

**Objectives:** To explore the symptom characteristics of older people with MBI and to classify them based on their symptoms.

**Methods:** Using a multi-stage sampling Methods, the MBI-Checklist was employed to investigate symptom characteristics in 255 older people with MBI from 32 nursing homes in Fujian Province. Latent Class Analysis (LCA) was then employed to categorize these individuals based on their symptom profiles.

**Results:** The neuropsychiatric symptoms clusters in older people with MBI often present as a combination of lack of motivation and emotional dysregulation, lack of motivation and impulse control disorders, or emotional dysregulation and impulse control disorders; presentation of a single symptom cluster is relatively less common, accounting for 45.49%. Older people with MBI can be divided into 2 latent classes ( $P < 0.05$ ) based on symptom characteristics. According to the conditional probability of each class, they were named the “high-level group” [211 (82.69%)] and the “low-level group” [44 (17.31%)].

**Discussion:** As individuals with MBI are at high risk for developing dementia, early intervention can effectively delay or reduce the occurrence of dementia. Future interventions should be personalized based on the specific symptom characteristics of this population.

### **FC19: PET imaging of late-life psychosis and mood disorder**

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**Summary:** In his 1910 textbook, 8th Edition, *Mental Illness in Old Age*, E. Kraepelin stated, “The realm of late-life psychiatric disorders is perhaps the most unclear in the entirety of psychiatry.” More than a century later, it remains challenging to fully understand late-life psychiatric disorders, including late-life depression, late-life bipolar disorder, and late-life delusional states such as late paraphrenia. However, recent years have seen significant advancements. Neuropathological examinations of these late-life psychiatric disorders are gradually uncovering the underlying diseases. In addition, progress in neurofunctional imaging studies using positron emission tomography (PET) is shedding light on their neurological foundations. Traditionally, mood disorders and delusional conditions in the elderly were considered distinct from dementia. Yet, over time, more cases are being observed to progress into some form of dementia or neurodegenerative diseases. These cases are suspected to have diverse neuropathological entities based on the type of abnormal proteins accumulating in the brain, such as amyloidopathy, synucleinopathy, or tauopathy. Among these, we have specifically revealed that tauopathy is a background factor in some cases of late-life mood disorders and late-life delusional states, using Florzolotau tau PET imaging. We have also found that psychiatric symptoms like delusions are related to the degree of accumulation of tau proteins. The involvement of tau pathology in symptom formation in late-life psychosis suggests that disease-modifying drugs targeting tau, which may emerge in the near future, could be effective in treating these individuals.

### **FC20: Apathy: the fourth musketeer in the normal pressure hydrocephalus in older adults**

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**Objectives:** Highlight the presentation of behavioral symptoms in addition to the classic clinical trial in idiopathic normal pressure hydrocephalus in the elderly. Identify apathy as the most prevalent behavioral symptom in normal pressure hydrocephalus (NPH) in the elderly.