

WYLD Special Symposium SS5 (Asia): Technological Innovations in Dementia Diagnosis and Care

Moderator: Anja Leist, University of Luxembourg

Researchers and entrepreneurs present technological innovations in dementia diagnosis and care, particularly through the use of wearables, apps, and novel data analysis techniques. These innovations address complex challenges of differential dementia diagnosis and ensuring high-quality and safe home and formal care.

1. Wearable technologies and differential dementia diagnosis (Riona Mc Ardle, Newcastle University)

We only observe a snapshot of individuals' behaviours in clinic. With wearable technology, we can unobtrusively monitor behaviour in the real world. Riona will present clinical applications of wearable technology for differential diagnosis of dementia subtypes.

2. A medical device for diagnosis and post-diagnostic support (Haza Newman, Geras Solutions, Stockholm)

Geras Solutions is an AI-based medical device that objectively measures cognition via thousands of digital data points, and simplifies post-diagnostic support for patients and professionals. Following FINGER recommendations, the device enables patients to engage in lifestyle changes for risk reduction.

3. Understanding healthy cognition to detect early signs of dementia (Claire Lancaster, University of Oxford)

GameChanger is a research project that analyses touch, movement, and voice data to understand cognition in healthy volunteers in order to detect early signs of dementia.

4. Testing end-users' experience of GPS devices for people with dementia (Silka Dawn Freiesleben, Charité – Universitätsmedizin Berlin)

There is a lack of research and quality standards on design of and user guidelines for GPS devices in home dementia care. This makes it difficult for end-users to select and clinicians to recommend GPS technology. Silka presents on user experience of people with dementia and their caregivers, including evaluations of clinical effectiveness.

5. Facilitating learning and person-centered professional dementia home care (Katarzyna Hess-Wiktor, Minnity, Stockholm)

Formal caregivers of people living with dementia often lack knowledge and skills to follow the person-centered approach to care. By using the Minnity app, professionals will understand better the people they provide care for, and be able to acquire relevant skills to ensure high-quality home care.

We thank the conference organizers for offering the room for the symposium and reduced registration fees to the speakers.