Reviewer's report

Title: A focus group study of enteric disease case investigation: successful techniques utilized and barriers experienced from the perspective of expert disease investigators

Version: 1 Date: 2 October 2014

Reviewer: Cameron Moffatt

Reviewer's report:

MAJOR COMULSORY REVISIONS
Nil

N.B. I do not have a background in qualitative methods and analysis so I am unable to provide much comment on the study design. I have made the editors aware of this.

MINOR ESSENTIAL REVISIONS

Methods

Study design and ethical approval
Para 1 sentence 5. Could the authors define what "high quality" data is? I would consider data quality to include the factors listed in this sentence such as completeness, ability to identify a potential source (although I think this often requires greater knowledge of typing that may or may not be available to interviewers) and identifying cases that form outbreaks. Achieving a low loss to follow-up would be another marker too.

Discussion
Para 4 last sentence. It would be helpful to see some further discussion of what innate characteristics a successful interviewer might possess. Open-mindedness, analytical skills are mentioned but what else? Could this be expanded further please?

Para 5 - last two sentences - It would be beneficial to see this expanded into a separate paragraph that discusses in more detail the single interviewer approach, especially as this is a recommendation.

DISCRETIONARY REVISIONS

Background
Para 2 - last sentence - Would the data collected during case interviews not also be used to assist in compiling briefs of evidence, expert witness statements to aid, for example, the prosecution of food businesses, manufacturers etc., if cases were identified as part of an outbreak investigation? That could be mentioned.
Methods
Para 2, sentence 3. Are treating medical practitioners (physicians) not among the individuals with legal requirements to report to the Medical Officer of Health or is this effectively covered by laboratories who undertake for example stool testing at the request of a physician?

Results
Understanding contextual information
Para 1 - comment. Could the authors comment on whether interviewers routinely contact the case’s treating physician prior to interview? This approach is in my experience quite beneficial, particularly for obtaining demographic and contact details that may not be uniformly recorded by different pathology providers on reports. For example being able to obtain the name & relationship of a nominated next of kin for a child case or whether a case speaks English well or not at all are important in preparing for an interview and obtaining a successful / useful outcome. The clinician may also have access to alternate contact numbers or addresses that may not be routinely updated by pathology providers. There is also another dimension to clinician contact that I think is important and that is one of courtesy. While obtaining a clinician’s consent to speak with their case may not always be an absolute requirement because of competing public health need, it is useful to check with clinicians that they are happy for an interviewer to call. For example it can be inappropriate if a diagnosis is delivered by someone not directly involved in the case’s care. Contacting the clinician first gives them an opportunity to speak with the case as well as inform the case that public health investigators will likely contact them to discuss their illness further. A clinician can also answer whether there may be factors such as cultural, social or mental health issues that an investigator may need to be mindful of when interviewing.

Establishing rapport, easing case anxiety
As per previous comments I’d suggest that by contacting treating physician and checking about the case having knowledge of the diagnosis and an awareness of public health investigator interest that this can assist with easing anxiety. The case will be hearing the news of their diagnosis, (if a lab confirmed infection) firstly from someone they know or have sought care from. It would seem that there is considerable local variation between public health units with respect to processes around contacting cases?

Approaches to improving recall
As identified by authors in rapport section, an explanation of the interview purpose and I think structure is useful too. I think having structured interviews / questionnaires are essential as it gives the interviewer a degree of control and by outlining the structure initially, also provides a point to refer back to in those instances where cases have perhaps decided what’s made them sick and wish to cut to that point. Could the authors comment on whether there exists province-wide or nationally consistent questionnaires for enteric pathogens in Canada? It seems from results section that different tools and questions are
asked between units. Some are mentioned as additional questions which I think should probably be standard (certainly for some foodborne conditions e.g. salmonellosis), including shopping habits, product brands, grocery stores etc. In my view the food history component (e.g. 3 day or 1 week) is best handled in a semi-structured fashion that enables individual meals to be broken down and described in more detail.

Discussion
Para 4 - Authors could mention that other processes / methods that can be of use in identifying novel exposures include trawling and shot gun questionnaires.
Para 5 - sentence 1 - This sentence is a confusing to read, it potentially gives an impression there were both focus groups and expert investigator focus groups. Weren't all participants 'expert' by definition? Could this be reworded?
Sentence 2 - Regarding the challenges of culture and language the development of culturally specific food modules for specific groups could be another aid. Requires engagement with these communities to develop such tools.

MINOR ISSUES NOT FOR PUBLICATION
Background
Para 1, sentence 2 - delete 'was' & change to "... for the years 2007 to 2009 were ...
Para 2, sentence 2 - delete from 4) "if the definitive source is not identified" to read "4) determining the source or sources of the disease causing agent; .."

Methods
Data collection and analysis
Para 3, sentence 8 and sentence 12 - remove brackets for sentence beginning "Exclusion refers ..." and sentence ending "... healthcare setting or childcare." I don't think necessary to enclose in brackets.

Results
Para1 - last two sentences - suggest merging. "... compared to the non-participating health units, with the participating units serving approximately 75% ...

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests.