## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

## **ARTICLE DETAILS**

TITLE (PROVISIONAL)	"It feels like being trapped in an abusive relationship": bullying prevalence and consequences in the New Zealand senior medical workforce; a cross-sectional study
AUTHORS	Chambers, Charlotte; Frampton, Chris; McKee, Martin; Barclay, Murray

# **VERSION 1 – REVIEW**

REVIEWER	Wendy Crebbin
	Royal Australasian College of Surgeons
	Australia
REVIEW RETURNED	05-Nov-2017
GENERAL COMMENTS	Overall well written and clear presentation of a complex analysis.  No reference to ethics.
	Only Figures 1 & 2 are referred to in the text - other Figures do not have titles.
	The Strobe checklist is not listed as a reference and is probably redundant here.
REVIEWER	Freda Ganz
	Hadassah Hebrew University
	Jerusalem, Israel
REVIEW RETURNED	12-Nov-2017
GENERAL COMMENTS	A well written manuscript on an important topic
	Several comments:
	a. The number of subjects who self-reported being bullied changes
	over the course of the results section. Is this because different
	numbers of subjects answered this particular section of the questionnaire?
	b. I did not see any discussion of ethical approval for the study
	c. perhaps the manuscript could benefit from a statistical model that
	looks at the relative contributions of each of the factors that
	contributed to bullying -such as specialty, whether from foreign

REVIEWER	Dr Hannah S Barham-Brown
	Junior Doctors Committee, British Medical Association,
	United Kingdom
	Deputy Chair for Professional Issues of the UK Junior Doctors

REVIEW RETURNED	18-Nov-2017
GENERAL COMMENTS	A fascinating and very well written, non-sensationalist paper - thank you.  I feel there needs to be a little more in the way of research ethics here; the authors state that emails were received by people not participating due to concerns re being identified, but little response is made to this; were these concerns founded? Were respondents linked into services that may provide them with support as a result of participating? Should they have been? Do we have a responsibility to these participants?  Results: a large % of Psychiatrists compared to other specialties, but this is not highlighted in Results section, whereas gender and one DHB are. Is this % representative of the number of Psychiatrists practising in NZ?

Committee of the British Medical Association

#### **VERSION 1 – AUTHOR RESPONSE**

### Reviewer 1:

Thank you for your positive feedback. Regarding the reference to ethics, we have included a more explicit statement explaining this issue on p4. The study was deemed outside of the scope for ethical approval from the national ethics committee due to the anonymous nature of the data collected and the online mode of delivery.

Figures 1 and 2 are referenced as noted but the other figures are supplementary files and are noted as supplementary figures a and b (p 9).

We defer to the editor but in our experience the strobe checklist is submitted with papers as information for the editors and is not usually referenced explicitly in papers, but if we have misunderstood we are happy to include a reference.

## Reviewer: 2

Thanks for the positive feedback. The numbers who responded to the self reported bullying question is of course constant but as the reviewer indicates in different summaries this sample sizes changes a little. This is a consequence of the changes in sample sizes associated with the individual demographic and work related measures and it is these measures we are exploring as potentially associated with self-reported bullying. The sample sizes for the individual questions are evident in table 1. The 563 individuals who self-report refers to those who also left comments (not all did). We have now added a few words to clarify this as follows: "and chose to leave comments (n=563)" (p11) to explain the reduction from the n=606.

### Ethics comment as above.

We agree with the reviewer on the point re. a statistical model and it was our intention to further explore the independent role of putative contributors to bullying using a multivariate model. However, despite the bullying rates being higher than anticipated we still do not have a sufficient sample size to tease out the independent (unconfounded) contribution of the many factors we have identified as

being associated with bullying. As a consequence we have purposely not overstated the direct role of the factors we have identified as statistically associated with bullying.

#### Reviewer: 3

REVIEWER

Thanks very much for the positive feedback. Re. your comment about ethics, this is an important point; as explained above the research as a whole was deemed outside of the scope for formal ethical review. All responses were anonymous and there was very little chance of identifying participants as no analysis was undertaken on a line-by-line basis i.e. all responses were analysed in aggregated form. Nevertheless, and despite these assurances, many were reluctant to participate. We took this as a sign of the heightened anxiety and stress around the issue of bullying which is interesting data in itself. Given the tight word limit we were unable to fully explore these issues in the paper, but we have added in some additional lines which flags up these issues (p4 & 6).

Respondents were not directed to any specific services after completing the survey. The ASMS is the professional association and union for all those who responded so it was stated in the email that accompanied the survey link that if any issues were raised as a consequence of participating in this research, they could contact either Charlotte Chambers as the primary contact or their industrial officer for further support. We suspect this is why Charlotte received a fair amount of correspondence from individuals, some of which were referred on to the industrial team of the ASMS. Having a more formalised statement at the end of such research is something that we probably could improve upon and make clearer in future studies; thanks for highlighting this issue.

Regarding the seemingly high number of psychiatrist respondents, there are approximately 700 psychiatrists in New Zealand, many of whom are not ASMS members or work exclusively in private practice. The number of psychiatrist respondents (n=178) therefore, generally reflects the overall SMO response rate and if anything the psychiatrists may in fact be slightly underrepresented in our sample.

## **VERSION 2 - REVIEW**

Wondy Crobbin

REVIEWER	Wendy Crepbin
	Royal Australasian College of Surgeons
REVIEW RETURNED	05-Dec-2017
GENERAL COMMENTS	A difficult subject addressed well
REVIEWER	Freda Ganz
	Hadassah Hebrew University School of Nursing
REVIEW RETURNED	11-Dec-2017
GENERAL COMMENTS	I found this manuscript to be well written and of great interest. I have
	several comments related to specific aspects of the manuscript:
	1. The most common negative behavior was excess workload.
	There was a brief mention in the discussion section about workforce
	issues in NZ. I believe that is result needs to be further explored. Is it
	really bullying when a senior physician is over-worked?
	2. The study population were those physicians who are essentially at
	the top of the "food chain". What are the implications for the entire
	system given this fact?

- 3. The reason behind submitting the figures on pages 21-22 is unclear
- 4. I found the qualitative results very interesting. However, the table was more or less a listing of the responses. Is it possible to categorize these responses into themes and then relate these themes to the quantitative results?
- 5. You mention that the response rate was moderate (41%) and that this presents a bias to the results of the study. In my opinion, this is a significant bias as perhaps those who were victims or bystanders were more likely to respond making the actual prevalence of bullying lower than reported.

## **VERSION 2 – AUTHOR RESPONSE**

Thanks for the comments. Our response to the 5 specific points noted are detailed below:

1. The most common negative behavior was excess workload. There was a brief mention in the discussion section about workforce issues in NZ. I believe that is result needs to be further explored. Is it really bullying when a senior physician is over-worked?

The instrument includes a wide range of behaviours, from "Having your opinions ignored" to "Threats of violence or physical abuse or actual abuse". While we can see that some might view the question on workload as being at the milder end of a spectrum (the actual wording is "Being exposed to an unmanageable workload") we believe that it is entirely reasonable to include it as the key word is "unmanageable", indicating that it is imposed on the respondent, is outside their control, and is unreasonable. However, beyond that, this is a validated instrument that has been used in numerous papers and we contend that it would be difficult to defend making changes to such a well-established instrument.

2. The study population were those physicians who are essentially at the top of the "food chain". What are the implications for the entire system given this fact?

It is certainly likely that more junior members of the medical workforce have worse experiences. However, we do not feel that we can extrapolate beyond our findings. That said, the responses we propose will benefit all health workers.

3. The reason behind submitting the figures on pages 21-22 is unclear

These figures are the supplementary figures a and b which are explained in the section 'overall prevalence of self-report and witnessed bullying'. The reason for submitting these figures is that they illustrate important detail pertaining to the prevalence of self-report and witnessed bullying by medical specialty. We feel that being able to view the prevalence for these additional measures of bullying by medical specialty will be of great interest to readers. However, due to the limits on the numbers of figures and tables in a submission, we had to list them as supplementary figures rather than in the text itself.

4. I found the qualitative results very interesting. However, the table was more or less a listing of the responses. Is it possible to categorize these responses into themes and then relate these themes to the quantitative results?

Table 5 does list the qualitative data by themes but as the question asked people to reflect on the consequences of bullying rather than in the manner that the bullying arose, the thematic analysis is structured around severity of the consequences of the bullying behaviour. This is explained in the methods section. We would have liked to spend more time exploring the qualitative data but the tight word limits for the paper precluded us from doing so. Nevertheless, we feel it was very important to include the qualitative data even in this minimalistic form.

5. You mention that the response rate was moderate (41%) and that this presents a bias to the results of the study. In my opinion, this is a significant bias as perhaps those who were victims or bystanders were more likely to respond making the actual prevalence of bullying lower than reported.

We address this point explicitly in the final section of the discussion. As noted, we suspect that the responder bias could go the other way in that many who had been bullied did not feel comfortable participating in the survey. Again, as stated it is impossible to interrogate this issue directly, hence our statement regarding the difficulties assuming that the findings are representative. Nevertheless, the bullying prevalence is very similar to that in other studies undertaken in the New Zealand and Australasian context.