

outcomes, mean(SD) HDRS-17 total scores improved from 20.5(6.62) to 11.8(7.7) after receiving piTBS intervention. The mean percent improvement of HDRS-17 was 46.0%±29.4%. Dichotomous outcomes showed response rate of 43.5% and remission rate of 34.8%. No seizures or other serious adverse events were noted, and no premature discontinuation was noted.

**Conclusion:** This study is the largest study demonstrating the piTBS protocol provides a comparable reduction in depression symptoms in older adults with TRD, similar to the effectiveness in adult TRD and the efficacy of standard sequential bilateral rTMS/iTBS in older TRD in the FOUR-D trial. Regarding desirable efficiency and effectiveness, piTBS may be an optimal form of rTMS in treating older adults with TRD. Further large comparative effectiveness trials with standard iTBS or high-frequency rTMS in this population are warranted.

### **P33: A Re-Evaluation Study and Literature Review on AD8 as a Screening Tool**

**Authors:** Cho-Hsiang Yang<sup>1</sup>, Yi-Ting Lin<sup>1</sup>, Tzung-Jeng Hwang<sup>1</sup>

<sup>1</sup>Department of Psychiatry, National Taiwan University Hospital, Taipei, Taiwan

**Objective:** The 8-Item Informant Interview to Differentiate Aging and Dementia (AD8) was developed as a screening tool for dementia with a cutoff of 2 suggested by the initial study. However, various studies found different cutoff values, and many found a cutoff of 2 might result in a high false positive rate. Furthermore, a higher false positive rate in Taiwan was repeatedly shown when AD8 was self-administered in local government screening programs. This study aimed to test the performance of AD8, define its best cutoff value, review factors that may affect its performance, and reconsider its proper role in clinical practice.

**Methods:** We recruited 118 participant-informant dyads from a university teaching hospital. For each informant, the AD8 was administered first and then the Clinical Dementia Rating to minimize contamination effect. For each participant, two geriatric psychiatrists considered history, physical and mental status examination, laboratory testing, neuropsychological testing, and neuroimaging results to make the final consensus diagnosis based on the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition. The receiver operator characteristic curve was used to assess the diagnostic performance of AD8.

**Results:** There were 59 subjects with normal cognition, 28 with mild neurocognitive disorder, and 31 with major neurocognitive disorder or dementia. To discriminate between dementia and non-dementia, a cutoff of 2 resulted in a sensitivity of 0.903, specificity of 0.598, and area under the curve (AUC) of 0.751. Moving the cutoff to 3 and 4 led to better specificity (0.7126, 0.8621) and greater AUC (0.776, 0.818), albeit some loss in sensitivity (0.8387, 0.7742). The best cutoff score was 4 based on the Youden index. Without considering the mild cognitive impairment group, the optimal cutoff remained at 4, with equal sensitivity and even higher specificity.

**Conclusion:** Our findings suggest the AD8 may perform better and have a lower false positive rate with a cutoff value higher than 2. A literature review found its performance could be affected by disease prevalence across various healthcare settings, education level, regions, respondents' personality and understanding of questions, conduct of test, flow of test administration, etc. We will discuss the details and best screening strategies at the IPA Congress.