FC17: Emergent neuropsychiatric symptoms and sleep disturbances among dementia-risk older adults with depressive symptoms in nursing homes: a network analysis

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Objectives: The aim of this study was to identify core and bridge symptoms between emergent neuropsychiatric symptoms and sleep disturbance in dementia-risk older adults with depressive symptoms in nursing homes using network analysis, and to further compare the structural differences in symptom networks between subthreshold depressive and depressive groups.

Methods: A total of 853 older adults in nursing homes participated in this study. We used the Mild Behavioral Impairment (MBI) and the Pittsburgh Sleep Quality Index (PSQI) to assess the severity of emergent neuropsychiatric symptoms and sleep disturbances, respectively, and the analyses also generated a network model of the MBI-PSQI in the sample and examined subthreshold depressive and depressive groups' potential differences between network structure and connectivity.

Results: The core symptom in the global MBI-PSQI network of older adults with depressive symptoms in nursing homes was MBI8'' (Lack of pleasure experience: 8.340), and the bridge symptom was PSQI7'' (Daytime Dysfunction: 3.894). The edges connecting the nodes MBI2'' (Lost curiosity in usual interests) and MBI3'' (Decreased social initiative) in the global MBI-PSQI network has the strongest weight (0.798). Compared to the global network, for participants in the depression group, MBI8'' (7.647) remains the most core symptom, and PSQI7'' (4.028) serves as a critical bridge symptom between emergent neuropsychiatric symptoms and sleep disturbances. However, in the subthreshold depression group, the MBI-PSQI network structure exhibits distinct characteristics, with MBI2'' (5.563) being revealed as the most significant symptom, closely followed by MBI8'' (5.453). Furthermore, the bridge symptom connecting emergent neuropsychiatric symptoms to sleep disturbances shifts to PSQI4'' (Sleep Efficiency: 1.386). Intriguingly, the strongest edge in both the global network and the subgroup network is MBI2-MBI3.

Conclusions: There is an association between emergent neuropsychiatric symptoms and sleep disturbance in dementia-risk older adults with depressive symptoms in nursing homes. In addition, heterogeneity in the network structure of subthreshold depression and depression, with shifts in core and bridge symptoms, providing directions for designing novel and targeted interventions.

FC18: Symptom characteristics of neuropsychiatric symptoms in older people with mild behaviour impairment: A latent class analysis

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Background: Mild behavioral impairment (MBI) in older people refers to a group of syndromes that are characterized primarily by clusters of neuropsychiatric symptoms without severe cognitive impairment, which is a high-risk population for dementia. Patients often experience a variety of symptoms and exhibit high heterogeneity in symptomatology across different individuals. Classifying the psychotic symptom characteristics of MBI patients aids in the implementation of precise interventions for the next steps.

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