

Review of the Shigella Stockholm abstract in view of the 20 tips

a. Use the different sections for the argumentation

1. TITLE.

- While one could argue the leakage could have been mentioned in the title, in general, the title emphasizes the results, and among those, the ones that are new. The title also mentions the time, place and person information.

~~2. INTRODUCTION.~~

- The two first sentences are unnecessary. This outbreak would have been investigated irrespective of the global burden of disease of Shigella and its mode of transmission. The two following sentences are good, with one sentence of rationale and one sentence of objectives.
 - **Possible fix:** Cut the two first sentences. Some of these ideas could be moved to the conclusions to show how this outbreak added to what we know of Shigella.

~~3. METHODS.~~

- ‘Univariable analysis’ is a label that can be replaced by a mention that you calculated matched or unmatched odds ratios. ‘Case cohort’ is not a standard design and could be described better. ‘STATA’ is just a programme name that is not necessary.
 - **Possible fix:** Mention the indicators calculated and the methods used to calculate them, describe how the authors constituted their case-cohort. Avoid ‘STATA’. One could say: We compared cases with controls drawn from the population registry of affected municipalities frequency-matched for age and sex. We calculated matched odds ratios and stratified by the water-supply area.

~~4. RESULTS.~~

- A key piece of data missing is the proportion of cases exposed that is important for the attributable fraction in the population. Also, the children are mentioned as more affected but there is no comparison displayed.
 - **Possible fix:** Add the proportion of cases exposed and display the data that documents that children are more affected (i.e., attack rate in other age groups).

~~5. CONCLUSION.~~

- The abstract misses a real conclusion. It goes directly from results to recommendation.

6. RECOMMENDATIONS.

- Generally, the authors identified an association between the leakage and the outbreak. Hence, their recommendation is appropriately focused on this point. One could argue that there is no evidence that the delay in intervention caused the outbreak. However, it could be considered as common sense that if the leakage would have been fixed immediately, there would not have been an outbreak.
 - Note that the recommendation could be that we cannot wait to have dysentery in children as an bioassay indicator for a faulty water-supply system-i.e. Additional controls should be implemented to detect hydraulic failures in water supply systems (e.g. pressure drop; continuous turbidity monitoring).

~~7. TECHNICAL REFERENCE.~~

- Of the 10 steps for outbreak, there is the alert (1), the laboratory confirmation (2) and the case definition (3). The case search (4) is missing and the descriptive epidemiology (5) is minimal. The analytical epidemiology (6) is present, but the conclusions absent (7) with little additional investigations (checking the pipeline), not much communication (9) but straightforward recommendations (10).
 - **Possible fix:** Check the 10 steps of an investigation and make sure they are all included.

~~8. SELF-CONTAINED ABSTRACT.~~

- On at least two occasions, the abstract is not self-contained. Data is presented for which there are no methods (no mention of the leakage in the methods). The methods mention a time, place and person analysis that is not displayed in the results. The conclusions refer to the water supply without any kind of environmental investigation.
 - **Possible fix:** Specify the data collection methods (and maybe how the authors came to ask questions about a leakage) and present the time, place and person data in the results. Add some information on the environmental investigation in the results.

b. Data presentation

~~9. Rounding up. Round up measures of associations and their CIs to two meaningful digits (e.g., 240, 24, 2.4, 0.24). Note that for three digits odds ratio, this involves rounding up (567 becomes 570). Remove decimals to round up percentages.~~

- The ORs have too many decimals.

- **Possible fix:** Round up measures of associations and their CIs to two meaningful digits (e.g., 240, 24, 2.4, 0.24). Note that for three digits odds ratio, this involves rounding up (567 becomes 570).

c. Writing style: The seven 'S'

~~10. Simplicity.~~

- Shigella is a 'major' cause of diarrhea and it is 'mainly' transmitted...
 - **Possible fix:** Remove imprecise statements or be more specific (In fact we know the introduction should be shorter).

11. Sequentiality.

- While the abstract could have described the time sequence (epidemic curve), the elements that are presented are sequential.

~~12. Short.~~

- The abstract has many redundancies, including the repetition of time, place and person elements between the title and the various sections, the laboratory confirmation (between methods and results), the p-values next to the 95% CIs and the break down by males and females.
 - **Possible fix:** Mention time, place and person elements only once (Maximize use of the title), don't repeat the laboratory confirmation in the results, delete the p-values and show only the proportion of females (The proportion of males can then be deducted).

~~13. Strong.~~

- 'Carried out' and 'used' are neutral verbs that do not carry meaning.
 - **Example:** They carried out a matched case-cohort study
 - **Possible fix:** We compared cases with a cohort selected....
 - **Example:** They used univariate analysis.
 - **Possible fix:** We calculated matched odds ratios and stratified by the water-supply area.

~~14. Systematic.~~

- Generally, the technical terms used are used appropriately, although one would want the author to display more description to back up the fact that this was indeed a case cohort approach (The lack of description can generate a doubt in the mind of the reader). However, the title mentions a 'Shigella outbreak', mixing up the pathogen and the disease. 'Shigellosis' or 'Shigella dysentery' maybe better terms.

15. Structured.

- The abstract follows the introduction, methods, results and conclusions structure.

d. Grammar

~~16. Prefer active voice.~~

- 'Controls were chosen' is a passive voice. However, it's only a stylistic issue as it does not hide an important subject. It's quite obvious that it's the investigators that made that voice.
 - **Possible fix:** We chose controls...(Not essential).

17. Select tenses appropriately. Use the past to report results and the present for established facts.

- Fine.

e. Abstract guidelines

18. Word count.

- Fine.

~~19. Check spelling and proof read.~~

- The English language needs a bit of polishing
 - **Possible fix:** Get assistance from a native English speaker (e.g., 'Mounth' instead of 'month')