An investigation of the German version of the Care Dependency Scale for self-assessment by older persons in supported housing

Background

With increasing age, older people are at risk of becoming care dependent. Care dependency should be detected at an early stage to prevent further complications. In institutional settings, care dependency is assessed by professional caregivers, but in settings where older people live independently, self-assessment is required. Supported housing facilities in Austria are a setting where early identification of care dependency is necessary to ensure that residents receive support that meets their needs. A well-established instrument that allows both proxy- and self-assessment of care dependency is the Care Dependency Scale (CDS) [1]. Psychometric testing of the scale revealed different factorial structures depending on the country and setting where it was applied. Whereas older studies in hospitals and nursing homes identified a single underlying factor [2]., more recent studies in an ICU [3]. and among home-dwelling older persons [4] found a two-factor structure with one factor related to physical care and one factor related to psychosocial care. The factorial structure of the CDS, therefore, needed clarification prior to its application in supported housing.

Aim(s)

The aim of this study was to determine the factorial structure of the German version of the CDS for self-assessment in assisted living in Austria and to determine how the scale relates to the established assessment of care levels according to the Austrian care insurance.

Methods

In a cross-sectional study self-assessments of care dependency were obtained from residents in supported housing in Austria. In a first step, exploratory factor analysis was used to determine the factorial structure of the scale. In a second step, the resulting factor models were compared by confirmatory factor analyses with a single factor model regarding the best fit. CDS total score and sum scores of the identified factors were correlated with externally assessed care levels according to the Austrian care insurance.

Results

48.2%. of the residents in supported housing participated, but some of them were younger than 60. According to exploratory factor analysis the scale had three factors with two variants in the distribution of items, depending on whether people over 59 were included in the analysis or not. The second variant showed the best fit in confirmatory factor analysis. CDS total score and sum scores of the identified factors showed statistically significant correlations with externally assessed care levels.

Discussion

The three-factorial structure shows that older persons in supported housing distinguish between different aspects of support that they consider to be the task of different service providers. However, several cross-loadings of items limit the discriminant validity of the identified factors and indicate an ambiguous understanding of support needs among independently living older persons.

Implications and future perspectives

A modified version of the CDS for the self-assessment of independently living older people may capture more clearly the different kinds of underlying support needs that are relevant for this target group.



References

- 1. Dijkstra, A., Buist, G., & Dassen, T. (1996). Nursing-Care Dependency: Development of an assessment scale for demented and mentally handicapped patients. *Scandinavian Journal of Caring Science*, 10, 137-143.
- 2. Dijkstra, A., Buist, G., Brown, L., Haven, B., Romoren, T., Zanotti, R., Dassen, T. & Heuvel, van den W. (2000). An international psychometric testing of the Nursing-Care Dependency (NCD) scale. *Journal of Advanced Nursing*, 31(4), 944-952.
- 3. Piredda, M., Bambi, S., Biagioli, V., Marchetti, A., Ianni, A., Lusignani, M., Rasero, L., Matarese, M. & Marinis, M.G. de (2020) Cross-validation of the Care Dependency Scale in intensive care unit (ICU-CDS). *Intensive & critical care nursing* 57, 102787. DOI: 10.1016/j.iccn.2019.102787
- 4. Boggatz, T., Farid, T., Mohammedin, A., Dijkstra, A., Lohrmann, C., & Dassen, T. (2009). Psychometric properties of the Extended Care Dependency Scale for Older Persons in Egypt. *Journal of Clinical Nursing*, 18, 3280-3289.