

Clinical validation of nursing diagnoses in vulnerable patients: the adequacy of different methods

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Background:

Nursing diagnosis (ND) represent a nurses clinical judgment related to a patient's human response (also known as a diagnostic foci) (1). It is recognized as the most important step in the nursing process since it precedes the planning and implementation of interventions towards proper outcomes (1). As so, it is acknowledged as essential in nurses care provision reflecting proficient nurses clinical judgment and determining and guiding novice nurses in their clinical practice (2). Still, a ND must primarily be a truthful representation of actual patients problems and demonstrate the most accurate label, definition, defining characteristics, related and risk factors as possible (1). Several calls have been made to appeal for researchers attention towards the need to increase the evidence-base and the validity of ND (1). Different ND validation methods have been used in clinical research in several settings and samples. Fehring's (3) or Rasch's model (4) have seem to be the most used in nursing research. Additionally, other methods have been suggested in developing and validating specific ND related to subjective foci (5). However, caution is needed not just for the ND but also when considering the study of particular populations or specific aspects of participants. When selecting the research method to conduct clinical validation of ND researchers should consider both the method and the participant's particular vulnerabilities.

Methods:

Critical analysis of three methods for clinical validation of ND in vulnerable patients are presented. Based on the doctoral projects of the authors it is used to illustrate the usefulness of those methods in particular patients such as the ones that face adverse health conditions like cancer and infertility.

Results:

Fehring's Model

- Richard Fehring, 1986,1987 -

Description: embraces 3 types of validation approach such as the diagnostic content validation (DCV) (resorts to expert nurses and their perception towards the extent on wether each defining characteristic is representative of a diagnosis); Clinical diagnostic validity (CDV) (used in a clinical setting were the expert nurses observe the existence of a certain diagnosis); Diferencial diagnostic validation (DDV) (used to differentiate close diagnosis or used to help the establishment of diferent levels in the same diagnosis) (6).

Sample adequacy: used with patients as well as with expert nurses.

Rasch's Model

- George Rash, 1980 -

Description: This approach allows rigorous measurements in instruments developed in nursing research with growing interest in diagnosis validation (7). It can be applied to studies with different designs (7). WINSTEPS Rasch Software was specifically developed to allow Rasch's analysis. It is a quantitative method useful in the evaluation of items unidimensionality, local independence, calibration, reliability, discrimination ability or separation (7,8).

Sample adequacy: It has been used in samples of mothers, adults, students and adolescents (7). It might also reveal its usefulness in the validation of nursing diagnosis in patients living with infertility.

Q methodology (QM)

- William Stephenson, 1935 -

Description: Has its origins in psychology. Combines qualitative and quantitative research to study of subjectivity (9). QM is adequate to study attitudes, perceptions, feelings, and values (10).

Sample adequacy: this method seems to offer a novel approach to investigate patients with head and neck cancer, with impaired verbal communication because clearly facilitates the participation using a card sorting technique, where the participants order the phrases written on sort-cards, (11). QM is used in a variety of contexts, people, and clinical areas for the production of scientific evidence, because it was able to understand, explain and expore the richness of human subjectivity in a more scientific way (5).

Discussion:

Fehring's and Rasch's models along with QM have been considered by researchers as useful methods to validate nursing diagnosis (6,7,8,12). However, the DDV seems to be the least used approach of the Fehring's model by investigators (12). On the other hand, Rasch's model is being used in nursing studies in replacement of the broadly applied Fehring's methodology (7).

QM is a method that has much to offer to nurse researchers, particularly those interested in the study of patients' perspectives in a reliable way. Thus, has the potential to help nurses in providing evidence-based care in response to patients' needs (10) and also can be used for the validation of nursing diagnoses related to subjective foci (5).

Conclusions:

The option for a method to validate ND should be based on the focus under study and in the specific conditions of the patients, as this can increase the accuracy of the results and promote the ethical dimension expected in research.

Implications for nursing:

Validation of nursing diagnosis must be ultimately adequate to patients and their circumstances in order to raise the diagnostic quality and consequently enable a truthful holistic nursing care.

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