Malnutrition in hospitalised older adults: A multi-centre observational study of prevalence, associations and outcomes

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Malnutrition is common in older adults, and is associated with high healthcare costs and adverse outcomes, particularly in hospital settings[1,2]. The prevalence and correlates of malnutrition in hospitalised older adults are currently not clear; much of the existing research in this area is limited methodologically; studies are typically based on small samples and/or narrow populations[3,4], exclude people with dementia[3,4], are uni-centre[5], and/or use tools not designed for use with older adults[5]. The present study addresses this gap, investigating the prevalence, correlates and outcomes of malnutrition in older adults on admission to hospital.

In total, 606 (70+ years) older adults were included in a prospective cohort study across six hospitals in the Republic of Ireland. All elective and acute admissions to any speciality were eligible. Day-case admissions and those moribund on admission were excluded. All participants were clinically assessed for dementia on admission (see Timmons et al.[6]). Socio-demographic and clinical data, including nutritional status (Mini-Nutritional Assessment – short form[7]), was collected within 36 hours of admission. Outcome data was collected prospectively on length of stay, in-hospital mortality and institutionalisation.

The mean age was 79·7; 51 % were female; 29 % were elective admissions; 67 % were admitted to a medical specialty. Nutrition scores were available for 602/606; 37 % had a 'normal' status, 45 % were 'at-risk', and 18 % were 'malnourished'. Malnutrition was more common in females, acute admissions, older patients and those who were widowed/ separated. Dementia, functional dependency, comorbidity and frailty independently predicted a) malnutrition and b) being at-risk of malnutrition ($p < ·001$). Malnutrition was also associated with an increased length of stay ($p < ·001$), institutionalisation ($p < 0·001$) and in-hospital mortality ($p < ·001$).

These findings support the prioritisation of nutritional screening in clinical practice and public health policy, for all ≥70 on admission to hospital, and in particular for people with dementia, increased functional dependency and/or multi-morbidity, and those who are frail.

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