

Abstract

Introduction: In Alzheimer's disease (AD), patients may suffer from agitation as well as cognitive symptoms. In the literature, it has been suggested that manifestation of agitated behaviour is related to other psychiatric symptoms. Little is known about the profile of agitated behaviour and its relationship to other psychiatric symptoms in local Chinese with late onset AD in hospital psychiatric services.

Method: This is a cross-sectional study examining the clinical profile, including agitation, and the relationships between the agitated behaviour and other psychiatric symptoms in a sample of local Chinese with late onset of AD presented consecutively to hospital psychiatric services for the first time over a nine-month period. Participants fulfilled the National Institute of Neurological and Communicative Disorders and Stroke and the Alzheimer's Disease and Related Disorders Association (NINCDS-ADRDA) criteria for probable AD with minimum age of onset of 60. The psychiatric symptoms studied included delusion, hallucination, depression and degree of cognitive impairment. The twenty-nine agitated behaviours, listed in the Cohen-Mansfield Agitation Inventory, were examined in three categories of agitation: (1) aggressive behaviour (physical or verbal aggression), (2) physically nonaggressive behaviour and (3) verbally nonaggressive behaviour for the purpose of study.

Results: There were 81 participants with probable AD. Results showed that the prevalence of delusion, hallucination and mild depression was 37%, 11% and 24% respectively. Regarding individual category of agitation, there was 35%, 74% and 84% of participants exhibiting at least one kind of aggressive behaviour, physically nonaggressive behaviour and verbally nonaggressive behaviour in a week respectively over a two-week period. There was a modest correlation between delusion and aggressive behaviour ($r=0.33$) and physically nonaggressive behaviour ($r=0.38$); and between depressive symptoms and all three categories of agitation ($r=0.31-0.37$) after controlling for the simultaneous confounding effect of other factors. The combined effect of delusion and depressive symptoms predicted 40%-45% of total variance of each individual category of agitation. In contrast, agitation was not significantly associated with hallucination, degree of cognitive impairment or demographic factors.

Conclusion: Delusion and depressive symptoms were independently associated with increased occurrence of agitation in people with AD, although there was only a modest correlation between these two symptoms and the individual category of agitation after controlling for the confounding effects. It is possible that other factors such as environmental, medical and psychological factors are also contributing to agitation. Further research is indicated to explore these unknown factors.