

P45: Not all days were created equal – better day orientation following the weekend in MMSE

Authors: Daphna Shefet, Ido Lurie

Background: The Min-Mental State Exam (MMSE) is the most common exam for screening and follow-up of cognitive impairment. One of 30 points is allocated to correct orientation to the weekday (“day orientation”).

Objective: The purpose of this study is to assess whether day orientation correlates with the weekday in which the exam was conducted, hypothesis being that orientation would be better on the work day immediately following the weekend (in Israel – Sundays).

Methods: All digitally recorded MMSE scores from Shalvata MHC’s were collected. The percentage of correct answers to day orientation was compared between weekdays. Differences between in/correct answers were assessed by Chi-square tests, with Cramer's V for the effect size of the correlations. Differences in total score between groups were assessed by independent t- tests with Cohen's d for effect size ($p=0.05$)

Results: The cohort consisted of 2,049 MMSE taken by 1,376 patients [average age 80.3 (SD 9.3) 56.4% Female] between 2016 and 2022. Due to very few responses ($n=7$) on Friday and Saturday, these days were excluded from analyses. Overall, 67.8% of exams were correctly oriented to the day. Correct response rate according to the weekday yielded a significant result ($\chi^2 = 20.77$, $p < .001$, Cramer's V = 0.104), with the largest effect difference was found on Sundays (53.4%), and then on Mondays (38.9%). The relative odds ratio (OR) for providing a correct response was found for Sunday (OR=1.55, $p=.001$), while for other days no significant OR was found. Patients who responded correctly showed higher final total scores in comparison with patients who did not respond correctly across all days. Similar analysis was carried out for orientation to the month, comparing between the first 5 days and last 5 days of the month, but no statistically significant difference for correct answers was found.

Conclusion: MMSE delivered on the first working day of the week may entail a better day orientation, and thus a higher total score. This finding may have significant implications for assessments (as in clinical trials) and thus treatment.

P47: Impact of the FindMyApps intervention on Social health in community-dwelling people with dementia: results from a randomized controlled trial

Co-authors: David Neal, Amsterdam University Medical Centers, location Vrije Universiteit Amsterdam, Department of Psychiatry. Amsterdam, The Netherlands. Amsterdam Public Health Research institute, Mental Health program, Amsterdam, The Netherlands

Teake Ettema, Amsterdam University Medical Centers, location Vrije Universiteit Amsterdam, Department of Psychiatry. Amsterdam, The Netherlands. Amsterdam Public Health Research institute, Mental Health program, Amsterdam, The Netherlands

Karin Dijkstra, Research Group Smart Health, School of Health, Saxion University of Applied Sciences, Deventer, The Netherlands

Maud Graff, Donders Center of Medical Neurosciences, Radboud University Medical Centre, Nijmegen, The Netherlands

Evelyn Finnema, Department of Health Science, Section of Nursing Research & Education, University Medical Center Groningen, University of Groningen, Groningen, The Netherlands

Majon Muller, Majon Muller, Amsterdam University Medical Centers, Department of Internal Medicine section Geriatrics, Amsterdam Cardiovascular Sciences Research Institute, Amsterdam, The Netherlands

Rose-Marie Dröes, Amsterdam University Medical Centers, location Vrije Universiteit Amsterdam, Department of Psychiatry, De Boelelaan 1117, 1081 HV Amsterdam, The Netherlands. Amsterdam Public Health Research institute, Mental Health program, Amsterdam, The Netherlands

Background: Most frequently felt needs in dementia concern maintaining self-management and participation in meaningful activities. E-health interventions may support these aspects of social health but few have undergone large-scale evaluations. The effectiveness of the FindMyApps intervention, an app selection tool and tablet training, designed to support people to find and use tablet apps that meet their needs and interests, was evaluated.

Methods: A non-blinded, single-centre, randomized controlled trial and process evaluation were conducted in the Netherlands between January 2020 and November 2022. Participants were community-dwelling people with mild dementia (MMSE <26 and >17) or mild cognitive impairment, and their informal caregivers. FindMyApps was compared with digital care as usual (normal tablet computer and general advice). Data regarding primary outcomes (self-management and social participation of the person with dementia, sense of competence of the caregiver) and secondary outcomes (including quality of life) were collected with standardized instruments at baseline and after a three months intervention period. ANCOVAs were conducted on post-test outcome measures, corrected for baseline scores, to investigate group differences.

Results: Data collection was completed in November 2022 and analyses are underway. Of 150 dyads randomized, 128 completed the three-month follow-up (64 experimental, 64 control). Results of ANCOVAs investigating the effect and effect size of FindMyApps on the primary and secondary outcomes at three months, will be reported, as well as results of post-hoc analyses that explored the effect on outcomes of: previous tablet experience and education level of participants; observed use of the FindMyApps app; and reported adherence to recommended frequency of tablet use.

Discussion and conclusions: Results of this study will indicate whether FindMyApps is an effective intervention for supporting social health of people with mild dementia and MCI. Comparisons with previous studies of FindMyApps and other digital interventions for social health in dementia will be drawn and implications for professionals, concerning implementation of FindMyApps, and for researchers regarding further development, translation and evaluation of FindMyApps discussed. Finally, establishing feasibility and utility of randomized controlled trials in this field, the results of this study will set the bar for future evaluations of eHealth interventions in general.