S10: Needs assessment, the basic too for psychogeriatric care
S11: Digital Health and Artificial Intelligence (AI) in Psychogeriatrics: Opening Multiple Frontiers

Symposium Overview

Session Faculty:
Ipsit Vahia, MD (Chair): McLean Hospital and Harvard Medical School, Boston, USA
Ana F. Trueba, PhD (Presenter): Harvard Medical School and Universidad San Francisco de Quito, Ecuador
Kreshnik Hoti, PhD (Presenter): University of Pristina, Republic of Kosovo
Bettina Husebø, MD (Presenter): University if Bergen, Norway.

Overall Abstract: The past decade has seen an explosion in the growth of technologies in mental health. Particularly, the scaled adoption of virtual care catalyzed by the COVID-19 pandemic has opened up new frontiers in how digital tools can be incorporated into psychiatry. No area of mental health care is as ripe for digital innovation as psychogeriatrics. In this session, an international group of clinicians and researchers will demonstrate how digital health in psychogeriatrics represents multiple cutting edges of innovation.

Our symposium will include 4 presentations, that represent original research from the USA, Ecuador, Norway, Kosovo and Australia. We will highlight clinical applications of these digital tools and aligned issues such as improved care access in low- and middle-income countries, the ethics of digital data collection and the potential for creating new liabilities.

We will focus on four distinct technologies and applications. Dr. Ipsit Vahia will discuss passive environmental sensing supported by signal processing and artificial intelligence (AI) in guiding treatment decision making, especially in dementia care. His presentation will include discussions on how AI can be incorporated into care while also preserving autonomy. Dr. Kreshnik Hoti will discuss the application of AI on voice-based signals to determine changes in pain levels and psychopathology. His presentation will include research conducted in collaboration between teams based in Australia and Kosovo and through a public-private partnership with a digital health startup. Dr. Ana Trueba will focus on digital interventions, specifically virtual reality (VR). She will present data from two studies, one from McLean hospital In the US, and the other from Ecuador that explore how VR can deliver evidence-based non-pharmacologic interventions. Dr. Bettina Husebø will present data from a project she oversees in Norway. Her talk will discuss how care in nursing homes can be improved by incorporating a range of digital approaches into nursing home care paradigms. A particular focus will be on the relationship between pain and behavior symptoms and dementia among nursing home dwelling older adults.

Thus, the symposium will address diagnostics, treatment and systems level care and how New technologies are shaping the evolution of psychogeriatrics worldwide.

Digital Phenotyping of Behavior and Clinical Decision Making in Psychogeriatrics: Towards Precision Care

Presenter: Ipsit Vahia, MD

Introduction: Appropriate and personalized pharmacologic management of behavioral and psychologic symptoms in dementia (BPSD) is among the most complex clinical challenges in dementia care. Use of antipsychotics and mood stabilizers is common but accompanied by risk, including high likelihood of adverse effects that can lead to hospitalization or institutionalization. Information to support decision-making in these scenarios is typically obtained

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