## LETTER TO THE EDITOR

doi:10.1017/S1041610218000662

# Risk of caregiver burden in patients with three types of dementia

Liu et al. (2017) investigated caregiver burden of patients with frontotemporal lobar degeneration (FTD) and dementia with Lewy bodies (DLB), which was compared with caregivers of patients with Alzheimer's disease. The authors concluded that the frequency and severity of behavioral disturbances in caregiver of patients with FTD and DLB were higher than those with caregivers of patients with Alzheimer's disease. I have some concerns about their study.

First, Bonanni et al. (2017) reported that the prevalence of DLB in comparison with those of Alzheimer's disease and FTD was 24.5% and 57.5%, respectively, in primary centers. Liu et al. (2017) handled 36 patients with DLB, 325 patients with Alzheimer's disease, and 131 patients with FTD, and the corresponding percentage was 11.1% and 27.5%, respectively. Although direct comparisons between data from a single center and from multicenter should be paid with caution, the prevalence of dementia and its subtype would be differed according to several factors of the target population. The number of samples in patients with DLB was relatively small, and summing-up the number of patients with DLB and also FTD would lead to higher statistical power.

Second, Cheng and Lam (2017) recently reported a difficulty of differential diagnosis for each type of dementia. Progression or severity in each type of dementia differs and appropriate adjustment is needed for the risk assessment of caregiver burden in patients with dementia. The clinical manifestations in each type of dementia would cause the frequency and severity of caregiver burden (Uflacker *et al.*, 2016). Liu *et al.* (2017) conducted a cross-sectional study, and I suppose that a follow-up study would clarify the change of caregiver burden with the progression of disease.

Finally, caregivers are fundamentally classified into family members and commercial staffing. I understand that Liu *et al.* (2017) handled caregiver burden in family carers and the authors partly traced the past report (Svendsboe *et al.*, 2016). As a further study, risk assessment of caregiver burden in patients with dementia should be conducted with special reference to the type of caregivers.

## **Conflict of interest**

None.

### References

- **Bonanni, L.** *et al.* (2017). The Italian dementia with Lewy bodies study group (DLB-SINdem): toward a standardization of clinical procedures and multicenter cohort studies design. *Neurological Sciences*, 38, 83–91. doi:10.1007/s10072-016-2713-8.
- **Cheng, S. T. and Lam, L. C. W.** (2017). Improving diagnostic communication in dementia. *International Psychogeriatrics*, doi:10.1017/S1041610217002757 (Epub ahead of print).
- **Liu, S.** *et al.* (2017). Caregiver burden, sleep quality, depression, and anxiety in dementia caregivers: a comparison of frontotemporal lobar degeneration, dementia with Lewy bodies, and Alzheimer's disease. *International Psychogeriatrics*, doi:10.1017/S1041610217002630 (Epub ahead of print).
- **Svendsboe, E.** *et al.* (2016). Caregiver burden in family carers of people with dementia with Lewy bodies and Alzheimer's disease. *International Journal of Geriatric Psychiatry*, 31, 1075–1083. doi:10.1002/gps.4433.
- Uflacker, A., Edmondson, M. C., Onyike, C. U. and Appleby, B. S. (2016). Caregiver burden in atypical dementias: comparing frontotemporal dementia, Creutzfeldt-Jakob disease, and Alzheimer's disease. *International Psychogeriatrics*, 28, 269–273. doi:10.1017/S1041610215001647.

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