

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Impact of Television Coverage on the Number and Type of Symptoms Reported During a Health Scare: A Retrospective Pre-Post Observational Study
AUTHORS	Petrie, Keith ; Faasse, Kate; Gamble, Greg; Cundy, Tim

VERSION 1 - REVIEW

REVIEWER	James Rubin Senior Lecturer King's College London UK
REVIEW RETURNED	28-Jun-2012

GENERAL COMMENTS	<p>I thought this was a fascinating paper, clearly presented and with a clear message. I have only a few minor suggestions.</p> <p>1. Figure one could be improved a little. First, it would help to draw in where news stories 1, 2 and 3 where. Second, I am a bit unclear when the problem first began. From Figure 1 it is very clear that the symptoms suddenly appear in June 2008. I can't tell from the figure whether all the symptoms suddenly all appear after this date (though Figure 2 suggests that they were), or whether they were building up throughout June. Is it possible to redraw the figure using daily or weekly symptom reports, rather than monthly? This might give a better illustration of the impact of News story 1.</p> <p>2. In the discussion, the authors suggest two possible mechanisms for the effects of media reporting – elevated anxiety among the public and increased expectation of symptoms among the public. I note that adverse event reports are normally made by GPs, pharmacists, hospitals and pharmaceutical companies. As a third mechanism, it seems reasonable to believe that a sudden furor over the medication would also alter the likelihood of of healthcare workers spotting, attributing and reporting symptoms among their patients. See, for example, Martin RM, May M, Gunnel D. Did intense adverse media publicity impact on prescribing of paroxetine and the notification of suspected adverse drug reactions? Analysis of routine databases 2001-2004. British Journal of Clinical Pharmacology 2006;61:224-8.</p>
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	<p>3. In terms of limitations, the authors mention confounding, but don't discuss this in any detail. Nor is the possibility of reverse causation mentioned. Is it possible that media outlets decided to run their stories because they were receiving increased reports of people suffering from symptoms? I think it is probably unlikely in this context, (especially for the effect of the first news report), but it would be worth considering, even if only to explicitly discount it.</p> <p>4. I wasn't 100% clear if the three news reports mentioned were the only three that occurred in the period under consideration. It might be worth being explicit about that.</p>
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REVIEWER	<p>Prof Simon Chapman School of Public Health University of Sydney, Australia</p> <p>I am a co-author with author K Petrie on one (unrelated) study which is under review. I have not published with him before.</p>
REVIEW RETURNED	05-Jul-2012

THE STUDY	"Data" is treated as a singular noun throughout, It is plural -- so "was" needs to be changed to "were" throughout.
GENERAL COMMENTS	This is a nice study which will have wide interest. I have one concern with it. On page 10, line 51 & Figure 1, the authors refer to "total adverse event reporting". I'm pretty sure they are referring here to total adverse event reporting about Eltroxin only, and not to total adverse event reporting of all kinds. This needs to be clarified. But it also raises one concern. It is possible that for some reason overall reporting of adverse events (from all causes) rose in the study period. There may have been some coincidental publicity about the need for reporting in medical circles for example. I imagine it would be easy for the authors to get data on whether there had been any overall change in reporting across the study period to address this potential (if unlikely) concern.

VERSION 1 – AUTHOR RESPONSE

James Rubin

1. Thank you for your suggestions for improving figure 1. We have modified the figure in line with suggestions from the managing editor and both reviewers (see above). The dramatic increase in adverse event reporting following the first television news report is now much clearer (page 21).

2. We have included in the discussion the possibility that media reporting increased the likelihood that healthcare professionals would ask about or notice these symptoms in their patients, attribute these symptoms to the new Eltroxin formulation and report them to CARM, and would like to thank the reviewer for the reference supplied which is now cited in the manuscript (page 15).

We have also noted that the adverse event reports received in response to the Eltroxin formulation change included a disproportionately high number of reports made by individual patients rather than by GPs or pharmacists in comparison to typical adverse event reporting patterns.

3. Potential confounding factors are now addressed in more detail (page 16). Additionally, the possibility of reverse causation is addressed (page 16-17).

4. As far as we are aware following our extensive search of the news media archives, the three television news segments investigated in this study are the only three that occurred during the time period under consideration (page 8).

Simon Chapman

1. 'Data' is now treated as a plural throughout, and "was" has been changed to "were" (page 8, 9).

2. Wording has been changed to reflect the fact that when we refer to "total adverse event reporting" we are indeed referring to "total Eltroxin-related adverse event reporting" (page 11, 14, 21).

We would like to be able to access data on overall reporting of adverse events for all medicines for this time period, as it is possible, though unlikely, that there was a substantial overall increase in reporting during the time period in question. Unfortunately this data is not readily available and would likely require a request to be made under the NZ Official Information Act, as was necessary with the current study data. We have added a sentence to the limitations noting the possibility raised herein (page 16).