Reviewer's report

Title: A guidance for contact tracing of plane passengers with Viral Haemorrhagic Fever - Results of an expert consultation

Version: 1 Date: 13 July 2012

Reviewer: giuseppe ippolito

Reviewer's report:

General issues
I do not believe that the paper in the current version is suitable for publication on an peer-reviewed international journal as it is in the present form.

My belief is due to:
1. The paper does not represent an original unpublished research/data. It is in fact an extract from guidelines which was already published by ECDC on 2009 (revised in 2011) and available at http://ecdc.europa.eu/en/publications/Publications/1012_GUI_RAGIDA_2.pdf .
2. The paper does not meet the standard criteria for “systematic review” or “guidelines” reporting; to be worthy of being published in a peer-reviewed paper, the report would need:
3. At least a more formal description of methods for systematic review; I do suggest to apply “PRISMA-statement”, as also suggested by BMC-Public health editorial policy see at http://www.biomedcentral.com/bmcpublichealth/about ;
4. At besta transparent description of guidance production; this include the list of expert involved and the way they used to reach consensus for each specific issue (in this case authors might have a look to EQUATOR-statment).

In my opinion the author could decide to either to write an editorial/letter to explain the relevance of the RAGIDA’s work (in this case the paper should focus on the most relevant aspect of RAGIDA network) or to produce a formal systematic review/guideline (in this case expand methods and results in order to meet at least PRISMA statement’s requirement).

I report below my remark in details by section (please consider all remarks as “major”)

Background
Second paragraph :“In 2010, 5.04 billion passengers arrived and departed from 1318 airports worldwide, nearly half of them on international flights [1].” Please provide updated figures for 2011.

Second paragraph: “Although the air transportation of a passenger suffering from a VHF is rare, the severe potential outcome of the disease and the public perception of its infectiousness result in high public attention, sometimes even panic. Often this public pressure influences the decision on public health
measures, such as passenger trace back more than the existing evidence.” To my knowledge, in EU there was no major event of VHF transmission due to air transport, nor did events of “panic” occur in EU due to fear of VHF outbreak. In fact, in my opinion, there is not a strong perception of the potential risk of VHF in public opinion. Please remove the statement or provide evidence for it.

Second paragraph: “Absence of guidance documents to help the decision on necessity and scale of the trace back contributed to this variation.” Actually full RAGIDA guidelines has published this since 2009 by the ECDC. This guideline are periodically updated, open access and contain the same data here reported. To me there is no reason to duplicate publication of a short extract of them on a peer-reviewed journal.

Third paragraph: “This article will report on the recommendations of the expert panel on the VHFs Lassa, Ebola and Marburg haemorrhagic fevers in order to advise the wider scientific and public health community and other relevant stakeholders on the decision to implement a passenger trace back and indicate the scale of the response.” (see above)

Methods

I believe that author should decided either they are going to publish an original paper or an editorial/letter about their work in RAGIDA network.

In case they are going to publish an original paper please:

1. Describe systematic review procedure, this should include research strategy and the way of literature analysis. For a detailed description of systematic review reporting please (see general issue above).

2. Describe the way the expert reach consensus and provide a list of all participants with their position. This will make the report more transparent.

In case the authors are going to publish an editorial/letter about the relevance of RAGIDA network they needn’t methods and results sections.

Results


as an example:

Page 4 current paper is “A detailed systematic literature review identified nine incidents of Lassa haemorrhagic fever cases being imported into Europe, (including one case which was in transit in London while travelling to the U.S.) between 2000 and 2010 [6-15]. Details about contact tracing were available for seven of the events. Contact tracing was initiated in all seven events because the index cases were symptomatic on-board, and the incubation period still allowed for preventive measures to be taken. In two events, a comprehensive search was initiated, and passengers could be traced because their seat location in relation to the index case’s seat was known. Contact tracing was done by actively contacting passengers with the help of manifests provided by the airlines.
179/293 contacts were successfully traced, and none developed the disease [4]. The literature review showed that the existing evidence suggests a low risk of transmission of Lassa haemorrhagic fever during air travel, it also suggests that the risk remains low even if a high risk exposure occurred [7, 10]."

ECDC document page 18 “A detailed systematic literature review identified nine incidents of Lassa fever cases imported into Europe, (including one case which was in transit in London while en route to the US) between 2000 and 2010 (1–10). Details about contact tracing were included for seven of the events in the literature review. Contact tracing was initiated in all seven events because the index cases were symptomatic while on board, and the incubation period still allowed for preventive measures to be taken. A comprehensive search was initiated for two events: passengers could be traced because their seat location in relation to the index case’s seat was known. Contact categories according to risk exposure were applied in two events. Contact tracing was done by actively contacting passengers with the help of manifests provided by the airlines. 179/293 contacts were successfully traced, none were infected (11). The literature review showed that while the existing evidence suggests a low risk of transmission of Lassa during air travel, it also suggests that the risk remains low even if a high-risk exposure occurred (2, 5).”

1. Being this the result of a systematic review the overall number of publications retrieved and the selection process should have been shortly described. I suggest to produce a flow-chart to describe the search and selection process.

Guidance

1. Being this a guidance for diseases specific intervention to be implemented in the real life a clear case definition should be explicitly reported. I would eliminate table 1 and report proper case definition and proper case-contact definition instead. In particular author could consider to depict specific scenario. In fact, as reported by the WHO, and proved elsewhere (New Microbiol. 2009 Oct;32(4):359-67), case definition for VHF have low sensitivity and specificity and they may need to be adapted for different specific scenario.

2. There is no mention of the use of molecular technology for case identification. Nevertheless the paper addresses specifically only 3 VHF pathogens.

3. There is no mention on how the case-contact tracing should be performed.

Discussion

First paragraph “But other facts have to be considered as well, such as: no treatment is available for Marburg and Ebola infections; hence reasons of starting a contact tracing should be to raise awareness and prevent onward transmission.” This is an arguable statement. In fact, even though no standard treatment for Ebola and Marburg is available by now, relevant experimental experience has been recently published (BMC Medicine 2012, 10:31). In addition if a standard effective treatment were available, given the severity of VHF by Ebola and Marburg the contact tracing would be even more urgent for preventing the contact to became case and eventually die and/or produce additional cases.

Second paragraph “In the absence of specific incidents involving body fluids, the
I’m not sure that the common use of toilet represent a negligible risk. First of all, you should assess if “specific incidents involving body fluids”, such a vomit episode, happened or not, and you should ask to the patient about it. This indication should be added in your paper as part of the decisional process. Moreover, you do not give any indications on actions to be done if the incident with body fluids happened. In this case, do you trace all passengers? Furthermore, even in absence of this specific accidents, during a not accurate use of the toilet you can contaminate your hands with urine or faeces, and after contaminate common surfaces, especially in a airplane toilet where the spaces are very limited. The common use of the toilet is in my opinion more significant than being seated a +1/-1 seat. I perfectly understand that this makes the contact tracing more complex, but I think that, if you really believe that the common use of toilet is not at-risk, you should better motivate/explain this.

Third paragraph:"We recommend trace back to be initiated following laboratory confirmation of the diagnosis. However, the airline should be contacted to enquire whether crew members remembered or recorded any incidents on board which might have resulted in potential exposures to crew or passengers and the availability of the passenger manifest while awaiting the laboratory result. This will facilitate prompt actions should VHF be confirmed. If a diagnosis cannot be laboratory confirmed in a timely manner, contact tracing should be considered if evidence is strongly suggesting VHF as the likely cause of disease in the index case." This should have been reported in details in the guidance section (see also guidance remark 2 and 3) as all the above are recommendation and not the discussion of results. In addition first statement is in contrast with the recommendation reported in the table which suggest to start contact-case tracing also for probable case (see first line in the table). I suggest to the author to consider to include a specific sub-section for action to be taken in guidance section. In particular this sub section should include laboratory diagnostic and advice on how the case-contact tracing is to be done.

Duplicate publication

Any manuscript submitted to a BioMed Central journal must be original. The manuscript, or substantial parts of it, must not be under consideration by any other journal.

In general, the manuscript should not have already been formally published in any journal or other citable form.

But, if made clear and justifiable upon submission, there are several exceptions to this rule. Details of the nature of overlapping or duplicate (redundant) publication, along with guidance in each of these cases follow below. These are also summarised in Table 1.

In any case where there is the potential for overlap or duplication we require that authors are transparent. Any potentially overlapping publications should be
declared on submission and, where possible, uploaded as additional files with the manuscript. Any overlapping publications should be cited. The Editors of BioMed Central's journals reserve the right to judge potentially overlapping or redundant publications on a case-by-case basis. Any suspected cases of covert duplicate manuscript submission will be handled as per the Committee on Publication Ethics (COPE) guidelines. BioMed Central endorses the policies of the International Committee of Medical Journal Editors in relation to overlapping publications.