Author’s response to reviews

Title: Validation of a 5-item tool to measure patient assessment of clinician compassion in the emergency department

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Author’s response to reviews:

We thank the reviewers for these thoughtful points of critique. Our point-by-point response to each item appears below. We hope that our revised manuscript will now merits publication in BMC Emergency Medicine.
Reviewer #1:

1. Overall, this article sets out to validate a survey for patient assessment of perceived "compassion" of providers in the ED, expanding on prior research involving the survey and proposing a potential tool which I agree will be of significance both to provider evaluation and to further research on the impact of empathy/compassion. I am particularly intrigued by the authors' discussion of the benefits of utilizing empathy for providers, addressing specifically the ED environment (lower rates of PTSD, lower physician burnout in a population of caretakers who are particularly prone to this) - this is a strength of the paper. Also impressive that the study is multicentered, strengthening the generalizability of the data.

Response 1: We thank the reviewer for these thoughtful comments.

2. Acknowledging this is a validation study of a previously developed survey, I was curious why the authors chose the term "compassion" instead of "empathy." The definition of compassion in the introduction is helpful, and seems to have overlap, however several of the referenced studies specifically use "empathy" instead.

Response 2: We agree with the reviewer that the terms compassion and empathy are often used interchangeably. They are closely related terms, with empathy often defined as the ability to understand another's emotions, and compassion defined as an emotional response to another’s pain or suffering involving an authentic desire to help. Thus in patient care, empathy is the understanding of a patient’s emotional state, and compassion is the responsive action that flows from that understanding. Although some of the referenced studies use the term empathy, the description of the construct measured in the referenced studies overlaps with this definition of compassion. We have added text to the introduction delineating compassion and empathy [page 3, lines 3-5].
3. It would be interesting to delineate some of the characteristics of the physicians being evaluated, if the authors collected this information. For instance level of training (attending/resident), gender, age, etc. There is ample evidence to suggest that patients and their advocates are not often able to identify or differentiate the members of their care team or their roles. It might also be useful to mention when during the ED visit the survey was administered. While the timeliness of administration of the survey theoretically makes attribution of the information more specific to the ED team (eg less interference from presence of admitting team/specialty consultants/other providers), it would strengthen the study to have this information presented. As this is a validation study only, it could be reasonable if this information is not available.

Response 3: We agree with the reviewer’s comment that physician characteristics may be associated with patient perception of compassion. We did not collect data pertaining clinician characteristics and now discuss this in our discussion section [page 11, lines 1-10]. However, in this study we sought to test the psychometrics of the 5-item compassion measure in the ED and we contend that our results demonstrating reassuring psychometrics support the use of the 5-item compassion measure in future research to test what clinician characteristics (if any) impact patient perception of compassion.

The questionnaire was administered at the time ED clinician care was completed (i.e. the time the discharge order or admission order was placed by the ED clinician) and were returned to the research assistants prior to patients leaving the ED. Thus, the questionnaire was administered prior to interaction with the admission team. We now discuss this in our methods section [page 5, lines 16-18].

4. Was illness severity included as a patient characteristic in this study? It is often assumed a confounder in studies assessing the impact of perceived physician empathy. Or was "reason for visit" an acceptable replacement for this?

Response 4: Illness severity was not measured as part of this study. We agree illness severity may impact patient perception of compassion and we discuss the need for future research to test what non-clinician variables, if any, such as severity of illness influence patient assessment of clinician compassion [page 11, lines 1-4].
5. If available, would suggest noting the primary reason 33 participants did not complete the study, although this is a relatively small percentage of the total included subjects.

Response 5: Patients received the study questionnaire at the completion of ED clinician care and prior to leaving the ED. Research assistants discussed the questionnaire was for research purposes and completing the questionnaire was voluntary. Thirty-three (3.7%) subjects chose not to complete the questionnaire. The reasons why subjects decided not to participate are unknown. We now discuss this in our discussion section [page 10, lines 22-26; page 11, line 1].

6. The fact that the survey was only available in English - and that LEP patients or patients from different cultures can interpret care behaviors differently or have different expectations of care should be listed as a limitation of the study, as it impacts generalizability and potentially usefulness of the tool in diverse populations.

Response 6: We agree with the reviewer that further research is needed to test the validity of the 5-item compassion measure in different languages. We now discuss this in our discussion section [page 11, lines 10-12].

7. On page 8 line 4 the authors mention that the "5-item compassion measure ranged the full scale (5 to 20), and 49% of respondents gave perfect scores (i.e. a score of 20)." There is no mention previously in the methods section indicating how this score was calculated - as it appears, it is up to the reader to assume based on the key for figure 1 and the supplemental figures that the total score for the survey was the additive of the modified Likert scale with numerical value equivalents.

Response 7: The composite score for the 5-item compassion measure was obtained by summing the scores for each individual item. We describe this methodology on page 6, lines 23-24.

Reviewer #2:

1. Thank you for allowing me to review this paper. This was a cross sectional prospective study attempting to validate a brief compassion measure for completion of are in the ED. Overall, I enjoyed reading this psychometric paper, and believe this may be a useful tool in the ED setting.

Response 1: We thank the reviewer for these thoughtful comments.
2. Compassion as previous work that the authors of this paper (Roberts) and others (Chang et al 2016: perceptions of clinician communication and hallway care) have noted the impact of the ED environment on psychological perceptions of care. It seems this scale is focused on disposition/state/trait aspects of the perceptions of compassion. Do the authors think that the ED environment may also moderate (mediate?) some of these effects? The authors make note of that in the last paragraph of the paper, but perhaps they could expound on this in a sentence or two talking about future work looking at the utility of their tool for identifying modifiable variables in the acute care setting to impact scores on the measure.

Response 2: We agree with the reviewer that it is possible that the environment may impact patient perception of clinician compassion. We now discuss this further in our discussion section [page 11, lines 4-6].

3. Validated in English speaking, would be curious to see the psychometric properties in other non-english speaking populations such as Spanish. Perhaps a sentence in the discussion to this would help raise interest among readers for future work.

Response 3: We agree that further research is needed to test the validity of the 5-item compassion measure in different languages. We now discuss this in our discussion section [page 11, lines 10-12].

4. There appeared to be differences in completion rates among the different sites, ranging from under 1% for WUMC 5% for CUH to about 10% in HCMC. Do we have any qualitative information about reasons for noncompliance? I don't think a sensitivity analysis needs to be done, but it would be useful for readers to get a better sense of non-completion.

Response 4: Patients received the study questionnaire at the completion of ED clinician care and prior to leaving the ED. Research assistants discussed the questionnaire was for research purposes and completing the questionnaire was voluntary. The reasons why subjects decided not to participate, specifically why HCMC had a higher rate of noncompliance, are unknown. However, we are reassured that the overall completion rate was 96%, and our psychometric results were similar between the three centers. We now discuss this limitation in our discussion section [page 10, lines 22-26; page 11, line 1].
5. How stable do you think the 5 item tool is? Would it be sensitive to assess real time changes in compassion (or within a hospital stay) or do you think it's something akin to other behavioral measures that are usually assessed over a longer time period. I ask, as this may have some interesting implications for the tool in assessing real time stress/compassion both in patient perception as well as provider factors (burnout, etc).

Response 5: We are hopeful that the 5-item compassion measure will be sensitive to real time changes in compassion and will be useful to trend compassion over time. However, this initial validation study only measured compassion at one point in time and future research is required before using the 5-item compassion measure to trend compassion over time. We now discuss this in our discussion section [page 11, lines 12-15].