Reviewer's report

Title: Impact of Communicative and Critical Health Literacy on Knowledge and Self-efficacy in Diabetes Management in Primary Care: a cross-sectional study in Japan

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Reviewer: Susan Darlow

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Manuscript review:

“Impact of Communicative and Critical Health Literacy on Knowledge and Self-efficacy in Diabetes Management in Primary Care: A Cross-sectional Study in Japan”

The manuscript describes a study in which associations were examined between communicative and critical health literacy, relatively new constructs, and knowledge of and self-efficacy for diabetes self-care. The authors found that communicative and critical health literacy are both associated with knowledge of and self-efficacy for diabetes self-care, even when controlling for various covariates and perceived clarity of physician advice/instructions. The study described is interesting and introduces a new approach to health literacy, as associated with diabetes treatment. However, the manuscript has some considerable flaws that would need to be addressed before the manuscript could be accepted for publication, specifically, further clarification regarding chosen variables and an emphasis on the innovation and significance of the study.

Discretionary revisions:

Social support seems to have been relegated as a covariate as opposed to a third variable of potential importance. Given that one of the predictor variables is health literacy associated with communication with close others, I would expect social support to play a larger role in the associations examined.

In Table 1, it may be interesting to see any significant group differences on the outcome variables.

Minor essential revisions:

Abstract:

Self-efficacy for what? Be specific.

The authors may want to include a statement defining communicative and critical health literacy.

Method:
Regarding study inclusion criteria, authors should state why individuals older than 75 were not included. In addition, authors should clarify what “diagnoses with type 2 diabetes for more than one year” means (second paragraph of Study Participants). If this refers to having been diagnosed with diabetes over a year ago, then the authors may want to reword to clarify this.

Why were the patient-physician communication items examined separately as opposed to an overall scale?

It sounds as if hierarchical linear regression analyses were done. If so, the authors should state this.

Major compulsory revisions:

Abstract: Identify sample size.

Introduction:

The authors may want to identify why communicative and critical health literacy would be associated with knowledge of care and self-efficacy for care. They mention in the Methods that the measure they are examining (the questionnaire by Ishikawa et al) has been validated in a previous study, and the subscales are internally consistent. However, they are examining novel constructs using a relatively new measure. They may want to provide more information about these new constructs and describe other variables associated with them that have been found in other studies. Also, why look at knowledge of care and self-efficacy, but not self-care behaviors?

Hypotheses should be stated.

Method:

In the second paragraph, the authors identify a “previous study.” If study methods are largely based on another study, then more details should be given about this study, preferably earlier in the Introduction.

Clarity of the communicative and critical health literacy constructs would be improved by providing examples of subscale items from the questionnaire that was created. Authors may also want to provide examples of items from the knowledge of diabetes care and self-efficacy questionnaires.

Results:

Results from all regression models should be presented in table format. It would be interesting to view the impact of some of the covariates on the outcome variables.

In Tables 3 and 4, the authors refer to knowledge of self-care and self-efficacy as “dependent variables.” As the study was largely correlations, these variables should be referred to as “outcome variables.”
Discussion:

At the beginning of the Discussion section, the authors again reference a “previous study” in which results of the current study are similar. The authors may want to be more specific regarding similarities and differences.

Though results are interesting, and the authors identified a new way of defining health literacy, they may want to emphasize the innovation of the study and how these results can be applied to practice.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.