initiated data collection we used the only available version of the CAMCOG adapted and validated by Bottino *et al.* (2001), who presented data suggesting appropriate psychometric characteristics for the battery. Several other Brazilian studies have used this version (Nunes *et al.*, 2008).

3. We also agree with our colleagues that "participation in social, cultural and labor activities are fundamental experiences which determine the overall capacity of the brain." One of the interesting points of our paper is showing that the CAMCOG depends upon aspects other than education. Our sample was recruited from a private clinic and most likely has a better socioeconomic profile than samples from public services. Our sample also had a monthly income of around US\$ 882 (equivalent to three minimum wages in Brazil), which does not equate to saving that our population was not poor. In Brazil, because of insufficient public health resources, people from various economic layers reach private services for better quality. In addition, Jundiaí is a city in São Paulo with high human development index. We understand our findings suggest that the impact of education on cognition may be mediated by cultural and socioeconomic factors which may come into play after formal schooling takes place. For further information on this topic, please refer to other papers from our group (Aprahamian et al., 2010; 2011)

In summing up, the authors do not agree that the presented findings were affected by "sample and classification bias."

Conflict of interest

None.

References

- Aprahamian, I., Martinelli, J. E., Neri, A. L. and Yassuda, M. S. (2010). The accuracy of the Clock Drawing Test compared to that of standard screening tests for Alzheimer's disease: results from a study of Brazilian elderly with heterogeneous educational backgrounds. *International Psychogeriatrics*, 22, 64–71.
- Aprahamian, I., Martinelli, J. E., Cecato, J. and Yassuda, M. S. (2011). Screening for Alzheimer's disease among illiterate elderly: accuracy analysis for multiple instruments. *Journal of Alzheimer's Disease*, 26, 221–229.
- Bottino, C. M. C., Stoppe, A., Jr., Scalco, A. Z., Ferreira, R. C. R., Hototian, S. R. and Scalco, M. Z. (2001). Validade e confiabilidade da versão brasileira do CAMDEX. Arquivos de Neuropsiquiatria, 59 (Suppl. 3), S20.
- Mayeux, R. (2010). Early Alzheimer's disease. New England Journal of Medicine, 362, 2194–2201.
- Nunes, P. V., Diniz, B. S., Radanovic, M. et al. (2008). CAMCOG as a screening tool for diagnosis of mild cognitive impairment and dementia. *International Journal of Geriatric Psychiatry*, 23, 1127–1133.

IVAN APRAHAMIAN¹ AND

Mônica Sanches Yassuda²

¹Psychogeriatric Unit, Laboratory of Neuroscience (LIM 27), Department and Institute of Psychiatry, Faculty of Medicine, University of São Paulo, São Paulo, Brazil

²Department of Gerontology, School of Arts, Sciences and Humanities, University of São Paulo, São Paulo, Brazil

Email: ivan.aprahamian@gmail.com

doi:10.1017/S1041610212000427

Complementary and alternative medicine usage among Alzheimer's disease patients

Use of complementary and alternative medicine (CAM) is common in chronic diseases. To investigate its relevance in Alzheimer's disease (AD), we interviewed 38 patients and an attempt was made to determine the type of CAM used and reasons for using it.

CAM generally refers to medicinal use other than contemporary or conventional medicine, though there is no uniform definition (Federspil and Vettor, 2000). CAM use is common in degenerative neurological disorders, especially in diseases with no known cure, such as AD. This is particularly so in countries like India where more than 100 systems of medicine are practiced and the use of drugs of limited or with no evidence of effectiveness is widespread.

Patients were asked to specify who suggested that they use CAM and whether they noticed any improvement following CAM use. Patients were randomly selected from a neurology outpatient department of a tertiary care hospital. All had mild to moderate AD. Eleven patients out of 38 studied (29%, M:F, 10:1) confirmed that they had used CAM over the last six months. Their pattern of CAM use was as follows: *Ayurvedic* = 8 (21%); *Homeopathy* = 2 (5.3%); *Accupuncture* = 1 (2.6%). Eight out of 11 admitted using CAM because they perceived that "desi davai" (Hindi equivalent of indigenous drugs/alternative medicines) were good for the brain and free from side effects. Two of them used the drugs on suggestion of their relatives and one was motivated by the media. Nine out of 11 were using CAM along with conventional medicines for AD, e.g. cholinesterase inhibitors and N-methyl D-aspartate (NMDA) modulators (rivastigmine, donepezil, memantine, etc.). None of the 11 patients studied reported any clinical improvement with CAM and none informed their treating physicians of CAM use.

Herbal drug usage is very common as such drugs are perceived by lay people to be "safer," "natural," and "totally free from side effects." Several studies, however, show that they are not entirely safe (Dhikav *et al.*, 2003). These too have clinically significant side effects, have potential drug interactions, and can even cause treatment failure. One in three people in the Western world report CAM use in the preceding year (Reilly, 2001). Although our sample size is small, it shows that CAM usage is common in AD patients. We feel that physicians should inquire about use of CAM to ensure better compliance of conventional medicines and reduce possibilities of potential CAM-drug interactions.

Conflict of interest

None.

References

- Dhikav, V., Singh, S., Pande, S., Chawla, A. and Anand, K. S. (2003). Adverse reactions of herbal drugs. *Journal of Indian Academy of Clinical Medicine*, 4, 345–347.
- Federspil, G. and Vettor, R. (2000). Can scientific medicine incorporate alternative medicine? *Journal of Alternative and Complementary Medicine*, 6, 241–244.
- **Reilly, D.** (2001). Comments on complementary and alternative medicine in Europe. *Journal of Alternative and Complementary Medicine*, 7, 23–31.

VIKAS DHIKAV AND KULJEET SINGH ANAND

Department of Neurology, Postgraduate Institute of Medical Education and Research (PGIMER), Dr. Ram Manohar Lohia, GGS-IP University, New Delhi, India Email: vikasdhikav@hotmail.com