Proceedings of the Nutrition Society (2011), **70 (OCE5)**, E320 doi:10.1017/S0029665111004058

Malnutrition Matters, Joint BAPEN and Nutrition Society Meeting, 29–30 November 2011, Harrogate

An investigation into the incidence of malnutrition risk among people with dementia in a defined geographical region in Ireland using two nutrition screening tools

M. Mc.Keon[1], M. McDonnell-Naugton[2], C. Glennon[1], G. Flanagan-Rugaboor[1], M. Oregan[3] and S. Faherty[2]

[1]*Community Nutrition & Dietetics Sevice, Health Service Executive Dublin Mid-Leinster, Republic of Ireland,* [2]*Department of Nursing and Health Science, Athlone Institute of Technology, Republic of Ireland and* [3]*Department of Statistics, Trinity Collage Dublin, Republic of Ireland*

Currently there are almost 44,000 people in Ireland with dementia. It is estimated that in twenty years this number will double and in thirty years it will treble[(1)], making it one of the most is important public health issues of our time. People with Dementia may suffer from anorexia, under nutrition, and involuntary weight loss[(2)]. Studies indicate that unintentional weight loss may increase mortality and reduce resistance to infections[(3)].

Eighty seven residents consented to participate in the study equivalent to 87% participation rate. In addition to collecting anthropometric data, two validated nutritional screening tools were used to assess the risk of malnutrition of all eighty seven participants in the study. The Mini Nutritional Assessment ('MNA')[(4)]and the Malnutrition Universal screening tool ('MUST')[(5)].

Risk of malnutrition	Number of participants identified using the "MNA"	Number of participants identified using the "MUST"
* 'at risk'	72	42
Not 'at risk'	15	45

*Participants identified at medium risk (n = 7) and at High risk (n = 35) were combined to form a new category of "at risk" participants (n = 42) which allowed for correlation of the screening tools.

The 'MNA' and the 'MUST' were both found to be highly correlated ($P<0.000$) (95% CI) in identifying participants who were 'at risk' of malnutrition. Both screening tools identified the same 55 participants as 'at risk' of malnutrition, and the same 15 participants as 'not at risk' of malnutrition. The screening tools differed when the 'MNA' identified a further 29 participants (33%) 'at risk' which the 'MUST' did not identify. The mean BMI of 'at risk' participants identified by the 'MNA' only is higher at 24 kg/m2 ($\pm$5.7 SD) when compared to mean BMI of 21 kg.m^2 ($\pm$4.5 SD) in participants identified 'at risk' by both screening tools. Indicating that both screening tools identified a high number of people as at risk of malnutrition in this group. The 'MNA' identifying a higher number of people as the cut offs for 'at risk' score are more sensitive in the 'MNA' than the 'MUST' tool.

1. Alzheimers Society of Ireland (2011).
2. Aselage MB & Amella EJ (2010) *Journal of Clinical Nursing* **19**, 33–41.
3. Barker L, Gout BS & Crowe TC (2011) *Int. J. Environ. Res. Public Health* **8**, 514–527.
4. Vellas B *et al*. (1999) *Nutrition* **15**, 116–122.
5. Malnutrition Advisory Group (2000) Malnutrition Advisory Group – Guidelines for the detection and management of malnutrition. Redditch, UK.