

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)	Identification of processes that mediate the impact of workplace violence on emergency department healthcare workers in the United States: Results from a qualitative study
AUTHORS	Vrablik, Marie; Chipman, Anne; Rosenman, Elizabeth; Simcox, Nancy; Huynh, Ly; Moore, Megan; Fernandez, Rosemarie

VERSION 1 – REVIEW

REVIEWER	Dave Lu Maine Medical Center, USA
REVIEW RETURNED	01-Jun-2019

GENERAL COMMENTS	<p>General Comments: This was a prospective qualitative study that examined the impact of workplace violence on the cognitive and behavioral processes of individual healthcare workers. Although study findings were limited by its small sample size and short interviews of EM healthcare providers, strengths include the study's prospective design, interviews of multiple types of healthcare providers, and conceptual model of how workplace violence may relate to professional burnout. I am confused why the important and interesting data in Supplement 2 are not included in the main paper, since a significant portion of the Discussion and Conclusions focuses on the specific data that is only presented in the Supplement. Overall, the study presents novel information that would be of interest to those engaged in issues related to workplace violence and professional burnout.</p> <p>Specific Comments:</p> <p>Abstract:</p> <p>Syntax suggestions include:</p> <p>Line 2: "linked [to]"?</p> <p>Line 4: aims should be "aimed"</p> <p>Line 6: "to further our understanding of why..." could be simplified to "to further understand why..."</p> <p>Line 19: "3" should be "three"</p> <p>Abstract Results:</p> <p>"Our data confirmed..."; I would suggest rephrasing "confirmed" to "supported" or another less prescriptive verb since this was a small qualitative study using interviews of just 23 providers.</p>
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	<p>“Confirmed” implies a large scale and systematic investigation of objective rates of workplace violence.</p> <p>Abstract Conclusion:</p> <p>Line 51: “thereby improving healthcare worker wellbeing and patient safety”; The link to improving pt safety may be a bit of a stretch or at least a jump in logic that isn’t explicitly supported in the paper.</p> <p>Line 53: “Further research is needed to develop interventions that reduce burnout resulting from workplace violence”; I would suggest rephrasing this to focus not specifically on reducing burnout, but rather the general negative impact of workplace violence. Burnout is only one negative outcome of workplace violence, and the bulk of the paper focuses on these general negative outcomes. Alternatively, if the interesting data presented in Supplement 2 are included in the manuscript, the focus on burnout in the conclusion here would make more sense.</p> <p>Introduction:</p> <p>Line 4: consider deleting the first “now” since it’s repeated again in the same sentence</p> <p>Line 9: “Workplace violence (WPV) in healthcare directly leads to HCW burnout and threatens the delivery of high quality patient care.^{2,3}”; The sentence and references need to be re-worked. As it stands, the current claim that WPV leads to HCW burnout needs to be referenced. The current two references only support the claim that burnout impacts delivery of care. There’s no tie to WPV and burnout in these references based on their abstracts.</p> <p>Line 32: “Despite these efforts, a recent report by the American College of Emergency Physicians notes an alarming increase in ED WPV.” This sentence needs a reference. And I would suggest deleting “alarming” for a more even tone.</p> <p>Line 49: “(3) the relationship between WPV and burnout.” I’m confused why the data showing this relationship is not in the main manuscript but only in the Supplement?</p> <p>Line 51: “This work supports our overall goal of developing and implementing interventions to mitigate the negative impact of acute and chronic exposure to WPV.” I would delete this sentence, since it’s aspirational and doesn’t add to the description of the current study. It can be moved to the Discussion as an alternative.</p> <p>Methods:</p> <p>Line 43: spell out two</p> <p>Line 45: spell out third</p> <p>Line 58: spell out two</p> <p>Page 7, Line 1: specify what kind of HCWs the two ED employees were who piloted the questions</p>
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	<p>Page 7, Line 3: clarify on whom the two additional rounds of re-testing were done</p> <p>Line 13: change “preserving” and “maximizing” to “preserve” and “maximize”</p> <p>Line 19: A mean length of 13 minutes for interviews is surprisingly short, and likely limits the depth and nuance of the data; the authors do note this as a limitation of the study</p> <p>Line 34: “Board” should not be capitalized</p> <p>Results:</p> <p>Line 2: “January, 2017 to May, 2017”; should remove commas</p> <p>Discussion:</p> <p>Page 16, Line 32: missing period; can delete “we agree that”</p> <p>Line 40: “effect” should be “affect”</p> <p>Page 17, Line 1: I would suggest adding the qualifier “may” to “the risk of chronic stress and burnout [may] increase” since I’m not sure this study proves the statement as it stands</p> <p>Line 15: similarly add “may” to “(2) [may] decrease burnout related to workplace stress”</p> <p>Line 17: Suggest changing “must” to “should” for a more even tone</p> <p>Line 21: “effects” should be “affects”</p> <p>Page 18, Line 11: “and improve patient safety”; this claim may need to be removed or tempered, as I’m not sure this study’s results can support it</p> <p>Figure 1: Shouldn’t both positive and negative primary cognitive appraisals lead to the secondary cognitive appraisal? For example, if someone has a positive primary cognitive appraisal, can’t he/she still feel a perception of inadequate resources?</p> <p>Supplemental File 2: As noted earlier, I’m confused why this isn’t included in the main paper, as significant portions of the discussion and conclusions revolve around data that are only presented here.</p> <p>Page 28: too many quotation marks in this sentence: “the development of “negative, cynical attitudes and feelings”</p>
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REVIEWER	Kirsten Schultz Petersen Department of Health Science and Technology, Faculty of Medicine, Aalborg University, Denmark
REVIEW RETURNED	26-Jun-2019

GENERAL COMMENTS	<p>Background: It would be good if the background could be related to international audience by involving references to other countries than the US.</p> <p>Methods: are sufficiently described.</p>
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	<p>Results: I am not sure I understand how the quotes placed in table 4 is related to the presented text, as new quotes are placed in the result section. Could you either delete the quotes from table 4 or make sure all the quotes are the same.</p> <p>Discussion: Could the transferability of the findings be discussed in order to identify if cultural differences may occur in relation to the subject under investigation. Is it likely that the themes are transferable to other countries or is it only relevant in the US.</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Reviewer Name: Dave Lu

Institution and Country: Maine Medical Center, USA

Please state any competing interests or state 'None declared': None declared

BMJ Open Review 2019-031781

Title: Identification of processes that mediate the impact of workplace violence on healthcare workers: Results from a qualitative study

General Comments: This was a prospective qualitative study that examined the impact of workplace violence on the cognitive and behavioral processes of individual healthcare workers. Although study findings were limited by its small sample size and short interviews of EM healthcare providers, strengths include the study's prospective design, interviews of multiple types of healthcare providers, and conceptual model of how workplace violence may relate to professional burnout. I am confused why the important and interesting data in Supplement 2 are not included in the main paper, since a significant portion of the Discussion and Conclusions focuses on the specific data that is only presented in the Supplement. Overall, the study presents novel information that would be of interest to those engaged in issues related to workplace violence and professional burnout.

Thank you for your comments. We initially placed the comments related to burnout in a supplemental file because we are aware that the relationship between burnout and workplace violence has been, to some extent, described both within and outside of the US. Based on this comment, we are moving these data back into the main document.

PLEASE NOTE: Moving these data to the results section increased the word count for the manuscript significantly. The total word count is now 4944.

Specific Comments:

Abstract:

Syntax suggestions include:

- Line 2: "linked [to]"?
- Line 4: aims should be "aimed"
- Line 6: "to further our understanding of why..." could be simplified to "to further understand why..."
- Line 19: "3" should be "three"

Thank you, we made these changes to the manuscript.

Abstract Results:

"Our data confirmed..."; I would suggest rephrasing "confirmed" to "supported" or another less prescriptive verb since this was a small qualitative study using interviews of just 23 providers. "Confirmed" implies a large scale and systematic investigation of objective rates of workplace violence.

Thank you, we agree with this recommendation and made this change.

Abstract Conclusion:

Line 51: “thereby improving healthcare worker wellbeing and patient safety”; The link to improving pt safety may be a bit of a stretch or at least a jump in logic that isn’t explicitly supported in the paper.

We agree and removed the reference to patient safety improvement.

Line 53: “Further research is needed to develop interventions that reduce burnout resulting from workplace violence”; I would suggest rephrasing this to focus not specifically on reducing burnout, but rather the general negative impact of workplace violence. Burnout is only one negative outcome of workplace violence, and the bulk of the paper focuses on these general negative outcomes. Alternatively, if the interesting data presented in Supplement 2 are included in the manuscript, the focus on burnout in the conclusion here would make more sense.

Thank you, we now simply state “Further research is needed to develop interventions that mitigate the negative impact of workplace violence.” While we did move the burnout material to the main document, we agree that a broader statement here is more appropriate.

Introduction:

Line 4: consider deleting the first “now” since it’s repeated again in the same sentence
This has been done.

Line 9: “Workplace violence (WPV) in healthcare directly leads to HCW burnout and threatens the delivery of high quality patient care.^{2,3}”; The sentence and references need to be re-worked. As it stands, the current claim that WPV leads to HCW burnout needs to be referenced. The current two references only support the claim that burnout impacts delivery of care. There’s no tie to WPV and burnout in these references based on their abstracts.

Thank you. We now reference Erdur, et al. and Copeland, et al. to better support these statements and reflect a more global focus of the manuscript as requested by Reviewer 2.

Line 32: “Despite these efforts, a recent report by the American College of Emergency Physicians notes an alarming increase in ED WPV.” This sentence needs a reference. And I would suggest deleting “alarming” for a more even tone.

Thank you, we’ve changed the statement to be more objective and provide a citation.

Line 49: “(3) the relationship between WPV and burnout.” I’m confused why the data showing this relationship is not in the main manuscript but only in the Supplement?
We’ve now addressed this and moved this material to the Results section and Table 4.

Line 51: “This work supports our overall goal of developing and implementing interventions to mitigate the negative impact of acute and chronic exposure to WPV.” I would delete this sentence, since it’s aspirational and doesn’t add to the description of the current study. It can be moved to the Discussion as an alternative.

Thank you, we now state:

This work supports our overall goal of mitigating the negative impact of acute and chronic exposure to WPV.”

Methods:

Line 43: spell out two

Line 45: spell out third

Line 58: spell out two

This has been done.

Page 7

- Line 1: specify what kind of HCWs the two ED employees were who piloted the questions
- Line 3: clarify on whom the two additional rounds of re-testing were done

We now clarify that two rounds of testing were performed and state the professions of those who piloted the interview tool.

Line 13: change “preserving” and “maximizing” to “preserve” and “maximize”

This has been done.

Line 19: A mean length of 13 minutes for interviews is surprisingly short, and likely limits the depth and nuance of the data; the authors do note this as a limitation of the study

Line 34: “Board” should not be capitalized

This change has been made to the manuscript.

Results:

Line 2: “January, 2017 to May, 2017”; should remove commas

This has been done.

Discussion:

Page 16, Line 32: missing period; can delete “we agree that”

This has been done.

Line 40: “effect” should be “affect”

This has been done.

Page 17, Line 1: I would suggest adding the qualifier “may” to “the risk of chronic stress and burnout [may] increase” since I’m not sure this study proves the statement as it stands

This has been done.

Line 15: similarly add “may” to “(2) [may] decrease burnout related to workplace stress”

This has been done.

Line 17: Suggest changing “must” to “should” for a more even tone

This has been done.

Line 21: “effects” should be “affects”

This has been done.

Page 18, Line 11: “and improve patient safety”; this claim may need to be removed or tempered, as I’m not sure this study’s results can support it

This has been done.

Figure 1: Shouldn’t both positive and negative primary cognitive appraisals lead to the secondary cognitive appraisal? For example, if someone has a positive primary cognitive appraisal, can’t he/she still feel a perception of inadequate resources?

Thank you for this question. While the literature is somewhat varied in how appraisal constructs are defined and linked, we kept to the original definitions used by Lazarus and Folkman. In this model, two separate appraisal processes determine if a situation is stressful. First, the primary appraisal determines if the situation is considered stressful or meaningful to the individual. A challenge appraisal indicates that the event is not seen as stressful, but rather as an opportunity (or irrelevant to the individual’s wellbeing). Lazarus and Folkman hypothesize that stress does not result from these primary appraisals.

A secondary appraisal is initiated to gather additional information if threat or harm are seen as possibilities. The secondary appraisal process evaluates the situation and determines which coping options are available, the likelihood that a coping option will accomplish what it is supposed to, and whether the individual can apply the strategy effectively (Lazarus & Folkman, 1984) If an event is not seen as potentially stressful or having meaning (from a stress perspective) then coping is not really necessary. There are several different views of coping, with one view suggesting that there is no such thing as “no coping” and not coping is a form of coping, and one stating that there are times when coping is not required.

We do feel that this model needs to be tested and refined for use in WPV, and look forward to conducting some of this important work.

Supplemental File 2:

As noted earlier, I'm confused why this isn't included in the main paper, as significant portions of the discussion and conclusions revolve around data that are only presented here.

Supplemental File 2 contents have now been incorporated into the main body of the manuscript.

Page 28:

too many quotation marks in this sentence: “the development of “negative, cynical attitudes and feelings”

This has been done.

Reviewer: 2

Reviewer Name: Kirsten Schultz Petersen

Institution and Country: Department of Health Science and Technology, Faculty of Medicine, Aalborg University, Denmark

Please state any competing interests or state 'None declared': None declared

Background:

It would be good if the background could be related to international audience by involving references to other countries than the US.

We now include language and references to reflect that WPV is a worldwide issue.

While the prevalence of WPV is most commonly described in North America and the United Kingdom, recent studies report similar violence rates and characteristics in other parts of Europe, Asia, Africa, and Australia.

We also now specifically note that the two studies cited that link burnout and WPV were conducted outside of the US.

Surveys conducted in several countries suggest a connection between WPV and burnout,^{3,4} yet do not offer an understanding of the processes that lead to burnout, nor do they explain why some HCWs are less affected than others.

Methods: are sufficiently described.

Results: I am not sure I understand how the quotes placed in table 4 is related to the presented text, as new quotes are placed in the result section. Could you either delete the quotes from table 4 or make sure all the quotes are the same.

We now clarify that the purpose of Table 4 is to provide additional quotes and support for our analyses. As we feel these add to the richness of data and provide more transparency, we are electing to keep this table. The manuscript now reads:

Quotes illustrating themes appear in the text below, with additional quotes provided in Table 4.

Discussion: Could the transferability of the findings be discussed in order to identify if cultural differences may occur in relation to the subject under investigation. Is it likely that the themes are transferable to other countries or is it only relevant in the US.

We acknowledged in our Limitations the fact that our study was conducted in a single US city. We now expand this statement to include the following statement:

Our sample was limited to a purposive sample of 23 HCWs practicing within a single US city. Existing research recognizes cultural differences in perceptions and reactions to violence. Although early work suggests similar links between WPV and burnout, it will still be important to evaluate the mechanisms and models proposed here across multiple countries and healthcare settings.

VERSION 2 – REVIEW

REVIEWER	Dave Lu Maine Medical Center Portland, ME, USA
REVIEW RETURNED	20-Jul-2019

GENERAL COMMENTS	The authors have responded appropriately to comments and suggestions.
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REVIEWER	Kirsten Schultz Petersen Department of Health Science and Technology, Faculty of Medicine, Aalborg University, Denmark
REVIEW RETURNED	01-Aug-2019

GENERAL COMMENTS	Thank you for the revised manuscript - which fully lives up to the responses made by reviewers. Though I am in doubt about the amount of words, if possible this should be discussed with the editor-in-chief as the article might be too long for publication. With regards Kirsten.
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