

De Geest article: Reviewer comments & checklist

Reviewer #2: The manuscript titled "Validation of the Basel Extent of Rationing on Nursing Care Instrument" (BERNCA) is on a timely subject. With the nursing shortage and other financial constraints in health care, having an instrument that could be used to measure the extent of rationing of different aspects nursing care among health care facilities is important.

The background of the study is well developed and the study uses appropriate measures to determine concurrent validity as well as evaluation of other aspects of validity and reliability of the instrument. However, I would suggest the statement of an explicit conceptual framework, rather than just the framework implied from the work of Aiken and colleagues and the ideas of explicit and implicit rationing.

I would like more discussion of the "unexpected" finding related to nurse-patient ratios mentioned on page 13, line 16. As the author(s) state, I am not sure that the measure of "last-shift workload" accurately captures the concept of nurse-patient ratios. However, is there another explanation that indeed, rationing is not a function of nurse-patient ratios?

The suggestion that the instrument needs to be validated for different cultures and countries is appropriate and an area in need of future research.

A couple minor editorial comments:

- Table 2 is referenced the 1st time in the text after Table 3.
- Pages 9-11 have several single sentence paragraphs
- The discussion section has an excessive use of the pronoun "it."
- Reference to Table 4 needs to be added to the Text Page 13 line 17.
- The OCED reference is incomplete on the reference list.
- Table 3 needs a KEY to explain that the factor scores underlined are ones that loaded on more than one factor.

Reviewer #4: The focus of this manuscript is to describe testing of a 20 item questionnaire designed to measure "implicit rationing of nursing care". This review will focus on the steps of the research process and provide a critique.

Problem

The research problem appears to be that nursing care is being rationed in some countries with an impact on patient outcomes. However, as there was no tool to measure rationing, the level of rationing was not identifiable. The problem statement becomes identified on P5L16-24. Earlier in the manuscript, the problem of rationing was discussed and the cause of the rationing P2L24-9. While this reader feels that the literature provided on the rationing problem and causes appears biased, the issue is the development of a clear problem for this research study. The study problem needs to come earlier in the manuscript, as well as the definition for implicit rationing, which does not appear until

P3L1-2. The reader would recommend greater problem clarity, and earlier identification in the manuscript.

Purpose

The purpose of the study is to test the reliability and validity of the 20 item questionnaire. This is clearly stated on P6L1-2. However, it is not clear why the author selected the standards reference, and why these standards were particularly important. These could be mentioned later to avoid confusion for the reader, who is likely aware of standards for reliability and validity. Table 1 present research questions and hypotheses. The column "evidence based on" is difficult to understand and the reader suggests that only the research hypotheses be presented. H1 is not in the format of a scientific hypothesis. H2 did not include the strength of the correlation expected, while H3 did include the word "moderate". H4 is actually two hypotheses.

Review of Literature

The review of literature comes at the beginning of the article, and is involved in describing the extent of the nursing shortage. Select words and concepts are inappropriate, such as "along with substitution of outpatient for inpatient care" P2L9 as a cost saving strategy. P2L16 includes the words "necessary care" provided as often as recommended. How can care be necessary yet recommended? P4L1 uses the words "good nursing care" which infers a value judgement on a task. This is objectionable. P4L23 uses the word "neglected". This reader also objects as no nurse intends to neglect a patient.

Missing from the review of literature are other ways of measuring rationing or inadequate nursing care. Specifically, much work has been done on acuity systems, one way that care is rationed.

Methodology

The study is a secondary analysis of data which is appropriate. The sample restricts the generalizability of the findings, geographically, employment area and convenience sample. It is noted that the nursing sample is very young, this may have impacted the results as their may be generational differences with respect to rationing.

The organization of this section would be improved if the development of the instrument items were discussed first, then the Sample followed immediately by data collection.

Instrument

P7L2-6 describe the conceptual framework for the instrument, however, this framework is not described nor presented. If this framework drove the instrument then the reader needs more knowledge about this framework to judge its applicability. P7L10 state

"Qualified nursing specialist", yet goes on to state that some of these were students. What were the characteristics by which these nurses were qualified and/or specialists in what field? What were these experts told about implicit rationing? How many specialists were involved? Were there also nurse administrators that may have a different paradigm of rationing? The first scale consisted of 20 items, the final scale 20 items, it is unknown if these items were the same. This reader could, with little effort, think of additional tasks or behaviors that may be omitted if nursing care needed to be rationed, for example, preparing a patient for surgery, reviewing the chart to detect abnormal lab values, administering a medication on time, reconciliation of medications etc. Some of the items are very focused, e.g. Keep a patient waiting for longer than 5 minutes, while some of the items are very broad e.g. Monitor a patient. Items under domain 2, would be delegated to the nursing assistant, and less likely to be thought of as rationing by a nurse. This reader is unclear as to what Item 4c refers to with respect to rationing. Conceptually, more information is needed as to how these items relate to and measure "implicit rationing"

The scale instructs the nurse to indicate "how often they had been unable to carry out" each of the tasks (P8L1-2)" on a ordinal scale. This then appears to be the author's definition of nurse rationing, that is, the inability to carry out a task. This definition is different than the one stated earlier (P3L2) which includes the word "necessary". A nurse may be unable to carry a task out, but may do it because that task was not necessary. As noted earlier, further clarification of the implicit rationing concept is needed to understand the items and qualities of the instrument.

Data analysis

Factor analysis indicated 3 factors based on eigenvalue and scree plot. It is essential that the eigenvalues and plot be provided for the reader, as well as all data related to item loadings P10 Lines 18-25 are very confusing to this reader. One dominant factor has one eigenvalue (the manuscript states "each eigenvalue). If only one dominant factor resulted, then why would 5 factors be analyzed? Clinical considerations aside, perhaps the conceptual framework is inappropriate. The authors ignore the one factor solution. With the use of 5 factors, it is not clear that these 5 factors are equal in their contribution to a total score. With no support that they contribute equally, the total score, as a mean of the subscales is not valid.

The means of each item (Table 3) seem to indicate a "floor effect" of the item, which can be a problem with the collection of ordinal data.

Discussion

The discussion section is limited in its depth. The author tends to reinforce the findings, not explain the results or place them in the context of previously described literature. The discussion contains limitations, but not explanations. The discussion did not refer to the hypotheses.

Recommendations/Conclusions

The conclusions are appropriately tentative and restricted to Swiss nursing practice. The one factor/5 factor discrepancy seems to be glossed over, with a summed mean score of the 5 factors promulgated. This reader would not accept this conclusion.

Organization

The organization of the manuscript, while following the research process, has sections that need review. If research questions are asked or hypotheses are to be tested then this reader expects the results and discussion section to be so organized. The problem needs to be clearly articulated before the literature is presented.

CHECKLIST FOR STYLE

References

Update in-text citations using APA 5th Ed. Format (The Publication Manual of the American Psychological Association, 5th Edition, pp. 208-209). In particular:

On first citation of a reference, list all authors if there are less than 6. For following citations, use first author followed by et al. (e.g., Sloane, Clark...2002).

Use only 4 references per point.

Add in-text citations of the following references to the reference list:

Aiken 2002; Aiken & Sloane, 2002.

The following references are not cited in the text. Remove from reference list or add to text:

Pett... 2003

Coolican 2005