Reviewer's report


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Reviewer: Margaret Holmes-Rovner

Reviewer's report:

This paper investigates a well-studied question, “Does SDM influence patient satisfaction with care received from a physician?” The authors have a new data set, which confirms earlier findings. They appear to elevate these findings to the testing of a model. However, the approach and results are unconvincing. While hypotheses are stated about expected correlations, it is not so clear what the question is. Is the question how do we predict patient satisfaction? Is the question about the effectiveness of shared decision making? If that is the case, do we have evidence that shared decision making occurred? Page 9 suggests that the SDM-Q-9 measures patient involvement in the decision making process from the patient’s perspective, attributed to the last remembered encounter. Is the study then fundamentally about patient’s perception of involvement? The statistical methods deserve a review by a statistician. In addition, the rationale for the particular method is not included. The survey instruments are previously developed. However, their use in this model building from cross-sectional survey data should be considered from a theoretical as well as correlational view.

The results consistently over-state the positive results of their study. The abstract presents only positive findings and (unstated) “counter-intuitive” findings. The authors acknowledge the cross-sectional nature of the data and suggest that future work should be longitudinal. Should the present study be considered exploratory? What modifications of the approach would the authors suggest for future studies? Is the “confirmed” model ready to be tested longitudinally or in an RCT?

- Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. Please correct the grammatical use of “between”. It means between two things. When used to describe relationships (plural) AMONG variables, between is not grammatically correct. This occurs repeatedly.

- Major Compulsory Revisions

1. This report requires a more balanced statement of results, both in the text and in the abstract. The authors show known relationships between SDM and satisfaction. Their other assumptions were largely not confirmed, and yet the text repeated says the model is a good fit and confirms their hypotheses.

2. There is an absence of theoretical grounding for what is set up as an important
model building exercise. Without theory, the empirical work becomes data-dredging. Why should these constructs be related in these ways? Do the survey measures each simply re-state the same ideas? Is that why the correlations are good in some areas? What is modifiable and what is not? What conclusion should we draw if this model is not adequate? How does this model suggest the field move ahead?

3. The assumptions behind the model and the analysis are not clearly described. Why structural equation modeling? The authors indicate that with cross-sectional data, they can’t draw causal inferences. But then, Table 4 makes causal arguments, as one might expect from an SEM analysis. Why is a stepwise regression approach used here?

4. The relationship of the Ende API measure to the other constructs was disconfirmed. The authors acknowledge this, but then claim their model is confirmed. They should be more forthcoming about the fact that the API measure fails to perform as expected in their model. There is a passing statement that they are not interested in validating new measures. However, that begs the question. Is the API an in-valid, though reliable measure of patient preference for involvement? Is the model conceptually flawed or is the measure flawed? The article is unclear about the authors’ thinking on this result. There is sound theoretical work on patient preference in the psychological literature showing that preferences are not elicited, but rather are formed in the process of decision making. (See B. Fischhoff. A thorough discussion can be found in the IPDAS background Chapter on preferences at www.ipdas.ohri.ca.) If this is true, what does it suggest for the model tested here? If the authors think the earlier studies are wrong, what is the evidence? Is Ende measuring something other than preference? An alternative explanation for the findings is that patient preferences are formed in the decision making process, and that the Ende measure is perhaps reliable, but not valid as a preference measure. Whatever, the approach, it deserves theoretical consideration of the relationships, as well as empirical correlating of scales.

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests