Reviewer's report

Title: Psychosocial work load and stress in the geriatric care

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Reviewer: Birgit Aust

Reviewer's report:

The main aim of the study is to investigate the psychosocial workplace situation for employees in geriatric care. For this purpose the authors conducted a cross-sectional study with employees in the geriatric care sector in Germany. The main findings are, that:

1. Employees in home care and employees in nursing homes evaluate their psychosocial working conditions differently and

2. The evaluation of the psychosocial working conditions in both groups is rather positive compared to a representative sample of the German working population and to employees in hospital care.

The authors point out that a large percentage of the study participants are part-time workers, which might be the reason for, why evaluations are rather positive. However, the two job groups (employees in home care and in nursing homes) also point to some negative aspects in their respective work environments compared to the national sample: employees in home care experience low (quantitative) social support from colleagues, while employees in nursing homes experience lower self-rated general health.

The study contributes to insights in the psychosocial work environment of employees in geriatric care. As the authors point out correctly, this is important due to the expected rise in need for geriatric care workers. A better understanding of the specific working conditions in the sector gives the opportunity to improve working conditions and thereby contribute to a sufficient and more stable work-force.

However, the manuscript would gain from a better presentation of the main findings and a more comprehensive discussion. Also the authors do not address strengths and weaknesses of their study in a systematic way.

Here are my comments, which I would like the authors to respond to:

About the aim of the study and the discussion of other similar studies
The authors point out that studies have shown different results with regard to the psychosocial conditions of employees in geriatric care, ranging from high sickness absence rates (which could point to adverse working conditions) to studies that have found “moderate workload for the nursing staff” (15). Since the results in the manuscript point to a rather positive work environment in geriatric
care, the former findings need to be discussed in more detail. What can be said about the studies with different results? Did these studies for example also have a high (or low) percentage of part-time workers in their study sample? Also, it is not quite clear if different job groups are compared. Could it be that (hospital-) nurses evaluate their working conditions more negative, while geriatric care workers evaluate it more positive? And could that be related to a higher or lower percentage of part-timers in these two job-groups?

Compared to the abstract, the aim of the study is reformulated on the bottom of page 5. If the aim (also) is to find out why different results have been found in earlier studies, a more detailed discussion of these studies is needed even more.

About describing the COPSOQ

The instrument needs to be described more precisely. For example does it only consist of 25 scales or are there also single items? Why not describe the domains which are shown in figure one (demands, influence and development etc.) instead of referring to single scales when introducing the instrument. Figure 1 shows not only the domains and their scales, but also the implicit theories of the instrument (which aspects lead to which effects). That also needs to be described. This can also be used in the discussion about subjective measurements (see below).

About the low participation rate

One of the main weaknesses of the study is the low participation rate, which needs to be discussed. On average the participation rate was 33% ranging from 11% to 93%. Do the authors have any information about why the differences in participating in the study were so large?

Considering the low participation rate, how representative is the study sample? Are other data available to check if for example the percentage of part-time workers in the study sample is comparable to what is usually found in this job group?

About the use of the data

Why are administrative personal left out from further analysis (se table 1)? They could function as a direct reference-group: working in the same field (geriatric care) but not involved in direct care work and thereby highlight the specific working conditions of those involved in care. We have done that with a sample of hospital employees (using the COPSOQ) and the article can maybe be used for inspiration (Aust, B., Rugulies, R., Skakon, J., Scherzer, T., & Jensen, C. (2006). Psychosocial work environment of hospital workers: Validation of a comprehensive assessment scale. International Journal of Nursing Studies, Advance access (ahead of print) published on March 14, 2006 (doi:2010.1016/j.ijnurstu.2006.2001.2008).

Some of the numbers on page 12 referring to table 1 do not correspond with the results represented in table 1 (percentages for on call duty and for shared shifts in geriatric care and home care do not match the table).
About the use of the right terms

With regard to a better presentation, the authors need to check the entire manuscript very carefully. Often the descriptions are too imprecise, for example with regard to formulations as “above average” – average of what? Since there are different comparison groups in use, it is important to point out - each time - which reference group is referred to. The description of the different reference groups also needs to be improved, for example “general mean of other profession” (page 6) should be reformulated to for example “mean of a representative sample of the German (working?) population”. Another example is on page 12, first line: the term is “in the overall statistics” – here clarification is needed. One precise term for each reference group should be found and consistently used throughout the entire document. Different terms are also used for the same group of the study population, for example “mobile care” for employees in home care at bottom of page 5. Also, with regard to terms such as nursing staff, the authors need to be more precise. Are all employees in geriatric care nurses? What is the exact job title, what is their educational background? Check for example the last sentence of the first paragraph in the background section (page 4).

The terms “shared shifts” and “alternating shift” need to be explained, for example do the alternating shifts include night shifts? To my knowledge, work-family-conflict or work-life-balance are more established terms than work-privacy-conflict.

About the result section

The result section needs to be edited, so that results become easier to understand. For example, the description of figure 2 in the text needs to be improved (page 12). The last sentence on page 12 is very long and difficult to understand. Explain for example “horizontal line” and find a better description “the total COPSOQ result”. Also the first paragraph on page 13 should be reformulated, especially the second sentence. The results should be presented simpler avoiding terms such as “in favour for”, “advantage”, “disadvantage” or “superior”.

Or on page 12, second paragraph: the authors state that home carers evaluate the amount but not the quality of social relations at work as low. Is this statement based on a single item analysis? Or what leads the authors to say that? The brackets in that sentence “(indicated by a minus-sign)” are misplaced giving the impression that that result (amount not quantity) is highlighted by a minus-sign. Also the information about the meaning of the + and – signs should be given earlier.

About the discussion and conclusion section

Editing is also needed her, as well as a comprehensive check of all terms used. The discussion should start with a short summary of the most essential findings before getting into the discussion of what might have led to these results. In particular: what was assessed negatively by the two groups (nursing home and
home care employees). With regard to the discussion of the subjectivity of survey data I suggest reading the editorial by Michiel Kompier on this subject (Kompier M.: Assessing the psychosocial work environment – “subjective” versus “objective” measurement. Scand J Work Environ Health 2005; 31(6): 405-408). The editorial points out that there is a tendency of a general disqualification of self-reports in stress research which can end in “throwing out the baby with the bathwater” which I think happened here. As I said above, a more qualified and structured discussion of the strength and weaknesses is needed. This discussion should be related to the specific strength and weaknesses of this study – not a general discussion of for example subjective measurements. The study certainly also has it strengths (for example a large reference group which gives the opportunity to compare study results with similar professions as well as the entire working population).

Instead of collapsing the discussion and conclusion into one section, I suggest a separate conclusion section or paragraph which sums up the essentials of their findings.

About table 1: The table is difficult to read. Results are not always shown in one line. The headline of table 1 should be reformulated, for example: Socio-demographic characteristics and working time of the study population. With regard to the different shifts: Is it possible to distinguish between “no answer” and “none”? As it is now, it is not possible to distinguish between missing values (no answer) and the answer “no”. Since in all cases it is more than half of the study population that falls into the category “None or no answer”, it becomes questionable how representative the study sample is. Are there maybe other information available about how employees usually are distributed among the different shift categories that allow to evaluate if there are more participants that do not have had that shift-type or more participants that just did not answer the question?

About table 2: The table needs to be revised. It is not quite clear what it shows. Different signs should be used to show significant values. The last line (N) should be included in the description of the columns at the top. In the description of the first column it should say: Results for scales and single items.

About the figures
They are difficult to read (too small). Were all 3 figures referred to in the text?

Minor changes
Some description about the background of the study is found in the result section, but should be moved to the method section.

Also information about the statistical analysis in the result section needs to be moved to the method section. A question to the last paragraph on page 9: it says 25 scales, 4 groups: which 4 groups?

All titles of German reports and other publication need to be translated.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Not suitable for publication unless extensively edited

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