Sir,
At present there is no curative treatment for dementia and Alzheimer’s disease (AD), nor any therapeutic approach to prevent the conversion of mild cognitive impairment (MCI) to dementia. In the past years, extensive research has increased our knowledge of the aetiology of AD, other dementing disorders and predementia syndromes, and several hypotheses have emerged from the epidemiological research (1). There is emerging evidence of a possible role of environmental and lifestyle-related factors, as was proposed recently for age-related changes in cognitive function, predementia syndromes and the cognitive decline of degenerative (AD) or vascular origin (3). These factors include education, expertise and experience, leisure-time and professional activities (3), suggesting that cognitive training may play a critical role in normal ageing, dementia and predementia syndromes. In fact, given the lack of effective pharmacological therapies, lifestyle changes may be potential non-pharmacological treatment options for predementia syndromes, e.g. MCI (2).

On the other hand, among non-pharmacological interventions, MCI syndrome could represent an ideal target for cognitive training, retaining a large range of cognitive capacities to learn and apply new strategies on memory skills (3). In the years preceding the operationalization of diagnostic criteria for MCI (1), a programme of cognitive stimulation for healthy elderly subjects with mild memory impairments focused on visuo-verbal, verbal and spatial memory and the utilization of “memory strategies”, showing an improvement in memory test scores, and demonstrating the positive effects of cognitive training on memory performance, compared with no improvement in the control group (4). Moreover, cognitive training may delay functional and cognitive decline in patients with MCI. A possible important outcome in this kind of study could be a delayed progression from MCI to dementia. In fact, studies on cognitive training used cognitive symptoms as end-points, while progression to dementia and functional decline may be more attractive outcomes for this research. Nonetheless, functional measures that are sensible to MCI should be used. In fact, in non-pharmacological intervention with a cognitive focus, there is also some debate on the approach for patients with MCI, i.e. cognitive rehabilitation or cognitive training (3). Given that activities of daily living (ADL) are the focus of cognitive rehabilitation, a target such as ADL in MCI patients could be difficult to identify for cognitive rehabilitation. In fact, all recent relevant studies on cognitive intervention in MCI have been based on cognitive training (3). In particular, a study on cholinesterase inhibitors (ChEI)-treated patients with mild to moderate AD and MCI who attended group sessions twice weekly for one year with a comprehensive cognitive and motor stimulation programme, showed a transitory cognitive stabilization and a long-term mood benefit (5). Unfortunately, this study did not separate the data for patients with MCI and AD, and the intervention did not incorporate memory strategy training, resulting in an intervention more similar to the definition of cognitive stimulation than to that of cognitive training (5). Furthermore, a more recent multi-factorial cognitive training on patients with MCI showed that the intervention effect was significant in 2 of the primary outcome measures of episodic memory (delayed list recall and face-name association), suggesting that a cognitive training programme focused on teaching episodic memory strategies with 8 weekly group sessions may have positive effects on objective measures of episodic memory in both healthy elderly subjects and patients with MCI (6).

A recent study investigated, in a total of 22 patients with MCI and their significant others, the effects of a cognitive behavioural group therapy in 10 weekly 2-hour sessions (7). In this study, while no changes were found on distress and mood measures in patients or their significant others, patients showed a significantly increased level of acceptance and a trend for increased marital satisfaction. The significant others reported an increased awareness of memory and behavioural problems (7). Although these were only preliminary results, as acknowledged in their report, in which the authors estimated a sample size of 70 couples in an eventual controlled study design to confirm the programme’s effectiveness, their findings suggested an intervention based on principles from cognitive behavioural therapy combined with psycho-educational elements for patients with MCI (7). This approach, with a behavioural/psychosocial focus, appeared to be very interesting and may be included in a more general picture of non-pharmacological intervention in patients with MCI. In conclusion, we strongly recommend an integrated approach to non-pharmacological intervention for patients with MCI, combining established cognitive training techniques for improving cognitive symptoms (3–6) with the proposed behavioural/psychosocial approach (7) to improve also the level of acceptance of the memory impairment and alertness to everyday changes in patients and significant others.

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