

## W0087

**Brain aging in major depressive disorder**

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Depression and anxiety are common and often comorbid mental health disorders that represent risk factors for aging-related conditions. Brain aging has shown to be more advanced in patients with Major Depressive Disorder (MDD). Here, we extend prior work by investigating multivariate brain aging in patients with MDD and/or anxiety disorders and examine which factors contribute to older appearing brains. Adults aged 18-57 years from the Netherlands Study of Depression and Anxiety underwent structural MRI. A pre-trained brain age prediction model based on >2,000 samples from the ENIGMA consortium was applied to obtain brain-predicted age differences (brain-PAD, predicted brain age minus chronological age) in 65 controls and 220 patients with current MDD and/or anxiety. Brain-PAD estimates were associated with clinical, somatic, lifestyle, and biological factors. After correcting for antidepressant use, brain-PAD was significantly higher in MDD (+2.78 years, Cohen's  $d=0.25$ , 95% CI -0.10-0.60) and anxiety patients (+2.91 years, Cohen's  $d=0.27$ , 95% CI -0.08-0.61), compared to controls. There were no significant associations with lifestyle or biological stress systems. A multivariable model indicated unique contributions of higher severity of somatic depression symptoms ( $b=4.21$  years per unit increase on average sum score) and antidepressant use (-2.53 years) to brain-PAD. Advanced brain aging in patients with MDD and anxiety was most strongly associated with somatic depressive symptomatology. We also present clinically relevant evidence for a potential neuroprotective antidepressant effect on the brain-PAD metric that requires follow-up in future research.

**Disclosure:** No significant relationships.

**Keywords:** Depression; brain age; antidepressant use; Anxiety

## W0086

**Frailty index as a clinical measure of biological age in psychiatry**

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The concepts of “accelerated biological ageing” and “premature biological senescence” have been receiving increasing attention in relation to psychiatric diseases, with clinical, epidemiological and molecular observations suggesting that psychopathological processes can have significant relationships with aging-related phenomena. The deficit accumulation model postulates that the individual's biological age and functional status is related to the amount of health

deficits accumulated over time and that one's biological age can be estimated by summarizing health deficits in a single continuous variable, the so-called “frailty index” (FI). In this presentation it will be discussed the possibility that the FI, which condenses information arising from multidimensional evaluations, represents a potential clinically-useful macroscopic indicator of biological age which can add relevant information to the measurements currently implemented in the study of accelerated biological age in psychiatric diseases.

**Disclosure:** No significant relationships.

**Keywords:** comorbidity; accelerated biological aging; frailty index; deficit accumulation model

**Mental Health Policy****A role for the ICF: Advantages and limitations of using the ICF in the treatment and care of individuals with mental health services**

## W0087

**International classification of functioning, disability and health (ICF) in daily clinical practice: Structure, benefits and limitations**

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**Introduction:** The diagnosis of intellectual disability (ID) alone does not predict the level of required care, functional outcomes or limitations in social and occupational participation. The International Classification of Functioning, Disability and Health (ICF) is a taxonomy of health and health-related domains. It provides a common language and framework for describing the level of functioning of a person within their unique environment. Furthermore, it helps to describe health problems of a person in line with the International Classification of Diseases (ICD-10).

**Objective:** Introducing the ICF taxonomy exemplary in the care of individuals with ID and mental health problems in Germany.

**Method:** Comparison of the ICF's comprehensive multidisciplinary approach to assess an individual's level of functioning and care in relation to assessing the needs of persons with ID based on clinical experience.

**Results:** The ICF provides a standardised assessment instrument to determine individual functional needs for the care, rehabilitation and societal integration of individuals with disabilities, which is a statutory requirement in many European countries.

**Conclusion:** Using the ICF for the assessment and management of patients with chronic health conditions, mental disorders and ID can help to accurately define individual therapeutic goals and monitor functional outcomes. A comprehensive narrative description of the patient's functional status and clinical needs is comparatively time-consuming, requires greater effort by the assessing clinician and carries a higher risk of omission of pertinent functional domains; furthermore, a single ICF item confers little additional benefit to the patient in terms of the treatment or care they subsequently receive.