

Peer Review Report

Review Report on The mediation effect of attitude on the association between

Original Article, Int J Public Health

Reviewer: Natasha Sobers

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EVALUATION

Q 1 Please summarize the main findings of the study.

This study found that “level of knowledge improved self-management behaviors and that attitude has a mediating effect on the relationship between knowledge and self-management behavior.” This is an interesting though not novel finding and the direction of the relationship could be more clearly stated in the abstract by saying in the conclusion of the abstract that increased knowledge improves self-management behavior.

Q 2 Please highlight the limitations and strengths.

- Strength: Given the many calls for social and political environmental change to effect behavior modification, this is an important study that reminds us that individual level self-management programs also have an effect in behavior modification to reduce risk factors for disease.
- Strength: The relatively large sample size is good especially for a behavior change study
- Limitations: The use of English/syntax is somewhat clumsy in some areas and makes it difficult to follow.
- Limitations: The use of interviewers to obtain info on lifestyle behaviors may have introduced some social desirability bias. It also seems as if the interviewers completed forms after and not during the interviews which may have cause recall bias (this latter process needs to be clarified at lines 122-123).

Q 3 Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

Abstract

Given the abstract is all some people will read it needs to be clearer.

For example: I recommend adding a line on the origin of the Mean score- this seems to appear suddenly in the results and the methods gives us no clue that it is based on the DSM questionnaire. Given the word limitations, a sentence can be taken from the conclusion to include more words in the methods.

Secondly, the impression in abstract is that sample size is 900 but eventually only 863 were included it is more transparent if the authors quote this number (863) either instead of or in addition to the 900. For example, state 900 were chosen and 863 consented.

Consider the following wording for abstract to reduce words and enhance understanding: “Level of knowledge has a significant direct impact on self-management behaviours and an indirect impact on self-management behaviours through.....”

This structure is less wordy and gives place for adding more to the methods which is sorely lacking. For example, the reader has no idea where the Beta coefficients are derived from and if they are adjusted or not and if yes, what was adjustment or even basic such as where mean score is derived from. These omissions make the abstract inadequate.

Contribution to the field

This is a nice letter to the editor but it needs to be more pointedly highlight the specific contributions to the field. The findings are important and should not be buried in the middle of the text.

Introduction

Line 38: Can include a more complete assessment of burden by including age-adjusted diabetes rate.

Examples of grammatical/syntax errors:

- Line 45: the word replies seems misplaced. "Recently, diabetes management mainly replies on community management and self-management"
- Line 59: syntax error
- Line 61: grammatical error- word perform

Line 88: The latter end of the introduction seemed weak because I began to lose what the author was saying. "Therefore, based on the knowledge, attitude and practices (KAP) model, this model was first proposed in the 1960s and has been widely used in the field of public health (29)." This thought felt incomplete - based on the KAP model what?

Methods

The description of the methods section was very clear, and I understood the process from obtaining ethics permission to collection of data how the study was undertaken.

Description of the variables were very clear.

Line 113: State whether the individuals were chosen based on weighted sampling perhaps based on population proportion or some other parameter or if simple random with no weighting. If weighted, did stats methods consider this?

Line 122: The questionnaires seemed to have been filled out after the person was interviewed. Can you clarify, why it was done after and not during the interview? Wouldn't doing if after introduce recall bias/measurement error in the data collector?

Line 132-138: What is the origin of the various cut-off points? Were they used and validated in previous studies? Or Did the authors perform their own psychometric analysis(Validity and reliability measures) to determine that these cut points were appropriate for this population?

Stats methods appropriate

Results reporting

Table 1: What is F/r? It suggests two things are being reported and it is not clear when F is reported and when r is reported? I am also not familiar with what r is? These look like p-values to me.

Discussion

The discussion made quite strong assertions that were not fully supported by the data. "Medical staff should be encouraged to care more about patients, family members and friends should also pay more attention to accompanying patients, prompting patients to accept diabetes treatment with an optimistic and positive attitude, further promoting them to develop good self-management behaviors." How do we know how much medical staff are caring for their patients? Was this assessed? The study was about self-management and this seems like a leap. This statement is one example of what I felt was a subjective response to the findings.

PLEASE COMMENT

Q 4 Is the title appropriate, concise, attractive?

Title is good.

Q 5 Are the keywords appropriate?

Keywords appropriate

Q 6 Is the English language of sufficient quality?

Syntax is weak in some areas. Details are given in the sections above

Q 7 Is the quality of the figures and tables satisfactory?

Yes.

Q 8 Does the reference list cover the relevant literature adequately and in an unbiased manner?)

Yes

QUALITY ASSESSMENT

Q 9 Originality

Q 10 Rigor

Q 11 Significance to the field

Q 12 Interest to a general audience

Q 13 Quality of the writing

Q 14 Overall scientific quality of the study

REVISION LEVEL

Q 15 Please make a recommendation based on your comments:

Major revisions.