

Policing practices, drug law enforcement, and overdose: A systematic review

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Policing practices and drug law enforcement increase non-fatal and fatal overdose risk.

Background

- Policing practices, including drug law enforcement, have demonstrated detrimental effects on the health of people who use drugs; however, its multiple impacts on overdose have not yet been systematically assessed.
- Our systematic review summarizes evidence quantifying the relationship between policing practices and overdose among people who use drugs, examining the hypothesis of a positive association between the two.

Methods

- Empirical studies that quantitatively evaluated the association between police practices and fatal and non-fatal overdose and published in either English, French or Spanish were eligible for inclusion.
- Electronic databases MEDLINE, Embase, CINAHL, PsychInfo, and Scopus were searched from their inception through August 25, 2023; grey literature and manual citation searches were also performed.
- Title, abstract screening, and full-text screening were conducted to evaluate inclusion eligibility.
- Extracted data included study location, design, recruitment and sampling, sample demographic characteristics, measure of policing practice, characteristics of overdose, and statistical analysis.
- Assessment of study bias was conducted using the Newcastle-Ottawa¹ quality assessment scale for cross-sectional, cohort, and case-control studies, the Quality Assessment Checklist² for ecological studies, and the revised JBI Critical Appraisal Tool³ for quasi-experimental studies; assessments were standardized across tools.
- This review adhered to PRISMA reporting guidelines and was registered in PROSPERO (#CRD442023459427).

Results

- Of 7,496 unique citations, 447 full-text records were assessed and **21 articles met inclusion criteria**.

Figure 1. PRISMA flow diagram of included studies (n = 21).

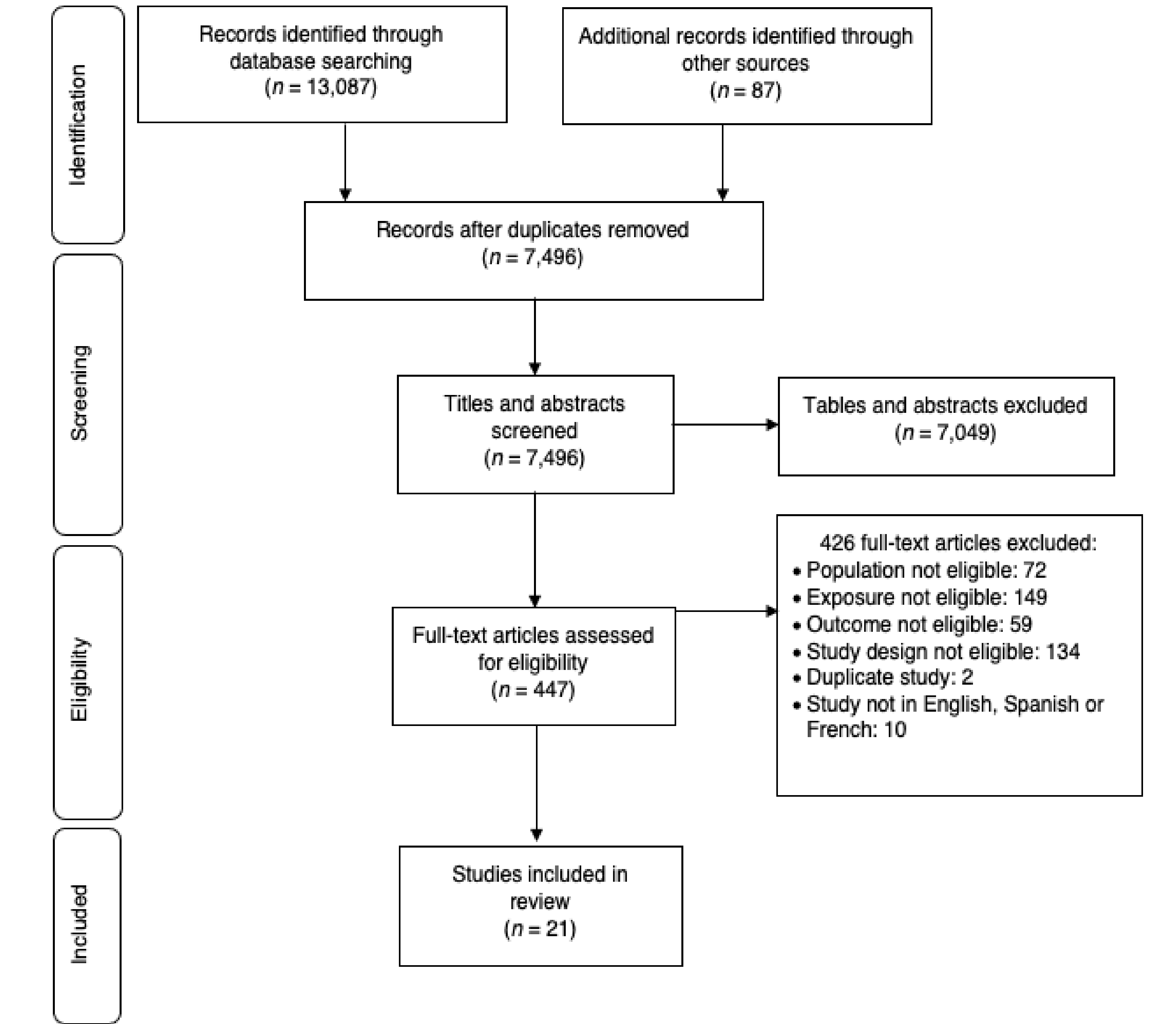


Figure 2. Study design (n = 21).

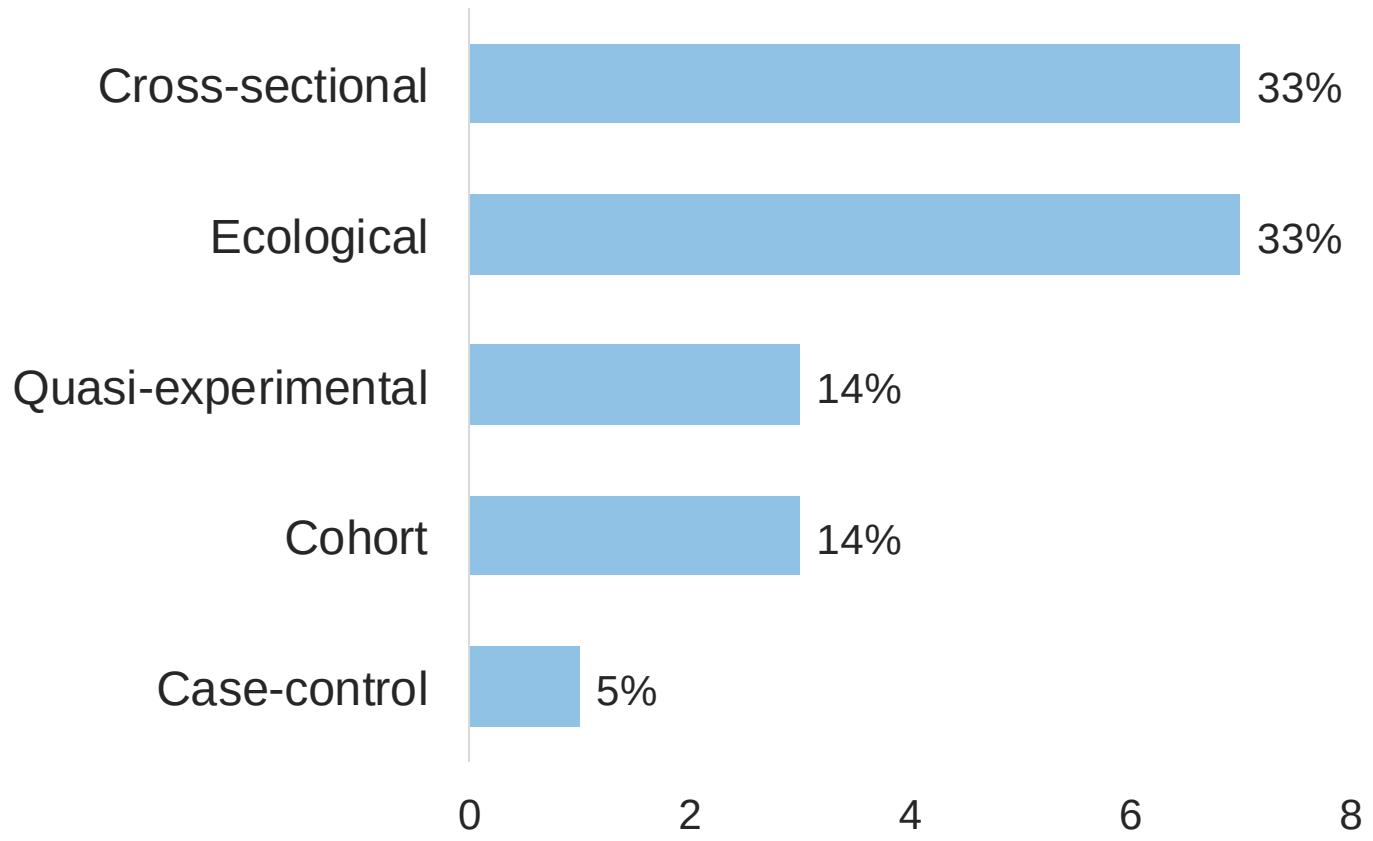
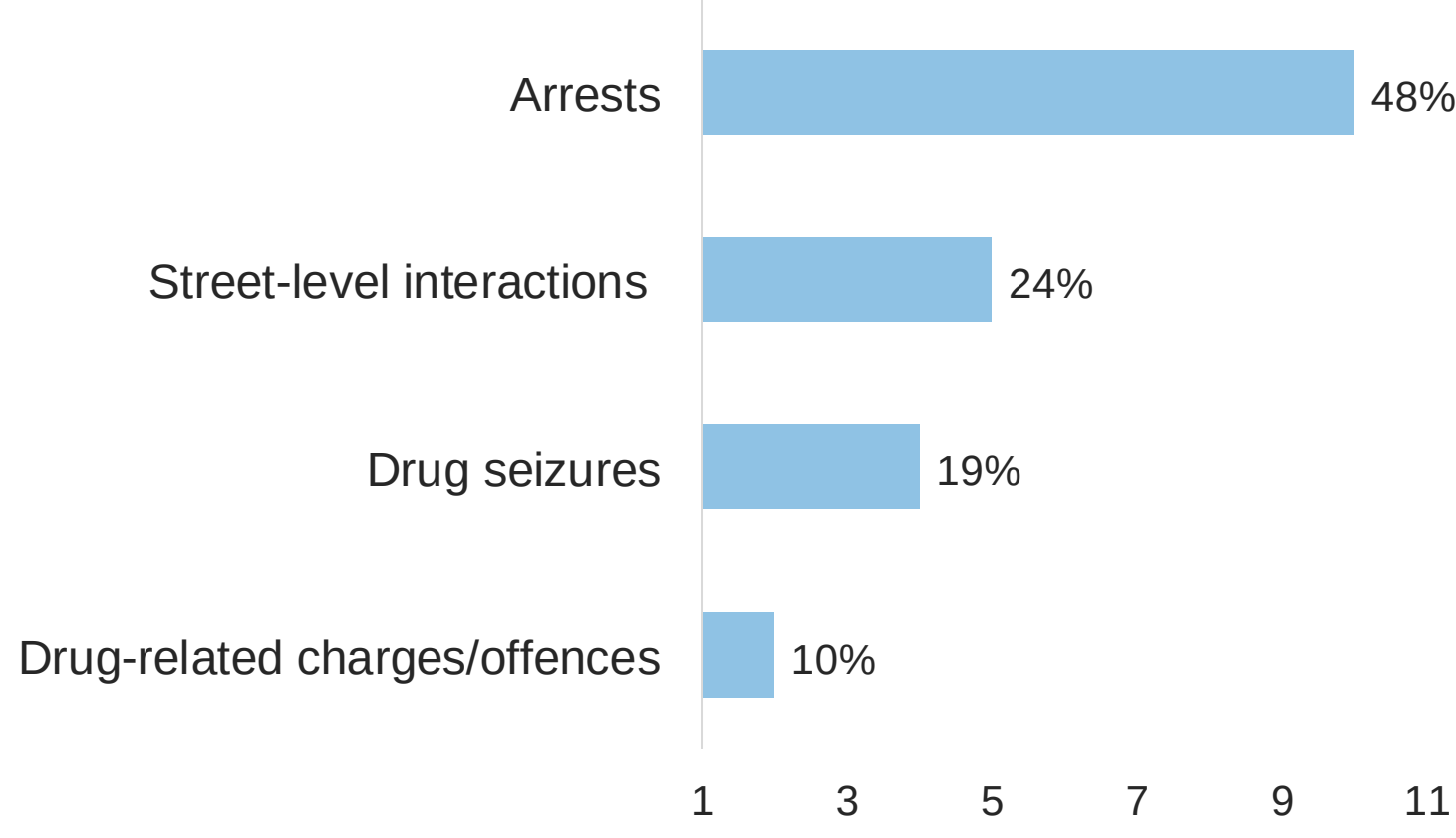


Figure 3. Measure of policing operationalized (n = 21).



Results

- **Over half of the studies were conducted in the United States (n=12)**; the remainder were conducted in Canada (n=3), Australia (n=1), Lebanon (n=1), Russia (n=1), Sweden (n=1), Switzerland (n=1), and the binational region of the United States-Mexico border (n=1).

Figure 4. Characteristic of overdose (n = 21).

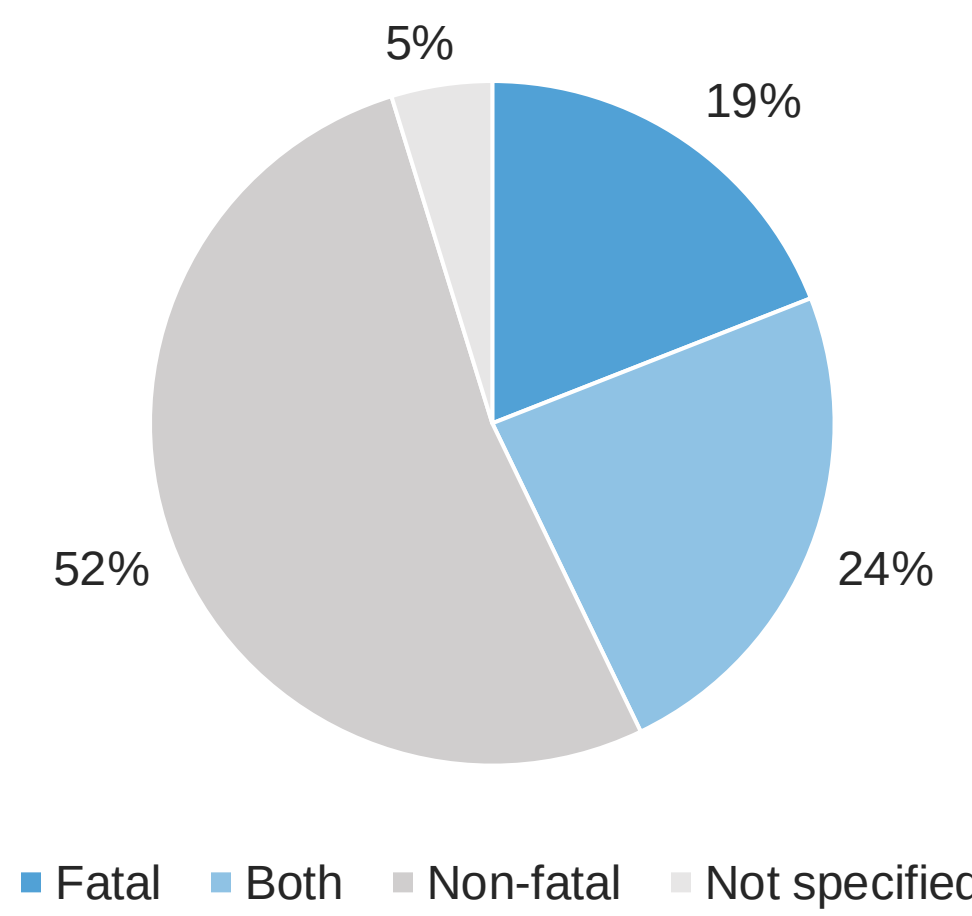
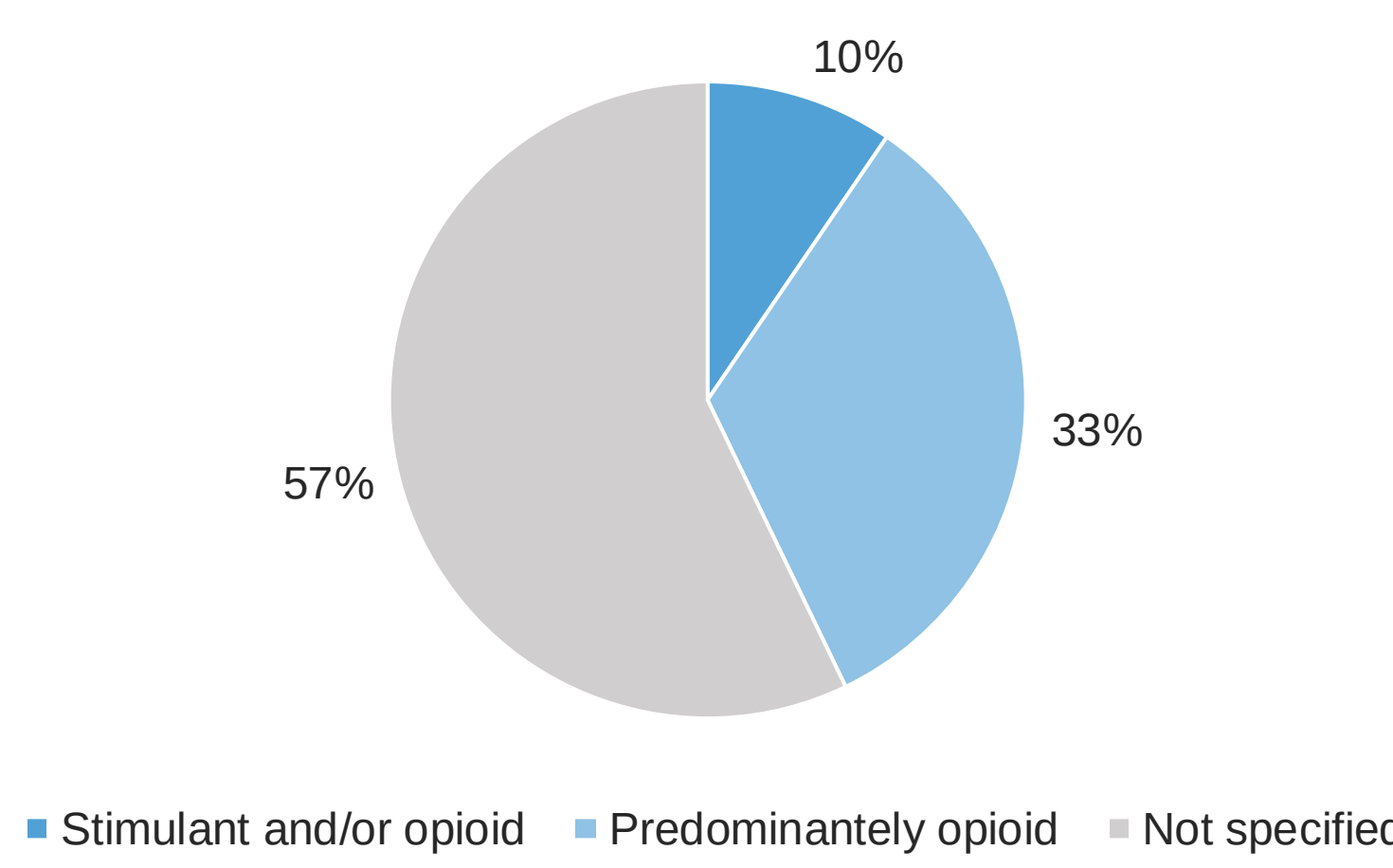
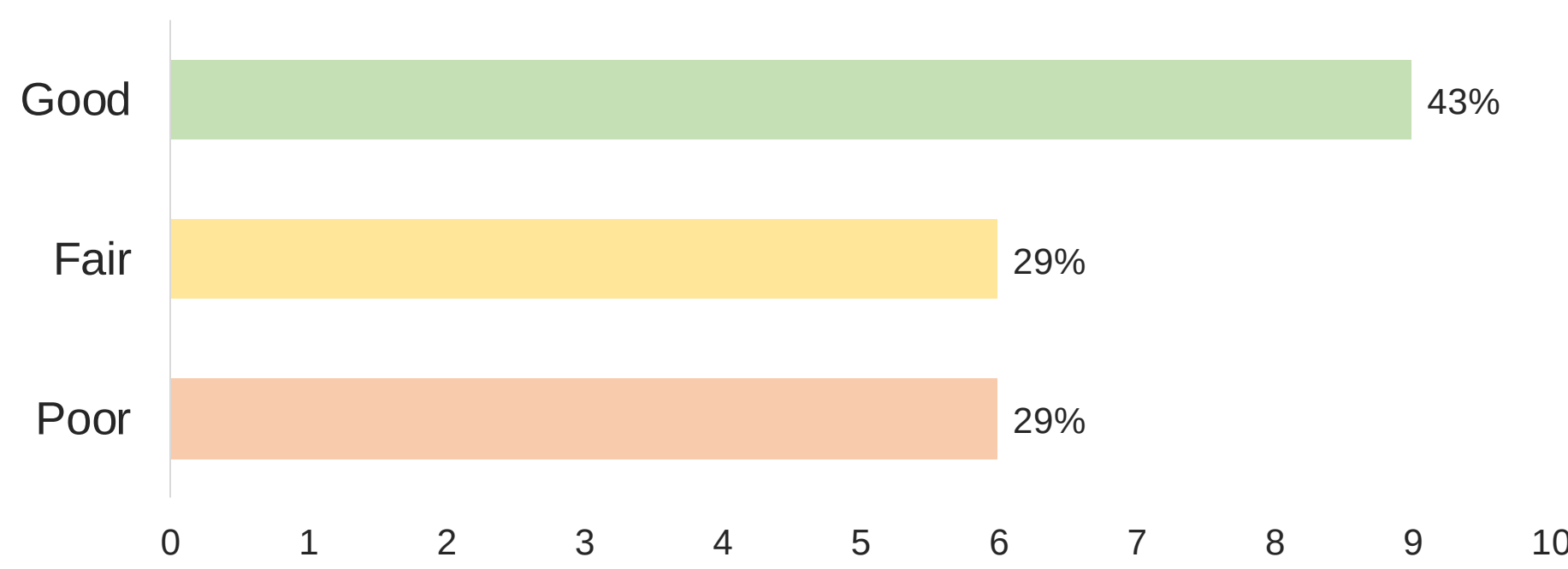


Figure 5. Type of substance attributed to overdose (n = 21).



- Of 21 included studies, **20 found associations in the hypothesized direction** whereby **policing was positively associated with the overdose** outcome measures.

Figure 6. Summary of risk of bias assessment (n = 21).



Limitations

- Heterogeneity across included studies precluded the pooling of effect measures.
- Selection bias may have been of concern given individuals who have overdosed are more likely to engage in higher intensity drug use or have severe substance use disorders, increasing their visibility and negative encounters with police.
- Included studies were restricted to English, French, and Spanish, limiting the scope of this review.

Conclusions

- An overwhelming majority of studies included in this systematic review found a positive association between policing and overdose.
- Findings suggest that policing practices such as drug law enforcement can increase overdose risk.
- Policy and legal reforms should strive to reduce the negative impact of policing on the morbidity and mortality of people who use drugs.

Acknowledgements

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This research would not be possible without the many contributions of people who use drugs, those that care for people who use drugs and those who we have lost due to fatal drug toxicity outcomes. We thank every individual for sharing in the spirit of collaboration, community care and making changes to better drug policy including within research.

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Declarations of Competing Interest

Dan Werb is a founder of DoseCheck, a commercial entity developing a mobile drug checking technology.

Abbreviations: JBI: Joanna Briggs Institute; PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-analysis

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