Reviewer’s report

Title: Low rate of dermatology outpatient visits in Asian-Americans: an initial survey study for associated patient-related factors

Version: 1

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Reviewer: Elliot Coups

Reviewer’s report:

The authors have successfully responded to some of the issues raised in the prior review. However, a number of issues were not sufficiently addressed.

MAJOR COMPULSORY REVISIONS

1. Issues were previously raised about the lack of a guiding model or theory that guided the selection of variables (such as the health belief model, social cognitive theory, etc.). The authors responded by pointing out the goal of the study, which is a separate issue. The authors justify their selection of study variables based on clinical experience and “following review of the medical literature”. There are numerous prior studies that have examined factors associated with receipt of physician skin examinations (in different populations), but relatively few of the relevant factors are included in the current study (on page 6, the authors cite 3 references but there are many others to consider: for example, Kasparian et al., Arch Dermatol. 2012 Oct;148(10):1142-51, PMID: 22801744). Additionally, it remains unclear why a variable such as belief in skin self-examination (although it still isn’t clear exactly which item this refers to in the survey) would be examined as a potential correlate of dermatologist skin examination (beliefs about dermatologist skin examination would be more meaningful to consider) and perceived risk of skin cancer, history of sunburns, and skin type (all of which were included on the survey and have been examined in prior relevant studies) were excluded from the analyses.

2. The stated goal of the paper is not commensurate with the survey that was employed. The authors note (in numerous places) that the focus is on dermatology outpatient visits among Asian-Americans. However, the primary outcome for the study is ever having one’s skin checked by a dermatologist. The corresponding survey item is ambiguous with regard to the nature or purpose of the skin check. However, the fact that it comes immediately after a survey item that asked individuals how many times they had self-checked their skin for abnormal moles likely means that it was interpreted as a dermatologist skin check for abnormal moles (as opposed to a dermatologist skin check for any skin-related issues). The authors appear to be using their survey item “…had your skin checked by a dermatologist” as a proxy for having a dermatology outpatient visit, which is not appropriate. If the goal of the study was to examine factors associated with dermatology clinic visits, a relevant question should have been included in the survey that asked individuals about such visits.
3. There are issues with the multivariate regression analysis. The odds ratio of >999.99 for the personal history of skin cancer variable suggests that there are very few individuals reporting a personal history of skin cancer in that analysis. Only 8 individuals reported such a history and some of those may have been excluded from the multivariate analysis due to having missing data on other included predictor variables. Thus, it would seem prudent to exclude the personal history of skin cancer variable from the multivariate analysis (with a brief mention of why it was excluded). It is also somewhat surprising that there was only one statistically significant predictor variable in the multivariate analysis. The authors should examine multicollinearity issues and also potentially conduct exploratory multivariate analyses (varying the variables included in the analysis).

4. Page 9, lines 194-196 – this conclusion cannot be drawn from the cross-sectional data in the current study.

MINOR ESSENTIAL REVISIONS

5. Abstract, line 59 – “approximately 469 surveys” doesn’t make sense. Why “approximately”?

6. All of the ORs in Table 2 should be provided to 2 decimal places (e.g., “1.7” should presumably be “1.70”)

7. Table 2 – the authors should clearly indicate that the numbers in parentheses are 95% confidence intervals.

8. In Table 1, the percentages for self-rated acculturation sum to 88% (instead of 100%), presumably due to missing data. The percentages should be presented based on the available data (and should thus sum to 100%). The “n=469” next to self-rated acculturation is presumably incorrect. For income, “not answered” should not be included as a category with a percentage. Instead, base the percentages of the available data and indicate in the table the number of people with missing data (or the number with complete data). The same approach should be applied to the “belief in skin examination” variable (although as noted in point 1. above, there is insufficient justification for including that variable in the current paper).

9. The sample size for the multivariate analysis should be clearly provided in Table 2. It is unnecessary in Table 2 to provide the sample size for each individual variable, as those should have been clearly shown in Table 1.

Level of interest: An article of limited interest

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