

Abstract. The world is rapidly aging and facing an increase in the number of dementia patients, so it is important to detect the preclinical stage of dementia in such countries. We examined both cognitive and affective functions among cognitively normal control (n=218), mild cognitive impairment (MCI, n=146) and Alzheimer's disease (AD, n=305) subjects using two evaluation tools for behavioral and psychological symptoms of dementia (BPSD) (Abe's BPSD score (ABS) and mild behavioral impairment (MBI)). BPSD were present in 12.4% (ABS) and 9.6% (MBI) of cognitively normal people, 34.9% and 32.2% in MCI subjects, and 66.2% and 51.1% in AD patients. Both ABS (§ p <0.05) and MBI (§§ p <0.01) score showed worse score with cognitive decline of the mini-mental state examination in the AD group in BPSD-positive participants. Similar correlations were found in all participants in AD group (|||| p <0.01 vs ABS and MBI). Among the subscales in BPSD-positive participants, an apathy/indifference score of ABS and a decreased motivation of MBI showed significant differences in AD patients compared to the control and MCI subjects (** p<0.01). In addition, subscale analyses further showed a downward trend from the control to MCI and AD subjects in four ABS subscales and three MBI subscales. The present study showed the preclinical presence of BPSD in cognitively normal people, more so in MCI subjects, and ABS detected BPSD more sensitively than MBI in all three groups.