Reviewer's report

Title: Perceived stress and gastrointestinal symptoms in nursing students in Korea: A cross-sectional survey

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Reviewer: petra lindfors

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This is a well-structured paper reporting on the cross-sectional linkages between perceived stress and gastrointestinal symptoms in 715 Korean nursing students. The Introduction is concise and describes the problem area. The Methods section, particularly the description of measures used is easy to follow and gives the reader necessary details.

Major Compulsory revisions

The students come from one Korean college. This raises questions relating to the representativity of this college: Is this college similar to or comparable to other colleges with nursing students? Do nursing students at this particular college have better or poorer health than other nursing students or other student groups? Is there reason to believe that this student sample is biased? Please add details where possible and discuss more thoroughly potential issues relating to generalisability to other nursing students within and outside Korea.

What about other factors affecting health and well-being of students? Typically, the student years involve many life events which may be partly linked to student reports of stress and health problems. Often too, problems in the educational setting are related to problems outside the educational setting (eg life in general, friends, family, parters and so on).

Why do the authors not include all data available in the statistical analyses: For instance, the conclusions would be strengthened if data relating to life outside nursing school was included. Here it is possible to investigate potential cross-sectional effects of PSS and SRH but also of living with parents vs. other living arrangements, and other health-related factors (eg drinking alcohol or not; BMI) on GI. Are these other factors unrelated to GI? If yes, please clarify. Otherwise an more detailed analysis is recommended.

There were only 68 men in the sample. This means that the results hold for women only. Comparing groups of women and men will be problematic due to issues relating to sample size and statistical power! With only 68 men, it is unlikely to have any statistical effects. Why not exclude the men altogether to avoid "error variance" relating to the fact that male students are a small group. Such an exclusion of men is supported by research showing that men in women-oriented education and work have other difficulties, possibilities and consequently may have other stress and health problems than do their women
Problems and pitfalls relating to cross-sectional research and statistical analysis based on self-reports only are not addressed in the Discussion. The shared variance between measures is likely to increase due to the fact that all data were collected at one point in time and that all questions relate to stress and health problems.

Minor Essential Revisions

Apart from the last sentence being loosely attached to the reasoning and abstract conclusions, the abstract is concise and well-written. However, as regards the final sentence, it is unclear how the results form the present study support a biopsychosocial model. Please rewrite the final sentence.

It would be good to provide a definition of GI early on in the Introduction. For instance, such a definition can be added to the 2nd paragraph detailing prevalence figures.

Data were collected after the final exam period. Why was this time period chosen? Is the timing of the data collection related to the study findings? Is yes, why and in what ways? If no, why?

The PSS asks questions relating to the overall life situation and is not specific for the educational context. This means that the stresses and strains reported by students may relate to issues outside college. Thus the Authors need to provide a rationale for why the PSS is linked to the educational context and academic demands (and not to other aspects of life).

In view of the time period (3 months) and GI symptoms included in the measure, it is perhaps normal that 65% of the students experienced more than one GI symptom? Is this so? Are the students having health problems or are they, in fact, fairly healthy?

There are a number of minor grammatical errors and misspellings in the paper.

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

**Quality of written English:** Needs some language corrections before being published

**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.