# Behavioural and Psychological Symptoms in Alzheimer's disease: the burden on the caregiver

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#### **Introduction:**

The care burden of patients with Alzheimer's disease is largely put on their families. The relative caregivers are under a great deal of stress and, consequently, they often show depression, insomnia, antisocial behavior and a general worsening in the quality of life (Ryu et al., 2011)

The present study evaluated which behavioral disturbances are the major cause of stress for the caregivers of patients with Alzheimer's disease.

### **Patients and caregivers**

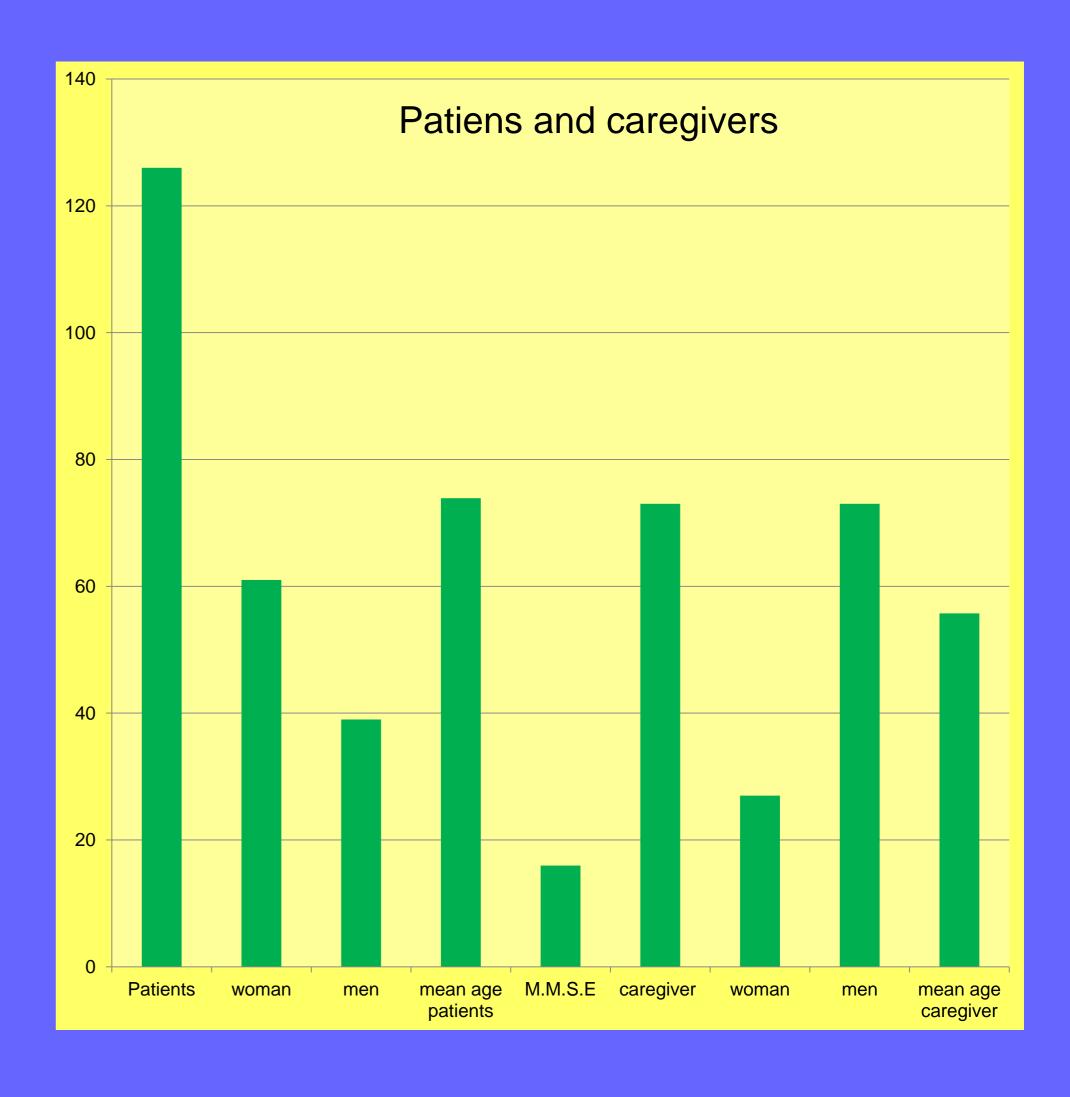
We enrolled 126 patients (61% F, 39% M; mean age 73.9 years, SD = 6.51; mean M.M.S.E.: 15.97, SD = 5.46) consecutively admitted to the Alzheimer Special Care Unit of the Department of Neurosciences at the University of Messina. Inclusion criteria were: age > 50 years, diagnosis of probable AD according to the NINCS-ADRDA criteria (McKhann et al., 1984). Exclusion criteria were: previous stroke and/or brain trauma, comorbidity with neurological or psychiatric diseases, co-existence of severe internal diseases, history of alcohol and/or drug abuse. One caregiver per patient participated in the study (73% F, 27% M; mean age 55.73 years).

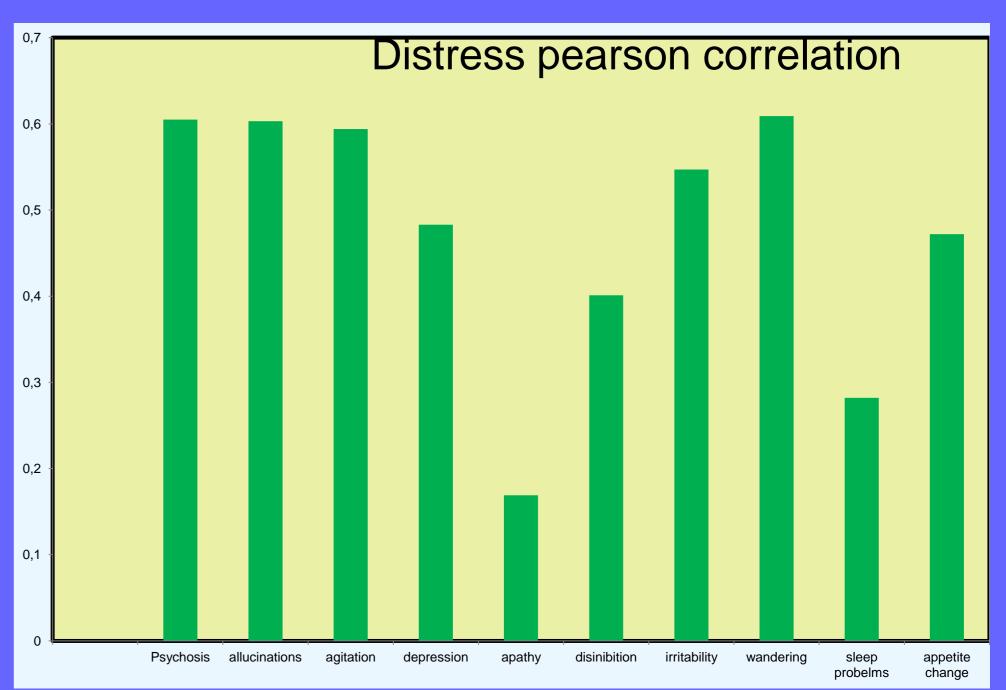


All patients underwent an extensive anamnestic, neuroradiological, neurological and neuropsychological evaluation. We also investigated activities of daily living (with ADL and IADL scales) as well as cognitive level (with MMSE). The behavioural and psychological symptoms of dementia (BPSD) were assessed with the Neuropsychiatric Inventory.

An in-depth interview was carried out with the caregiver that included the administration of various scales and questionnaires; in particular, the impact of stress was assessed with the Caregiver Burden Inventory.

A multiple regression analysis was carried out with the various neuropsychiatric symptoms on the NPI as independent variables and the distress of the caregiver on the CBI test as dependent variable.





### **Results and comments**

The distress of the caregivers correlated with all NPI scales except apathy. The multiple regression model showed that the most predictive patients' symptoms were the presence of agitation, depression/dysphoria, irritability and eating disorders.

Overall, the model explained 64% of the total variance.

The results confirmed a very close relationship between severity of BPSD and distress of caregivers and indicated the most critical factors mediating this relationship.

The behavioural and psychological symptoms of the patient affect the caregiver's well-being as much (or more) than the cognitive deficits. Caregiver support and the treatment of behavioural disturbances in AD patients represents one key area of intervention in the care for patients with dementia.

## References

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