OBJECTIVE: To investigate the possible correlations between depression in dementia and agitation in the morning by a prospective naturalistic study. METHODS: Data were collected from three independent nursing homes in an urban setting. Trained nursing home staff pre-selected 110 demented and agitated patients with a minimum age of 60 years. Three main groups were formed based on agitation peak either: in the morning, evening or none. Each is respectively: 'sunrisers', 'sundowners' and 'constants'. Agitation was assessed by the same staff twice a day for a 2-week timeframe using the CMAI (Cohen-Mansfield Agitation Inventory); MMSE (Mini-Mental State Examination) for dementia re-evaluation and staging; CSDD (Cornell Score for Depression in Dementia) for depression screening. RESULTS: Sixty-three (60%) of all patients were depressive but only 16 patients of them were treated with antidepressants. Forty-four patients were classified as belonging to the 'sunriser' group, 38 to the 'sundowners' and 23 to the 'constants'. There were no significant differences in depression between the three groups: $p = 0.798$ for the difference in proportion of depressed or not depressed people; $p = 0.272$ for the difference in raw Cornell-score between agitation in the morning and evening. CONCLUSION: 'Sunrising' appears to play an important role in dementia. In our population agitation was slightly more common in the morning than in
the evening, but peak of agitation does not seem to be related to depression in dementia. Our data supports that the diagnosis of depression is still often overlooked in demented and agitated persons.