

Frailty screening in older hospitalized patients

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Impact

This dissertation describes studies that aimed: (1) to generate an overview of available hospital frailty screening tools and their psychometric properties, (2) to obtain information regarding the performance and usability of the Maastricht Frailty Screening Tool for Hospitalized Patients (MFST-HP), and (3) to explore opinions of hospital nurses on conducting frailty screening in hospitalized older patients.

The current chapter reflects on the societal and scientific impact of this thesis, as well as the efforts made to disseminate the results.

Societal impact

As a result of the aging population, the number of older people will increase considerably in the Netherlands and the rest of the world in the coming years (1). This trend will also lead to more older persons with frailty, comorbidities and disabilities and therefore a growing group of older hospitalized patients.

Up to now, the care for this vulnerable group in the total care chain is not optimal (2). This also counts for the care they receive in hospitals, the focus of this thesis. In order to provide more tailored care for this target group, it is important for hospital staff to know which older patient is frail and which is not. This enables them to provide care in a more proactive way. The Dutch Council of Geriatricians (NVKG) e.g. considers the detection of frailty and associated risks as the starting point of personalized geriatric care (3).

Screening tools may help hospital staff to detect potentially frail older patients. This requires that valid (evidence based) and easy-to-use instruments for daily hospital care. In this thesis we reviewed the currently available frailty screeners for hospitalized older patients with particular attention for the Maastricht Frailty Screening Tool for Hospitalized Patients (MFST-HP).

It appeared that the optimal frailty screening tool is not available yet. For the Dutch context it can be doubted whether use of the current VMS tool, which has been implemented in many Dutch hospitals, should be continued. Given the moderate predictive value of the MFST-HP, investigated in this thesis, we would advise against (continuing of) using this tool in its current form for the detection of frail old people in hospital.

Our study on the perspective of nurses regarding frailty screening with the MFST-HP, Groningen Frailty Indicator (GFI) and Risk-score showed that they viewed a supporting screening tool as helpful. Paradoxically, they did not use the instrument appropriately, partly because they considered their own clinical view as more important. Moreover, it seemed that the implementation of these screening tools

in the three hospitals had several flaws. This implies the involvement of nurses from the early beginning in the process of development and implementation of these instruments.

Scientific impact

Our studies have shown that many frailty screening tools exist for daily hospital practice, but none of the current tools is perfect regarding to the different frailty outcomes. This also counts for our MFST-HP that rather seems to filter out non-frail patients instead of frail patients. These findings urge for more research towards a better screener. Future studies on the Clinical Frailty Scale (CFS), which was used in many hospitals all over the world during the Covid pandemic, could be promising in this respect.

Moreover, future studies should explore these instruments more from a care chain perspective, making it possible to validly assess an older person's frailty in different contexts (e.g. at home, in hospital, in long-term care, et cetera) and throughout the total care trajectory. Such studies might also look more broadly to the frailty balance, meaning that they do not only assess frailty but also resilience of people. This may enable better monitoring of older persons as well (4).

Our studies also underline the importance of adequate implementation of nursing (diagnostic) interventions and therefore there remains an additional need for implementation studies that might improve the evidence base of nursing care (6).

Activities for further dissemination

All studies in this dissertation have been published in peer-reviewed international scientific journals. The results have also been discussed at several national and international scientific and professional conferences, including the Annual Scientific Meeting of the Gerontological Society of America, IAGG World Congress of Gerontology & Geriatrics and the Dutch Geriatric Days (Geriatriedagen). Results have been made available for researchers and healthcare professionals via the World Wide Web in scientific and professional platforms.

Knowledge and skills regarding the care for frail older patients is important. We provided several trainings for hospital nurses of various hospital departments. In addition, lectures on frailty and frailty screening were provided in different nursing educational programs. Our results will be further incorporated in nursing education, among others in bachelor of nursing programs. Results of some studies were also discussed during an expert meeting of the Dutch Council of Nurses (V&VN in Dutch).

References

1. Planbureau SSC. 2022.
2. Verbinding Tv. Tijd voor verbinding: de volgende stap voor patiëntveiligheid in ziekenhuizen. 2018 [1 oktober 2018:[Available from: Beschikbaar op: https://www.nfu.nl/sites/default/files/202108/Rapport_tijd_voor_verbinding_de_volgende_stap_voor_patiëntveiligheid_in_ziekenhuizen_01102018.pdf.
3. NVKG. 2013 [cited 2023 280-01-2023]. Available from: <https://www.nvkg.nl/sites/nvkg.nl/files/NVKG%20Leidraad%20Zorgpad%20Kwetsbare%20Ouderen.pdf>.
4. De Donder L, Smetcoren AS, Schols J, van der Vorst A, Dierckx E. Critical reflections on the blind sides of frailty in later life. J Aging Stud. 2019;49:66-73.
5. Kwaliteit van Zorg verpleging en verzorging [cited 08-02-2023]. Available from: <https://www.zonmw.nl/nl/onderzoek-resultaten/kwaliteit-van-zorg/verpleging-en-verzorging>