

Exercise on Referral for Mild Cognitive Impairment – June 2021 Abstract and Executive Summary

Author: Dr Craig Kirk, working with the Brain Centre at North Bristol NHS Trust, United Kingdom.

Abstract (236 Words)

Mild Cognitive Impairment (MCI) is a disorder of cognition where there is objective impairment in at least one cognitive domain with maintained functional independence. People with MCI are at greater risk of developing dementia. Some studies of non-pharmaceutical interventions to reduce progression to dementia in at-risk elderly populations have been encouraging to date. Influenced by these and similar social intervention projects (Think Health for Your Memory and ESCAPE pain), we developed an Exercise on Referral (EoR) scheme for patients with MCI, aiming to improve our understanding of the effect of organised exercise on wellbeing and progression to dementia in these populations. Our exercise programme was well received by participants, but unfortunately was truncated by the 2019 Coronavirus pandemic. Our initial findings showed that patient engagement measured by the Patient Activation Measure improved; as did wellbeing (Warwick-Edinburgh Mental Well-Being Scale). Effects of the project on cognition (measured with Montreal Cognitive Assessment) and capacity for exercise (measured by novel means developed for this project) showed no clear positive or deleterious effect. A small number of participants over only one out of four intended exercise programme cycles means we cannot draw robust conclusions on outcomes for cognition, wellbeing, patient engagement or exercise. However, our project demonstrates an appetite for this approach. Furthermore, through feedback collection and our experience running this project, we highlight important factors for consideration in the development of similar projects in an era of social distancing.

Summary of outcomes

- Qualitative feedback from participants and instructors show this type of project can be very positively received and outline an appetite for further uptake of social interventions.
- The populations targeted by this project are inherently vulnerable to communicable illness including COVID-19. Future social projects will need to consider this and develop the means to protect participants where possible, taking into consideration the positive effects of social integration and exercise.
- Public venues for hosting social interventions will also need to consider means to protect participants and the community from communicable disease while organising these programmes.
- Social distancing may preclude exercise and social attitudes from returning to pre-pandemic levels in the near future, particularly among the elderly. As such, alternative measures of delivering exercise or similar programmes should be considered, such as online classes.
- The effect of the COVID-19 pandemic on attitudes toward and uptake of exercise and social integration, particularly among the elderly, is likely to be adverse and important. Emerging projects focussing on these concepts should try to mitigate the possible confounding effect of this on outcomes, for example by performing comprehensive pre-intervention analysis so that more reliable comparisons can be made.

Considerations

- A small number of participants over only one out of four intended exercise programme cycles means we cannot draw robust conclusions on outcomes for cognition, wellbeing, patient engagement or exercise.