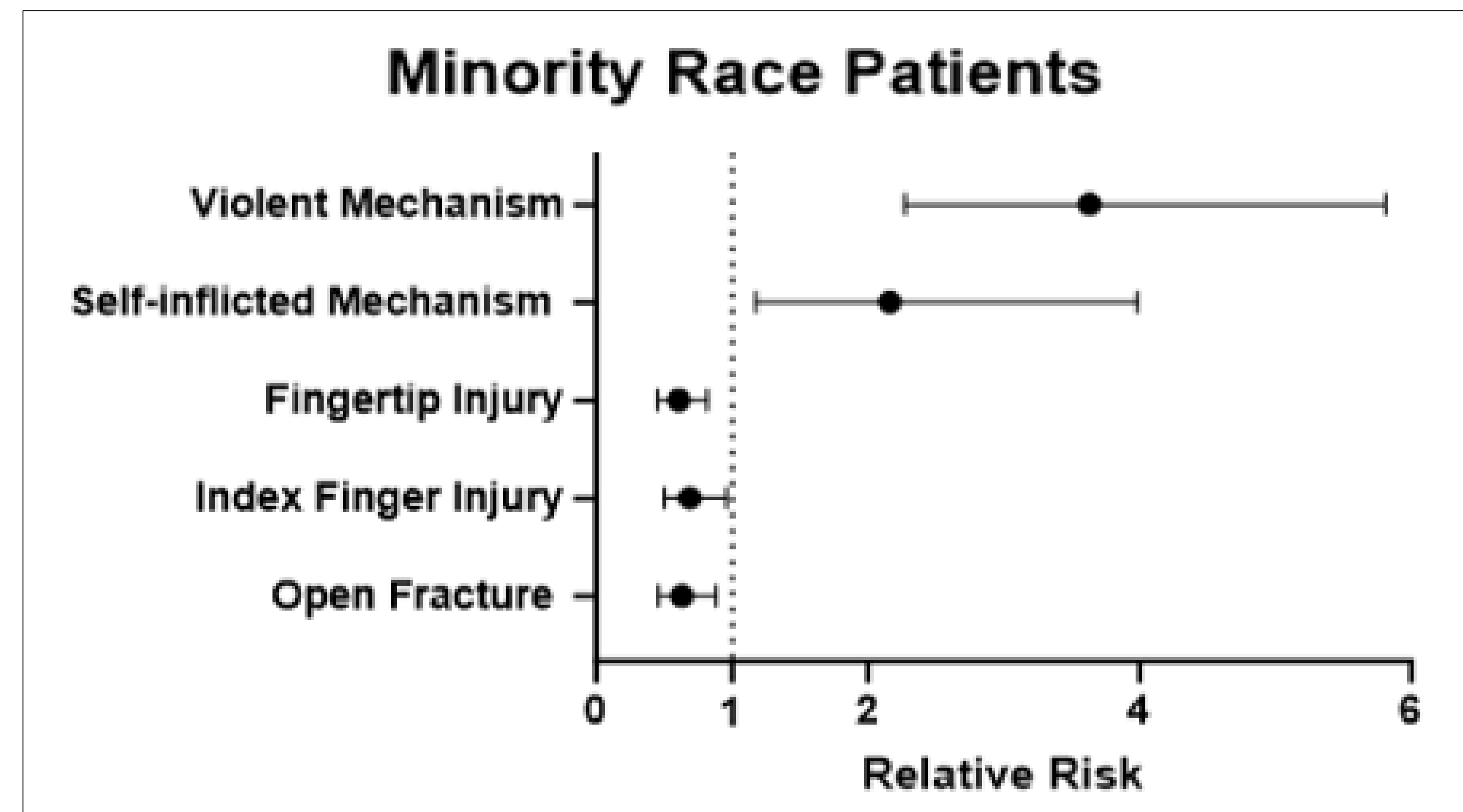


Figure 4. Hand trauma risk factors in minority race patients.

RESULTS

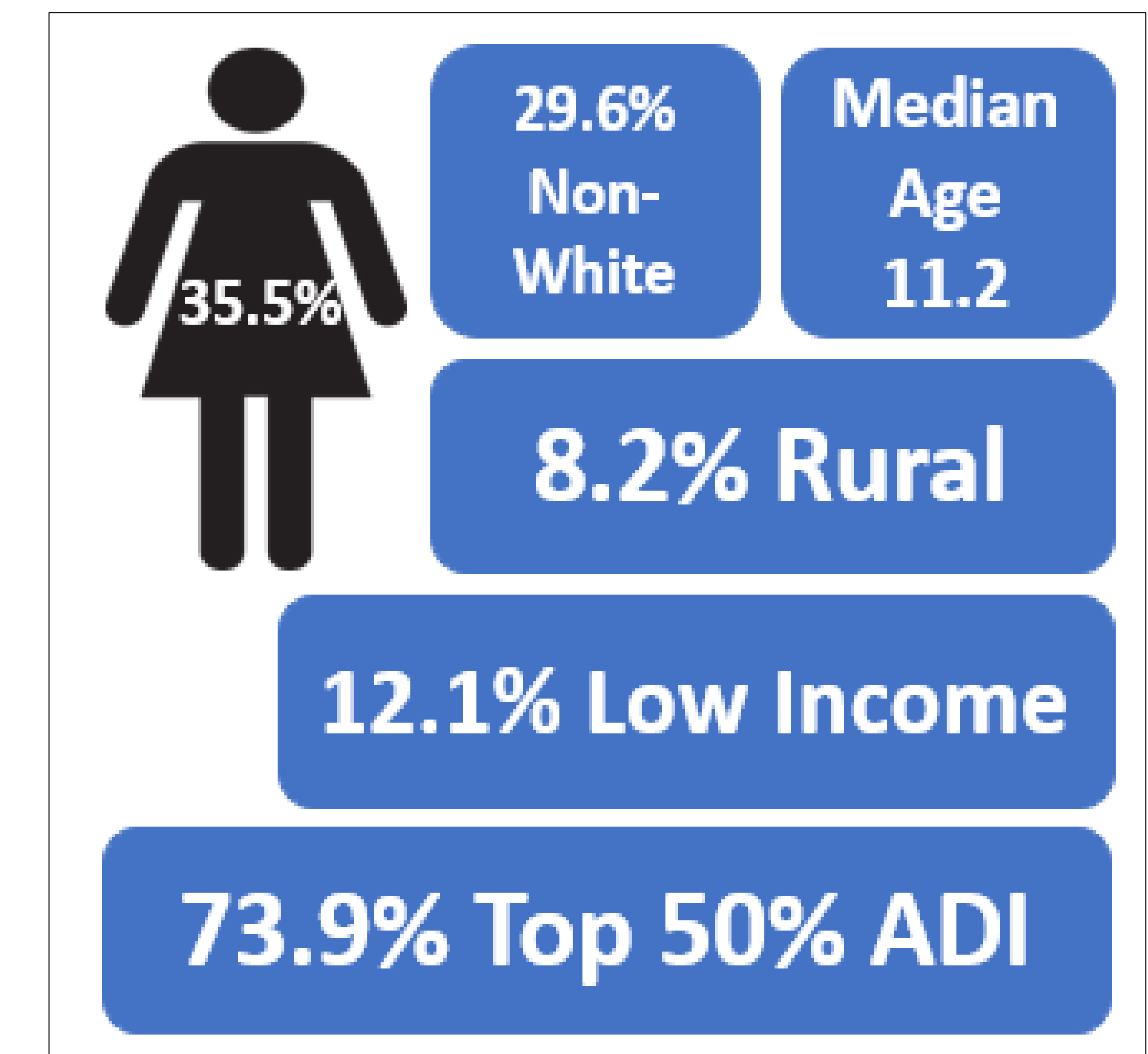


Figure 5. Cohort demographics.

CONCLUSIONS

- This represents one of the largest reported cohorts in pediatric hand trauma to date.
- Children from minority races and disadvantaged backgrounds were more likely to suffer from hand trauma due to violence compared to their Caucasian and less disadvantaged counterparts.

