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## Background:

Rowland Universal Dementia Assessment Scale (RUDAS) is a brief cognitive test, appropriate for people with minimum completed level of education and sensitive to multicultural contexts. It could be a good instrument for cognitive impairment (CI) screening in Primary Health Care (PHC). It comprises the following areas: recent memory, body orientation, praxis, executive functions and language.

### Research Objective:

The objective of this study is to assess the construct validity of RUDAS analysing its internal consistency and factorial structure.

### Method:

Internal consistency will be calculated using ordinal Cronbach's  $\alpha$ , which reflects the average inter-item correlation score and, as such, will increase when correlations between the items increase. Exploratory Factor Analysis will be used to arrange the variables in domains using principal components extraction. The factorial analysis will include the extraction of five factors reflecting the neuropsychological areas assessed by the test. The result will be rotated under Varimax procedure to ease interpretation. Exploratory factor analysis will be used to arrange the variables in domains using principal components extraction. The analysis will include Kaiser–Meyer–Olkin measure of sampling adequacy and Bartlett's test of sphericity. Estimations will be based based on Pearson's correlations between indicators using a principal component analysis and later replicated with a tetrachoric correlation matrix. The variance in the tetrachoric model will be analysed to indentify convergent iterations and their explicative power.

#### Preliminary results of the ongoing study:

RUDAS is being administered to 321 participants older than 65 years, from seven PHC physicians' consultations in O Grove Health Center. The data collection will be finished by August 2021 and in this poster we will present the final results of the exploratory factor analysis.

#### Conclusions:

We expect that the results of the exploratory factor analysis will replicate the results of previous studies of construct validity of the test in which explanatory factor weights were between 0.57 and 0.82, and all were above 40%. Confirming that RUDAS has a strong factor construct with high factor weights and variance ratio, and 6-item model is appropriate for measurement will support its recommendation as a valid screening instrument for PHC.

**Key words**. Cognitive impairment. Screening. Neuropsychology. Primary Care. Test. Exploratory factor analysis. Construct validity.

**546** - Attachment, Ioneliness, and depression among residents in long-term care (LTC) homes **Author List**: Suthikarn Arunrasameesopa, Tinakon Wongpakaran, Nahathai Wongpakaran Department of Psychiatry, Faculty of Medicine, Chiang Mai University, Thailand

**Background**: Little is known regarding attachment styles among residents in long-term care homes and the relationship with depression and loneliness

**Research Objective**: The study evaluated the distribution of attachment among residents in long-term care (LTC) homes and identified their association with depression and loneliness.

**Method:** This study involved 132 residents in LTC homes in Thailand. All of them were cognitively intact based on Mini-Cog. The Thai version of the Experiences of Close Relationships-Revised questionnaire (ECR-R-18), the Relationships Questionnaire (RQ) were used to assess attachment. The Thai version of Geriatric Depression Scale (GDS-6) and the 6-item Revised version of The University of California Los Angeles Loneliness Scale (RULS-6) were completed.

**Preliminary results of the ongoing study**: Participants included 85 females (64.4%) with mean age 74.89 (SD 7.89) years. The mean number of years of education was 6.81(SD 4.46) years. Most of the attachment styles were insecure (60.7%). The distribution of attachment style was 39.4% for secure, 15.2% for fearful, 16.7% for preoccupied, and 28.8% for dismissing. The mean score of attachment-anxiety was 3.58 and of attachment-avoidance was 3.61. Mean GDS score was 1.17 (SD 1.58), while depression based on the GDS cut-off was found in 31.1% of the residents. Mean RULS score was 2.36 (SD 0.75). Factors associated with Depression includes male ( $c^2 = 4.50$ , p < 0.05), anxious attachment (t = 3.51, p = 0.001) and loneliness (t = 4.90, t = 0.001). Anxious attachment was associated with loneliness (t = 0.001) and depression score (t = 0.001), while avoidant attachment was not.

**Conclusion**: The majority attachment style among residents in LTC homes is insecure attachment, with dismissing style the most prevalent. Attachment with high anxiety i.e., preoccupied, and fearful was associated with loneliness and depression.

# 547 - BDNF and cognitive function in Alzheimer's disease

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**Relevance:** Alzheimer's disease (AD) is a neurodegenerative pathology that develops mainly in elderly and senile people.

Disruption of BDNF transport or suppression of its production appears to be typical for people of old age. Objective: To investigate the influence of Alzheimer's disease on the secretion of brain factors and correlate with neuropsychological profiles.

**Material and methods of research:** 12 men (2) and women (10) with Alzheimer's disease were examined. The average age of the subjects was 76.25 + 4.89. Methods: MMSE, ADAS-COG, laboratory - BDNF was performed using the G7611 BDNF Emax (R) ImmunoAssaySystem 5 x 96 wells, BDNF Emax® Immunological test.

**Results:** 2 patients have mild dementia, 8 patients have moderate dementia, 2 patients have severe dementia. The average age of patients with mild dementia was 72.0 + 1.0. The average MMSE score is 16.7 + 3.4. Correlation analysis showed a close relationship between a pronounced decrease in memory in memory tests (ADAS-COG) and a pronounced decrease in blood BDNF content (r = 0.676). A close statistically significant relationship was found between a low result of the recognition test and a low blood BDNF content (r = 0.598).

**Conclusion:** we assume that blood BDNF is a marker of pathologically accelerated aging of the central nervous system, since low test results for mnestic function are an indicator of severe degeneration in Alzheimer's disease.