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Title	Public drug injecting in London, Ontario: a cross-sectional survey
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Reviewer 1	Dr. Tara Marie Watson PhD
Institution	Centre for Addiction and Mental Health, Institute for Mental Health Policy Research, Toronto, Ont.
General comments (author response in bold)	It is important to observe injection drug use patterns, including rates of public injecting, in smaller and mid-size municipalities as research and planning tends to focus on larger urban centres. I also appreciate the authors' evidence-informed recommendations for supervised injection services (SIS) and scaling up Housing First interventions in locations such as London, Ontario. I would suggest some relatively minor revisions, though. **We were pleased to see that Reviewer 1 felt that our paper was "important" and "evidence-informed". However, Reviewer 1 also requested that briefly clarify some language in the introduction and methods and provide some additional detail on the local context. We have made the following changes in response:** Re Introduction: 1. I'm not sure that "non-fatal overdose" should be listed among injecting risk behaviours such as needle sharing and not cooking or filtering drugs - or perhaps its place here needs brief clarification. **In the introduction, we have re-phrased "injecting risk behaviours" as "injecting-related risks" (1st paragraph, pg. 2) to avoid characterizing overdose as a risk behaviour.** 2. What is known about overdose rates in London? If this information is available, it deserves to be included in the Introduction or Discussion for greater context given the important waves of media and research attention to recent and increasing rates of fatal overdoses (often linked to opioids like fentanyl) across the country. This reinforces the need to address public injection and use of SIS. **We have cited available data to characterize overdose deaths in London (second-to-last paragraph of the Introduction, pg. 3): "In 2012, London's health region recorded prescription opioid-related deaths at twice the provincial rate. In recent years the number of overdose deaths in London has declined, potentially related to a shift towards crystal methamphetamine use among people who inject drugs."** Re Methods: 3. The sentence that explains responses to the question about public injecting frequency could be made clearer, and perhaps use quotations instead of italics. **We have also revised the description of the public injecting outcome for greater clarity (Measures, pg. 5): "Participants were asked, "In the last six months, how often did you inject in public or semi-public areas like a park, an alley or a public washroom?". Response options included never, occasionally (less than 25% of the time), sometimes (25-74% of the time), usually (over 75% of the time), or always. Responses were categorized to create variables indicating any public injection (yes vs. no) and regular public injection (our outcome), defined as yes (vs. no) if respondents indicated injecting in public sometimes or more often (26-100% of the time)."** 4. I'm curious as to how "drug selling" was defined? Perhaps briefly indicate in brackets. **To clarify how "drug selling" was defined, we have added new text in parentheses (Measures, pg. 5): "(reporting "selling drugs" as a source of income)"** 5. Very minor point, for clarity, I would consider rewriting one sentence to read as: "Between March and April 2016, three peer research associates used electronic tablets to administer the quantitative survey to 199 individuals." **Rather than rewriting the sentence beginning with "Between March and April 2016", we split the sentence up as part of reorganizing the methods section. This sentence now reads (Recruitment, pg. 4): "Survey data were collected between March and April 2016 by three peer research associates."** Re Discussion: 6. Please see my earlier comment about local context regarding overdose rates. 7. The Best Practice Recommendations for Canadian Harm Reduction Programs Part 2 (Strike et al., 2015) has a chapter on housing service referrals that discusses more evidence regarding Housing First. I would recommend also citing this resource when discussing the need to scale up such housing interventions. **We have added a reference (#23) to The Best Practice Recommendations for Canadian Harm Reduction Programs Part 2 (Strike et al., 2015).**
Reviewer 2	Dr. Dana Paquette PhD MSc BA
Institution	Public Health Agency of Canada, Ottawa, Ont.
General comments (author response in bold)	This manuscript describes the prevalence and correlates of public injecting in the smaller municipality of London, Ontario, and provides valuable information for London and other similar municipalities who are challenged with increased rates of HIV and hepatitis C among people who inject drugs. While generally methodologically sound, this manuscript would be strengthened by further clarifications in the methods, results and discussion sections. 1. Confounding and interactions do not appear to have been assessed. Describe more fully how confounding and interaction (i.e., effect modification) were assessed in the analysis. With regards to confounding: by only including variables that were significant at $p<0.05$ in bivariate analysis, the authors may have failed to take into account potential confounding variables, and/or variables whose significance was confounded by other variables. **We were pleased to learn that Reviewer 2 felt that our manuscript "provides valuable information for London and other similar municipalities" and is "generally methodologically sound". Reviewer 2 also suggested clarifications in the methods, results, and discussion to strengthen the manuscript.** **Reviewer 2 asked us to more fully describe how confounding and interaction were assessed in the analysis, and to consider residual confounding.** 2. In the results section, it would be useful to see the characteristics of the sample as a whole. Consider adding a column to Table 1 that describes the characteristics for the total sample. **Considering sample size and the absence of an empirical or theoretical basis to generate specific hypotheses regarding confounding or effect modification, we made an a priori decision to restrict the multivariable model to variables significant at $p<0.05$ in bivariate analyses and not to test for all possible interactions. We recognize that this may contribute to residual confounding. However, as we believed gender to be the excluded variable most likely to contribute to confounding, we conducted a post-hoc analysis including gender as a covariate in the**

	multivariable model. The results did not differ substantively, and thus we have retained our original analysis, as described in the manuscript. We would, however, be happy to undertake further revisions to address this concern if the Editor deems it necessary. **We have added a column to Table 1 describing the characteristics of the full sample.** 3. For the ethnicity variable, Indigenous peoples were combined with persons of colour. If the sample size allows, it would be useful to see these two categories separated. **Reviewer 2 also asked if we could separate the categories of Indigenous and persons of colour. Unfortunately, the sample size did not allow for this disaggregation (5 respondents were non-Indigenous people of colour). In addition, we did not have a specific rationale for investigating Indigenous ancestry as a variable, and thus (following CIHR guidelines) thought it would be inappropriate to do so.** 4. Describing the prevalence of 'Regular public injecting' was one of the objectives of this study, however there was no comparison of the prevalence of this outcome with that found in other Canadian cities in the discussion section. **The reviewer also noted that we did not compare the prevalence of regular public injecting with that found in other Canadian cities. Given differences in outcome definitions across studies, it is not possible to compare the prevalence of regular public injecting. However, we have provided proportions reporting any public injecting in other cities (Introduction, page 2, 1st paragraph) and we return to those figures in the discussion (last paragraph, page 7) and note that our estimates are comparable.** 5. In the discussion, it is noted that the use peer recruitment and interviewers contributed to success in reaching a diversity of PWID. The sample's characteristics did not seem to be diverse. Was it diverse in comparison with previous surveys? If yes, please clarify. **We have clarified the reference to "a diversity of" PWID in the discussion of strengths and limitations (page 9) by adding: "e.g., with respect to gender and race/ethnicity" in parentheses.** 6. Also in the discussion section, the authors indicate that public injecting appeared to be driven largely by unstable housing. Given the cross-sectional nature of this study, the authors should remove the suggestion of causation. **We have removed the suggestion of causation in the conclusion by revising the text to read (final paragraph, page 9): "public injecting was associated with unstable housing ...".**