

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Gaps in research on asbestos-related diseases: declining emphasis on public health
AUTHORS	Lin, Ro-Ting Soeberg, Matthew Chien, Lung-Chang Fisher, Scott Takala, Jukka Lemen, Richard Driscoll, Tim Takahashi, Ken

VERSION 1 - REVIEW

REVIEWER	Alfredo Menendez-Navarro
REVIEW RETURNED	24-Mar-2018

GENERAL COMMENTS	<p>This paper is an outstanding bibliometric analysis of trends and priorities in ARD-related research over the past 25 years. It uses an informative and appropriate strategy for their evaluation, and it provides valuable insights into the implications of the decline in public health research for the prevention of asbestos exposure worldwide. If some minor methodological issues can be properly addressed and the discussion enriched, this paper would be suitable for publication in BMJ Open.</p> <p>Please find below my comments and recommendations to authors:</p> <p>Page 5, line 8: Authors should clarify the field in which they have included these keywords (Title, Topic?) to improve our understanding of their search strategy.</p> <p>Page 5, lines 21-22: I am not sure whether this procedure should be carried out before or after retrieving the final data set. I find it strange to directly classify WoS categories into three areas such as laboratory, clinical and public health. It seems more logical to do this after analyzing the articles in the final data set.</p> <p>Page 5, line 41: Have the authors thought about the use of automatic classification techniques to supplement and validate their approach?</p> <p>Page 6, line 58: The significance level was set at 5%. If a pragmatic or heuristic choice, this should be stated. If not, please cite reference(s) supporting this decision.</p> <p>Page 7, line 3: I replicated this search strategy but retrieved a different set of documents. Can the authors explain why this could occur or provide any additional parameter(s) used in their search? I attach WoS screenshots showing the results I obtained using the strategy described in the paper.</p> <p>Page 8, line 37: The statement on the selection of papers published in English should appear earlier in the paper (e.g., Methods > Data source). Is this the reason for the aforementioned</p>
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	<p>discrepancy in datasets? What influence could this decision have on the final results?</p> <p>Page 10, lines 14-16. As the authors suggest, further research is needed to assess the funding situation of ARD-related research, paying more attention to the impact of austerity policies on public health. It is well documented how cuts to health programs have affected health levels, but less attention has been paid to the impact of austerity on public health research. Public health researchers have a greater dependence on public funding in comparison to researchers in other areas. Furthermore, the smaller size of research groups in this area makes their research projects more vulnerable to cuts in funding and jobs. Exploration of these issues among the top 11 countries in ARD research could improve our understanding of this situation. The authors could also discuss the under-recognition of ARD rates by national insurance systems. Low recognition rates contribute to the lack of visibility of this issue in the public arena and therefore in public agendas.</p> <p>Page 11, line 2: When discussing the study limitations, authors should consider that a complementary automatic classification method (clustering on keywords, journals, etc.) could be useful to refine the authors' classification.</p>
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REVIEWER	Paul Cullinan
REVIEW RETURNED	09-Apr-2018

GENERAL COMMENTS	<p>This is a nicely conducted analysis of the published literature on asbestos-related disease between 1991 and 2016. The findings and main message indicate a decline in the number of relevant papers, in particular those relating to 'public health'; there are some interesting findings in relation to papers emanating from different countries. The manuscript is very clearly written and well referenced.</p> <p>While this will serve as a call to arms for those working in the field - and those responsible for the allocation of research funding - it is (alas) a fairly esoteric argument that may not appeal widely to the readership of BMJ Open. While research is important, especially in countries where asbestos is still used widely (and where we have no idea of the scale of the problem), it is politicians who in the end will have to act.</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewers' Comments to Author:

Reviewer #1

This paper is an outstanding bibliometric analysis of trends and priorities in ARD-related research over the past 25 years. It uses an informative and appropriate strategy for their evaluation, and it provides valuable insights into the implications of the decline in public health research for the prevention of asbestos exposure worldwide. If some minor methodological issues can be properly addressed and the discussion enriched, this paper would be suitable for publication in BMJ Open.

Response: We would like to thank you for reviewing our manuscript and providing constructive suggestions, which helped to improve the quality of our manuscript. We have carefully revised the manuscript, and provide our responses as below.

Please find below my comments and recommendations to authors:

1. Page 5, line 8: Authors should clarify the field in which they have included these keywords (Title, Topic?) to improve our understanding of their search strategy.

Response: Thank you for your comment. We entered our keywords under the search field "Topic" on the Web of Science platform. We agree to clarify the field in the text: "We entered our keywords under the search field "Topic," which includes Title, Abstract, Author Keywords, and Keywords Plus® on the Web of Science platform.[16]" (new page 5, paragraph 1, line 3). In addition, we provided our search steps and records in Appendix 1 of this response letter. Although the platform appears in Chinese, the keywords and search field can be observed.

2. Page 5, lines 21-22: I am not sure whether this procedure should be carried out before or after retrieving the final data set. I find it strange to directly classify WoS categories into three areas such as laboratory, clinical and public health. It seems more logical to do this after analyzing the articles in the final data set.

Response: Thank you for your comment. It is impractical to classify categories on the WoS platform. Instead data obtained from the WoS were imported into the InCites™ (Clarivate Analytics) for categorization. In order to better address this point, we have moved and revised the sentence explaining our process in the paragraph of the data source: "Data obtained from the Web of Science were imported into the InCites™ (Clarivate Analytics) tool for further grouping and analyses.[17]" (new page 5, paragraph 1, line 9)

3. Page 5, line 41: Have the authors thought about the use of automatic classification techniques to supplement and validate their approach?

Response: Thank you for raising this point. Classifying a large volume of literature could be very handy but would increase the possibility of misclassification. In our study, we used the classification techniques on the InCites platform, where we could simply input subject categories of each research area. Hence all articles were classified into the appropriate research areas automatically.

4. Page 6, line 58: The significance level was set at 5%. If a pragmatic or heuristic choice, this should be stated. If not, please cite reference(s) supporting this decision.

Response: Thank you for your comment. We adhered to the author's guidance of the BMJ Open to report the significance level at 5% which we used in the data analysis. We realize that the choice is sometimes debatable. However, the 5% significance level is still widely accepted as a solid criterion to determine the significance of estimates. We added a citation to justify this choice. (new page 7, paragraph 1, line 2)

5. Page 7, line 3: I replicated this search strategy but retrieved a different set of documents. Can the authors explain why this could occur or provide any additional parameter(s) used in their search? I attach WoS screenshots showing the results I obtained using the strategy described in the paper.

Response: Thank you for raising this point. The difference between your search results and ours is that we searched the database "Web of Science Core Collection" whereas you searched the database "All databases." Although "All databases" includes more databases, the "Web of Science Core Collection" includes information indexed by the WoS, e.g., authors, addresses, funding

acknowledgment, and cited references. This means that the literature identified from the “Web of Science Core Collection” can be imported to InCites for further analysis. In contrast, this cannot be done for “All databases.” We appreciate that you highlighted the potential difference between users. To clarify this issue, we revised the sentence: “We searched for ARD-related publications in the database “Web of Science Core Collection” on the Web of Science™ platform (Clarivate Analytics) by using the keywords “asbestos” OR “mesothelioma.” (new page 5, paragraph 1, line 1) In line with Comment #1, we demonstrated our search steps and retrieved records in Appendix 1 of this response letter, which shows that the database we used was “Web of Science Core Collection.”

Please note that our initial search included data for 1990 and 2017. Data were incomplete for 1990 and 2017 because the ICD code for mesothelioma was endorsed in 1990 (as stated in the Method, Data source). Also there was a potential time lag between data on WoS and InCites, so it was reasonable to set our study period as 1991–2016. Accordingly, we noticed that the total number should be 15,405, after subtracting 677 in 2017 from 16,082 (see Step 4 in Appendix 1 of this response letter). We have corrected the number. (new page 7, paragraph 3, line 1)

6. Page 8, line 37: The statement on the selection of papers published in English should appear earlier in the paper (e.g., Methods > Data source). Is this the reason for the aforementioned discrepancy in datasets? What influence could this decision have on the final results?

Response: We apologize that our inclusion of the phrase “in English” was an error. We did not restrict language in our search strategy because we wanted our search to be as inclusive as possible. We have deleted the phrase “in English” from the sentence. (new page 8, paragraph 4, line 1)

7. Page 10, lines 14-16. As the authors suggest, further research is needed to assess the funding situation of ARD-related research, paying more attention to the impact of austerity policies on public health. It is well documented how cuts to health programs have affected health levels, but less attention has been paid to the impact of austerity on public health research. Public health researchers have a greater dependence on public funding in comparison to researchers in other areas. Furthermore, the smaller size of research groups in this area makes their research projects more vulnerable to cuts in funding and jobs. Exploration of these issues among the top 11 countries in ARD research could improve our understanding of this situation. The authors could also discuss the under-recognition of ARD rates by national insurance systems. Low recognition rates contribute to the lack of visibility of this issue in the public arena and therefore in public agendas.

Response: These comments are insightful and have stimulated us to think more. Regarding the impact of austerity policies, we would like to absorb your comment entirely and add a new sentence in the Discussion: “For example, austerity policies on public health in general can also impact public health research.” (new page 10, paragraph 2, line 2). In addition, regarding the under-recognition of ARD by national insurance systems, we would like to reflect your comment in a new sentence in the Discussion: “Furthermore, the capacity of national insurance system to detect and deal with ARD is an important factor,[29-31] whereby a limited capacity will obstruct visibility in the public arena, the public agenda and hence public funding.” (new page 10, paragraph 2, line 12)

8. Page 11, line 2: When discussing the study limitations, authors should consider that a complementary automatic classification method (clustering on keywords, journals, etc.) could be useful to refine the authors' classification.

Response: Thank you for this suggestion. In line with previous comments #2 and #3, we have stated that data retrieved from WoS were imported into InCites for further grouping and analyses. (new page 5, paragraph 1, line 9).

Reviewer #2

This is a nicely conducted analysis of the published literature on asbestos-related disease between 1991 and 2016. The findings and main message indicate a decline in the number of relevant papers, in particular those relating to 'public health'; there are some interesting findings in relation to papers emanating from different countries. The manuscript is very clearly written and well referenced.

While this will serve as a call to arms for those working in the field - and those responsible for the allocation of research funding - it is (alas) a fairly esoteric argument that may not appeal widely to the readership of BMJ Open. While research is important, especially in countries where asbestos is still used widely (and where we have no idea of the scale of the problem), it is politicians who in the end will have to act.

Response: We would like to thank you for reviewing our manuscript and your many constructive comments. We concur that policy is extremely important to tackle asbestos-related issues. The importance of having evidence-based policies is also increasingly recognized. As ARD takes on the dimension of global health, the need for multidisciplinary cooperation on a global scale is growing. We hope the revised the manuscript has improved and that policymakers and researchers concerning ARD take interest in this manuscript.