## Background

Residents in long-term care facilities (LTCFs) are at a particular higher risk of developing delirium [1, 2]. Despite its many adverse effects, delirium is often not adequately recognized by healthcare workers during their daily practice in LTCFs [3]. Lack of recognition or adequate management of delirium in LTCFs is mainly due to lack of necessary knowledge and skills among CNAs. Certified Nursing Assistants (CNAs) play an increasingly important role in the care of residents with delirium. Early symptom recognition enables to quickly diagnose and treat the underlying cause(s) and may prevent negative outcomes. It's important to know how CNAs in LTCFs care for residents with delirium and how they perceive receiving training [4, 5]. To increase knowledge about delirium, a blended learning was developed and tested [6].

## Aim(s)

The aims were to identify the prevalence of delirium in Flemish LTCFs, and the influencing factors for developing delirium; to validate a screening tool for delirium detection that can be used by all healthcare workers; to identify CNAs' perspectives on delirium care; to determine health care workers' knowledge about delirium with the Delirium Knowledge Questionnaire (DKQ), and their strain of care in delirium with the Strain of Care for Delirium Index (SCDI); and to develop a blended learning on delirium for all health care workers.

## Methods

To determine the prevalence of delirium and the influencing factors, and to validate a screening tool, a cross-sectional evaluation in six LTCFs took place. To identify CNAs' perspectives on delirium care, interviews were conducted. The development of a blended learning on delirium for healthcare workers, the determination of their knowledge and their strain of care about delirium was done over the course of several years through the development of a blended learning and pre-posttests in LCTFs.

## Results

Delirium is an important clinical problem affecting almost 15% of the residents in LTCFs. The Delirium Observation Screening Scale (DOSS) was found to be a reliable and valid instrument to screen for delirium in LTCFs that can be used by all healthcare professionals. During the interviews with the CNAs, five themes emerged: Knowledge About Delirium, Caring for Residents With Delirium, Delirium Education, Psychological Burden, and Quality of Care. There was a significant improvement the delirium knowledge after the blended learning and decrease in strain of care. The delirium knowledge increased the most for CNAs.

## Discussion

Screening for risk factors and presence of delirium is important to prevent a potential delirium and to treat underlying causes when present [7]. CNAs' care of residents with delirium was based on prior experiences and gut feelings. This insufficient knowledge may hamper timely detection or adequate treatment of delirium, indicating a high need for delirium training [8-10]. Adequate delirium knowledge will increase awareness, not only among nurses but also among other health care workers [5, 11]. This might stimulate the implementation of delirium management in LTCFs [6].

## Implications and future perspectives

During this study, we have established that knowledge about delirium in LTCFs is lacking. Health care workers not equipped to deliver adequate delirium management, because delirium training is not a part of their training. Therefore, the next phase has 2 main goals: to set-up a stepped-wedged implementation of the blended learning in Belgian LTCFs and to adapt the blended learning so that it is suited for CNAs (and other healthcare workers), and to be implemented in their curricula.

## References

1.  Wilson, J.E., et al., Delirium. Nature Reviews Disease Primers, 2020. 6(1): p. 90.
2.  Achterberg, W.P., et al., We're all different and we're the same: the story of the European nursing home resident. Age Ageing, 2019. 49(1): p. 3-4.
3.  Sabbe, K., et al., Correction to: The prevalence of delirium in Belgian nursing homes: a cross-sectional evaluation. BMC Geriatr, 2021. 21(1): p. 673.
4.  Thomas, N., M. Coleman, and D. Terry, Nurses' Experience of Caring for Patients with Delirium: Systematic Review and Qualitative Evidence Synthesis. Nurs Rep, 2021. 11(1): p. 164-174.

5.	MacLullich, A.M.J. and S.D. Shenkin, Delirium research, education and practice. Age Ageing, 2019. 48(5): p. 619-623.

6.	Lee, S.Y., et al., Developing delirium best practice: a systematic review of education interventions for healthcare professionals working in inpatient settings. Eur Geriatr Med, 2020. 11(1): p. 1-32.

7.	Park, J., E. Jeong, and J. Lee, The Delirium Observation Screening Scale: A Systematic Review and Meta-Analysis of Diagnostic Test Accuracy. Clin Nurs Res, 2021. 30(4): p. 464-473.

8.	Sabbe, K., et al., Certified Nursing Assistants' Perspectives on Delirium Care. J Gerontol Nurs, 2023. 49(2): p. 43-51.

9.	Racine, A.M., et al., Delirium Burden in Patients and Family Caregivers: Development and Testing of New Instruments. Gerontologist, 2019. 59(5): p. e393-e402.

10.	van Velthuijsen, E.L., et al., Can education improve clinical practice concerning delirium in older hospitalised patients? Results of a pre-test post-test study on an educational intervention for nursing staff. BMC Medical education, 2018(1472-6920).

11.	NICE, Delirium: prevention, diagnosis and Management. Clinical guideline, revision. 2019: Manchester.