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Encouraging behaviour change in mild cognitive impairment patients: development of educational material

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Cognitive decline has a profound impact on the health and quality of life of older people and their caregivers. Exploring mechanisms to delay cognitive decline has become an urgent economic priority as population demographics change. The suggestion that diet and other lifestyle factors could delay or reduce cognitive decline is an attractive proposition and has become a focus of scientific interest^(1–5). Since cognitive decline is a salient concern for many older adults (6), the development of educational material (EM) which highlights the link between a healthy lifestyle and cognitive health may help motivate people with mild cognitive impairment (MCI) to change their behaviours. However, little is known about attitudes to lifestyle behaviours in people with MCI. The aim of the present study was to employ a focus group approach with MCI patients and caregivers in order to direct the design, development and pilot testing of EM to help encourage behaviour (dietary and physical activity) change.

A qualitative study design was used encompassing structured interviews with health professionals involved in the care or education of people with MCI (n = 10), and focus groups with MCI patients (n = 24) and caregivers (n = 12). Focus group discussions addressed a range of topics including living with MCI, attitudes to and knowledge of diet and physical activity and their links to MCI, current lifestyle and dietary behaviour, EM content and access to information, and thus provided an insight into the key issues that needed to be addressed within the EM. Focus group discussions were tape recorded, transcribed and analysed by emergent themes analysis. Based on the discussions and interviews, EM was drafted and pilot tested with a new group of MCI patients (n = 21) and caregivers (n = 6). Telephone interviews were conducted with the pilot testers in order to obtain feedback and thus examine the usefulness of the material in achieving behaviour change.

The group discussions and interviews generated mixed responses. Health professionals alluded to the lack of high quality evidence for a link between lifestyle and MCI risk. They felt that lifestyle modifications should be recommended to MCI patients and felt confident in communicating such advice. However, MCI patients had no recollection of receiving such information and lacked awareness of the lifestyle cognition link. Participants preferred EM to be concise, eye-catching and in written format, with personal delivery of information favoured. The material developed included information relating to the Mediterranean diet and a healthy lifestyle, and also a meal plan, recipe cards and wall chart. Most pilot testers approved of the EM but were heterogeneous in terms of their lifestyle behaviour, their willingness to change, and the support needed to change. Some patients were interested in diet and were either following a Mediterraneantype diet or were willing to try different foods and make changes. However, many were resistant to changing the dietary habits they had been following for most of their lives, and to encourage behaviour change in these patients is likely to be challenging.

The findings suggest that health professionals need to be more pro-active in responding to the lifestyle educational needs of MCI patients. Specifically tailored resources are needed for this population to ensure usefulness and comprehensibility. Following further evaluation, the EM developed could be used in health promotion activities targeting MCI patients.

- 1. Baker LD, Frank LL, Foster-Schubert K et al. (2010) Arch Neurol 67, 71-79.
- Cassilhas RC, Viana VA, Grassmann V et al. (2007) Med Sci Sports Exerc 39, 1401–1407. Etgen T, Sander D, Huntgeburth U et al. (2010) Arch Intern Med 170, 186–193.
- Gillette-Guyonnet S, Abellan Van Kan G, Andrieu S et al. (2007) J Nutr Health Aging 11, 132–42. Solfrizzi V, Capurso C, DIntrono A et al. (2008) Exp Rev Neurother 8, 133–158.
- Connell CM, Scott Roberts J, McLaughlin SJ (2007) Alzheimer Dis Assoc Disord 21, 232-240.