

Review of: "Human health effects of volcanic eruptions – a systematic review"

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Potential competing interests: No potential competing interests to declare.

Dear authors,

I have the opportunity of reading your manuscript that seemed to me interesting but, at the same time, suffering of a main issue: the lack of contribution from a volcanologist.

The matter you discussed is examined just from the medical point of view, and looking at your references it is immediately evident that a lot of papers in the field by volcanologists are missing (strong dominance of titles from the medical side).

The lack of a volcanological expertise is also evidenced by the improper use of volcanological terms and definitions, about which I'll give you few examples:

- Line 4 of the introduction: living as far as hundreds of km away from the volcano caldera (calderas are only a type of all the possible volcanic structures).
- The whole second paragraph of the introduction should be completely rewritten: hot spot volcanism is not something generating "spontaneously" but is linked to precise structures of the mantle and to plate movements over hot spots, the morphological classification of volcanoes is imprecise and not causally linked to health issues, there is no evidence that higher air temperatures can influence volcanic activity, and so on.

Anyway, you considered only eruptions, but there are a lot of evidences in the related scientific literature that long term adverse human health effects can be induced by passive degassing during inter-eruptive periods (see Vulcano island in the Aeolian archipelago as an example). Moreover, it is worth nothing that Stromboli volcano, characterized by continuous volcanic activity whose effects on human health have been discussed in some papers, was not considered in your study.

As a concluding remarks, my opinion is that your work needs a robust revisions before being considered for publication, and I warmly suggest you to involve an expert in volcanology, because an accurate consideration of the volcanological aspects is, in my opinion, fundamental for adequately linking health effects to volcanic activity