

## Peer Review File

Article information: <http://dx.doi.org/10.21037/jtd-20-3516>.

### **Review A:**

Comment 1: Freudenberger and Shah have written a nice, succinct review of the literature on age, sex, race, and socioeconomic disparities in the treatment of mesothelioma. This is an underappreciated topic. Their references are appropriate and thorough, and the writing overall is clear. There are numerous areas where the punctuation should be reviewed and the entire manuscript should be carefully read again and corrected. Otherwise, I think this article is a nice contribution to the literature. I would also suggest a change in the title: “socioeconomic” does not really cover such variables as age, sex, and even race. I believe the term more narrowly refers to income level, insurance status, and the such.

Reply 1: Thank you for the criticism and comments. The title has been edited to more broadly reflect the health disparities associated with malignant pleural mesothelioma rather than specifically the socioeconomic disparities. Additionally, the grammar and punctuation has been edited throughout the article.

### **Review B:**

Comment 1: The title of this manuscript promises a review of socioeconomic disparities while discussion of this issue is limited to lines 170-174.

Reply 1: Thank you for the criticism and comments. The title has been edited to more broadly reflect the health disparities associated with malignant pleural mesothelioma rather than specifically the socioeconomic disparities.

Comment 2: References mainly concern publications from the USA and many remarks state the obvious.

Reply 2: Additional information was added to the Methods section to identify the number of studies from the United States vs elsewhere. Also, throughout the review edits were made to make it apparent when data from other countries was being discussed in order to be completely transparent about the country of origin of the data.

### **Review C:**

Comment 1: Although the discussion about socioeconomic influence on the treatment of mesothelioma is not new, this review provides an interesting overview on potential factors influencing treatment possibility and decision.

Reply 1: Thank you for the comments.

**Review D:**

This narrative review examines the demographic and socioeconomic factors associated with disparities in MPM diagnosis, treatment, and survival. While the topic is important, the manuscript has many limitations and requires greater methodological rigor.

Thank you for the comments and criticisms. Please see below for everything that was addressed.

Comment 1: Overall:

The manuscript could benefit from English language editing

Readability of the manuscript would be improved by removing or editing questions posed to the reader. For example, in the abstract, the sentence “Are there any factors, specifically socioeconomic health disparities, that can be identified that are contributing to the disease’s dismal prognosis?” could be rewritten to say “Questions remain about factors, specifically socioeconomic health disparities, that contribute to the disease’s dismal prognosis.”

Reply 1: Grammar and punctuations were reviewed throughout the text and edited. All of the posed questions in the text were reworded to no longer be in question format.

Comment 2: Abstract:

The abstract implies that the focus will be specifically on socioeconomic disparities, but later says it will focus on demographics (ie: age and sex).

Reply 2: The abstract was edited to replace “socioeconomic disparities” with “health disparities” as this more broadly encompasses the topics that were reviewed and addressed later in the review.

Comment 3: The abstract specifically mentions geographic location, but there is no discussion of geographic location in the text. Are the authors referring to disparities in different countries, or in urban/rural locations?

Reply 3: Geographic location was originally used in reference to discussing access the medical centers. As this could be an area of confusion, the term was removed and replaced with “access to medical centers” to make it more precise.

Comment 4: Introduction:

MPM is a rare cancer, so it's not entirely accurate to say the incidence is "still high in countries where asbestos continues to be manufactured and used...", even if it is *higher* than in places where asbestos use has been restricted. This may be clearer if accompanied by actual incidence rates.

Reply 4: Data regarding trends of mortality in the United States versus other countries throughout the world were included to show that although mortality may be trending down in some countries, it is actually rising in others.

Comment 5: The authors say that "diagnosis and management of MPM is beyond the scope of this article", but the next paragraph specifically says that this review will address "diagnosis, treatment, and prognosis of MPM". Please provide a clear statement in the introduction about the focus of this review.

Reply 5: This sentence was clarified to state that the specific modalities used in the treatment (i.e. types of chemotherapy or surgery) and diagnosis of MPM would not be discussed, but how health disparities affect patient diagnosis, treatment, and prognosis would be.

Comment 6: Methods:

Please provide a complete list of the exact search terms used to identify relevant studies, as well as how articles were screened, and selected for inclusion in the review. It would be helpful to include a PRISMA diagram to summarize study selection. This should include the number of studies identified through the search terms, and why studies were excluded. There is currently no way to know how relevant articles were selected.

Reply 6: A table of search terms was included. Additionally, further inclusion and exclusion criteria were defined. Given that this is a narrative review that is providing an overview of the topic of health disparities associated with MPM, a PRISMA diagram was not included because this is not necessary in such a review. The methods section of this review was designed as outlined in the article by Green et al. which is the article the Journal of Thoracic Disease references in how to write a narrative review (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2647067/>).

Comment 7: Please include a sentence detailing how many studies were included in the review. It would also be helpful to have a table summarizing the included studies

(ie: author, year, demographic factors examined, outcomes reported). This could be organized by the topics discussed in the manuscript.

Reply 7: A few sentences detailing the number of articles included in this review were added to the methods section.

Comment 8: Did this review include studies from multiple countries? If so, it would be helpful to have a breakdown of the geographic distribution of the studies, as well as to discuss differences in the context of when different countries restricted asbestos use (ie: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7082259/>)

Reply 8: The geographic breakdown of the articles included was included in the Methods section. Additionally, throughout the review edits were made to make it apparent when data from other countries were being discussed in order to be completely transparent about the country of origin of the data.

Comment 9: The methods suggest that meta-analyses and reviews were included for this review. Please confirm whether there are any repeats of studies due to this (ie: an individual study included on its own, and as part of a review/meta-analysis).

Reply 9: A breakdown of the study designs of the articles was included in the methods section.

Comment 10: Did the authors undertake any quality review of the included studies?

Reply 10: All articles were selected from peer-reviewed sources.

Comment 11: Discussion:

The discussion could benefit from increased focus in each section. For example, it is unclear why rates in urban and rural areas are mentioned in the section about “Disparities in Sex”.

Reply 11: The above reference was removed as it was clear that this could lead to some confusion to the reader. Other similar incidences were edited as well to make the discussions clearer.

Comment 12: When the authors say that “MPM affects white patients significantly more than blacks and patients of other races”, do they mean that MPM is significantly more common among white patients? The current statement is not clear as to whether

the authors mean MPM is more common among those of white race, or that white patients with MPM experience more clinical effects than black patients with MPM.

Reply 12: This sentence was edited to clarify that MPM has higher incidence in whites compared to blacks with appropriate data provided.

Comment 13: Although this review does not include a meta-analysis, it might be helpful to include some statistical measures from the included studies to provide quantitative estimates.

Reply 13: Additional statistics and statistical parameters were added throughout the text to bolster the claims that were being made.

Comment 14: It is especially important to address whether this review includes studies from countries outside the US in the section on “Disparities in Economics”. This section appears to be focused on the US, but other countries with wider/government run healthcare may be interesting comparisons.

Reply 14: This was addressed by stating that all studies in this review that addressed insurance and coverage were all from the United States.

### **Review E:**

The manuscript provides a nice review of the socioeconomic disparity issues in the treatment of malignant pleural mesothelioma. Please see below for comments.

Comment 1: I believe a summary Table or Figure that summarizes the findings (with pertinent references) would add value.

Reply 1: Table 2 was added to the review to give an overview of the factors that were discussed that are associated with worse and better survival in MPM. This brief table was added because it can allow readers an easy way to identify the key findings discussed in the paper that summarize where current health disparities exist with this disease.

Comment 2: Some minor grammar mistakes:

- a. Line 93-94 – instead of “how does patient age ~ MPM?”, this should be “how patient age ~ MPM.”.
- b. Line 114 – “a” before “typically” is not necessary.
- c. Line 126 – there needs to be a comma before “increasing”.
- d. Line 167 – “men more women”?

e. Line 177 – there needs to be a comma between “average” and “rates”.

Reply 2: Thank you for the criticism and comments. All of the above grammatical errors were fixed and additional grammar and punctuation were edited throughout the article.

**Review F:**

Comment 1: Please see attached versions (one with tracked minor changes).

Reply 1: Thank you for the edits, they were incorporated.