

THE CASE STUDIES OF AN INTEGRATIVE APPROACH IN PRIMARY HEALTHCARE OF MYALGIC ENCEPHALOMYELITIS/CHRONIC FATIGUE SYNDROME (ME/CFS) AND POST-COVID-19 PATIENTS

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Introduction

The coronavirus disease caused by the SARS-CoV-2 virus (COVID-19) pandemic has induced an indelible and increscent impact on public health and the healthcare system. Consequences manifest in acute emergencies and also in post-COVID-19 conditions, such as long-COVID-19, which is composed of heterogeneous sequelae that often affect multiple organ systems, with significant impacts on morbidity, mortality, and quality of life. Researchers assumed that 10% of COVID-19 survivors could develop myalgic encephalomyelitis/ chronic fatigue syndrome (ME/CFS). Accordingly, the burden of chronic diseases poses new longterm challenges for public health and requires new approaches to healthcare. In these circumstances, the current study aimed to investigate the potential of coaching integration in healthcare of long-COVID and ME/CFS patients to benefit additional value in Health-Related Quality of Life (HRQoL) of patients, with expected positive economic impact.

Methods

To achieve the aim of this study, the longitudinal case study was performed by a professional team consisting of a general practitioner, infectiologist, and coach. The coaching sessions for two long-COVID-19 and two ME/CFS patients ('portraits' of the patients are available in Fig 1) were carried out by a certified coach of Erickson Coaching International.

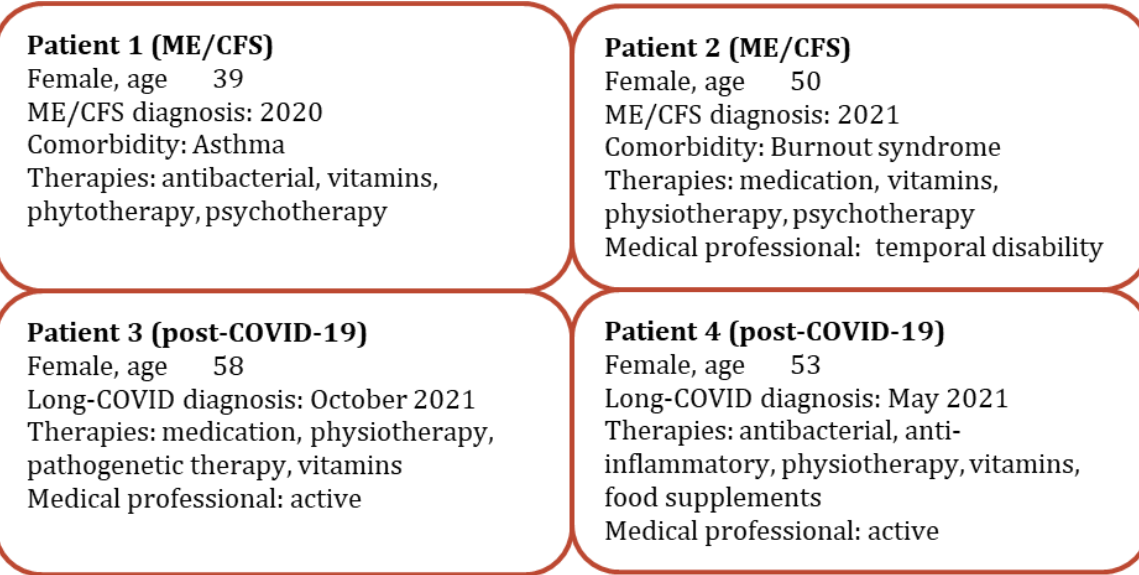


Fig 1. 'Portraits' of ME/CFS and post-COVID-19 patients who participated in the study

Virtual coaching sessions were held for each patient for four weeks (six weeks for Patient 2, by her request), from March to May 2022. The EuroQoL-5D-5L, Visual Analogue Scale (VAS, 1 – the worst health state, and 100 – the best possible health state), as well as the PROMIS Fatigue – Short Form 13a (FACIT-Fatigue) self-assessment questionnaire were used for a deeper investigation of fatigue dimensions in two ME/CFS patients. Descriptive and analytical statistical methods were utilized for the analysis of the obtained data.

The results of the study demonstrate significant improvement in the health state of patients after the coaching period: overall for both ME/CFS patients – by 30%, a long-COVID patient – by 20%, and another – by 10%. Limitations: data are not statistically significant for extrapolation to the whole population of patients. The main strength is focused on the great additional opportunity to resolve the problems arising in chronic disease management.

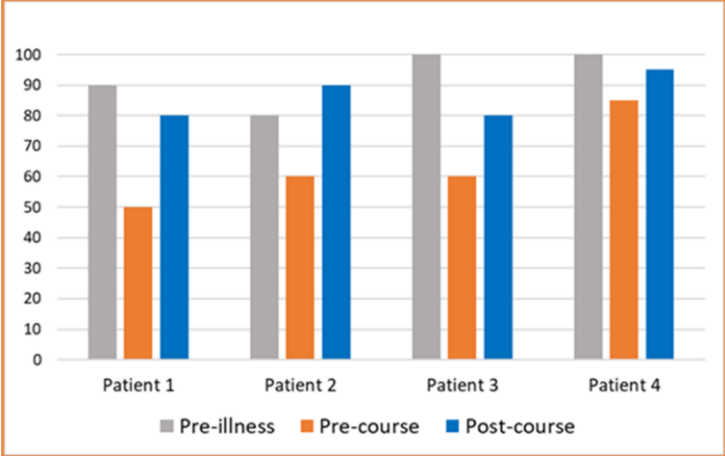


Fig 3. Patient-reported HRQoL, measured by the VAS, in ME/CFS and post-COVID-19 patients: before illness, prior to the coaching course, and after four weeks coaching course (Patient 2 – after six weeks)

The integrative approach has a progressive role in value creation for healthcare, particularly for patients with chronic complex diseases and diversity of manifestations. This case study provides insight into the potential of using coaching to improve the HRQoL of chronic patients.

Results

Patient-reported outcomes are demonstrated in Fig 2 (EuroQoL-5D-5L), Fig 3 (VAS), and Fig 4 (FACIT-Fatigue), as well as the patient's attending physician's performed evaluation results are shown in Fig 5.

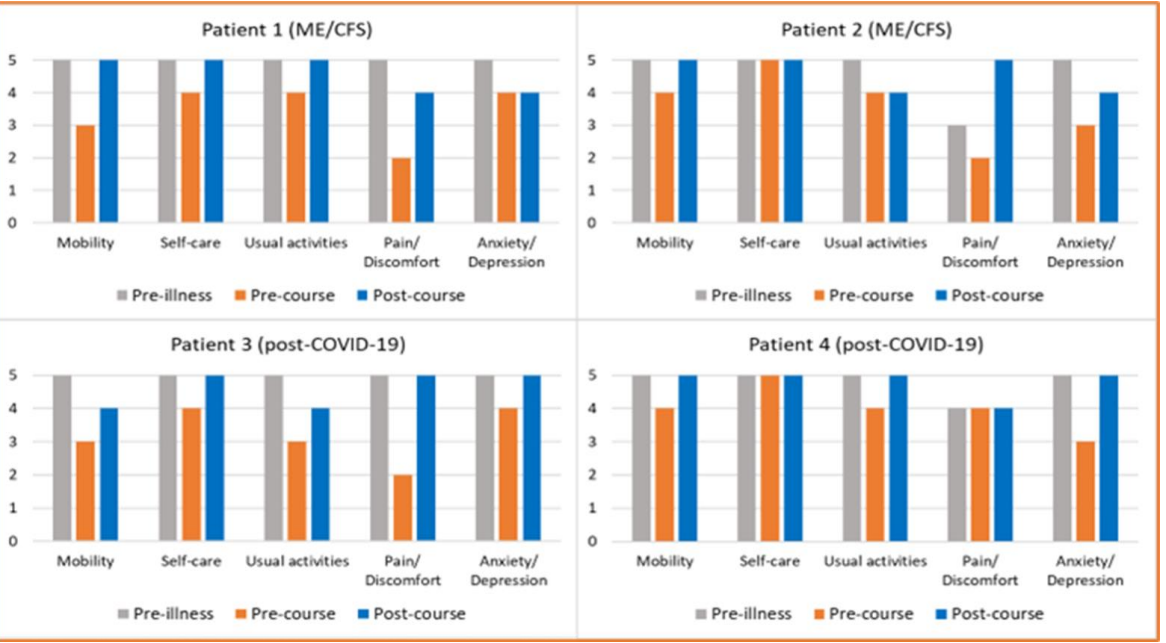


Fig 2. Patient-reported HRQoL, measured by the EuroQoL-5D-5L (1 – extreme problems, 2 – severe problems, 3 – moderate problems, 4 – slight problems, and 5 – no problems), in ME/CFS and post-COVID-19 patients: prior illness, prior coaching course, and after four weeks coaching course (Patient 2 – after six weeks)

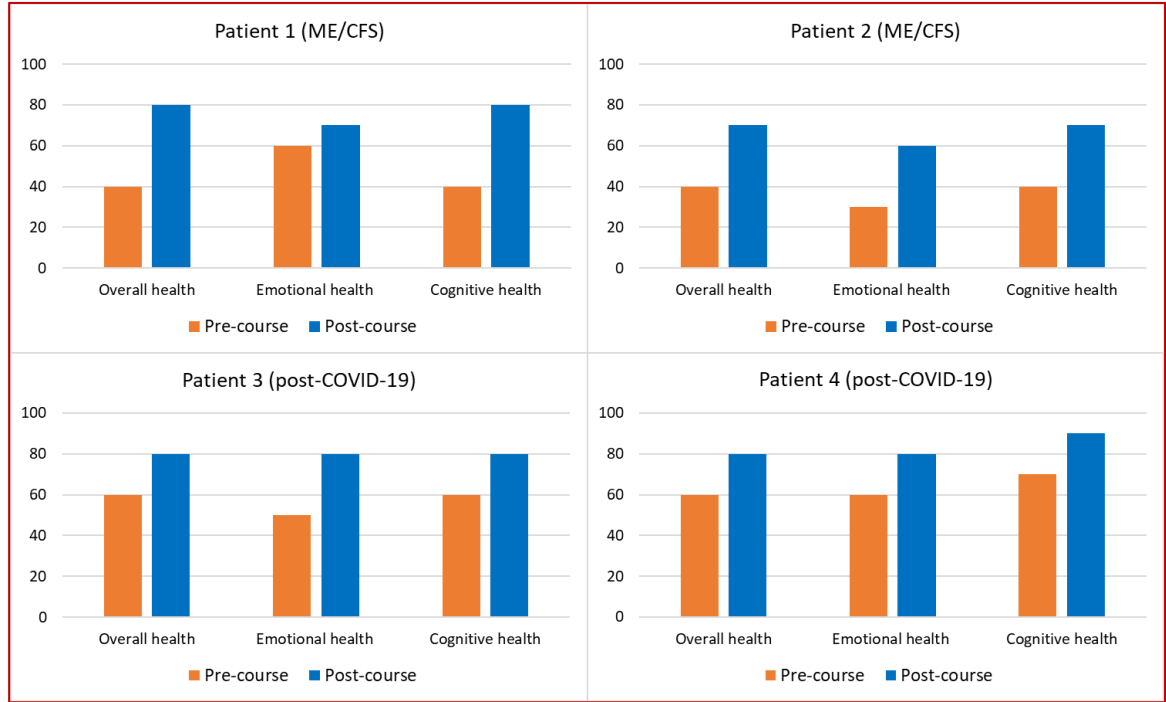


Fig 5. Physician's performed evaluation of the patient's overall health status, emotional health, and cognitive health, measured by the VAS, in ME/CFS and long-COVID patients: prior to the coaching course, and after 4 weeks coaching course'

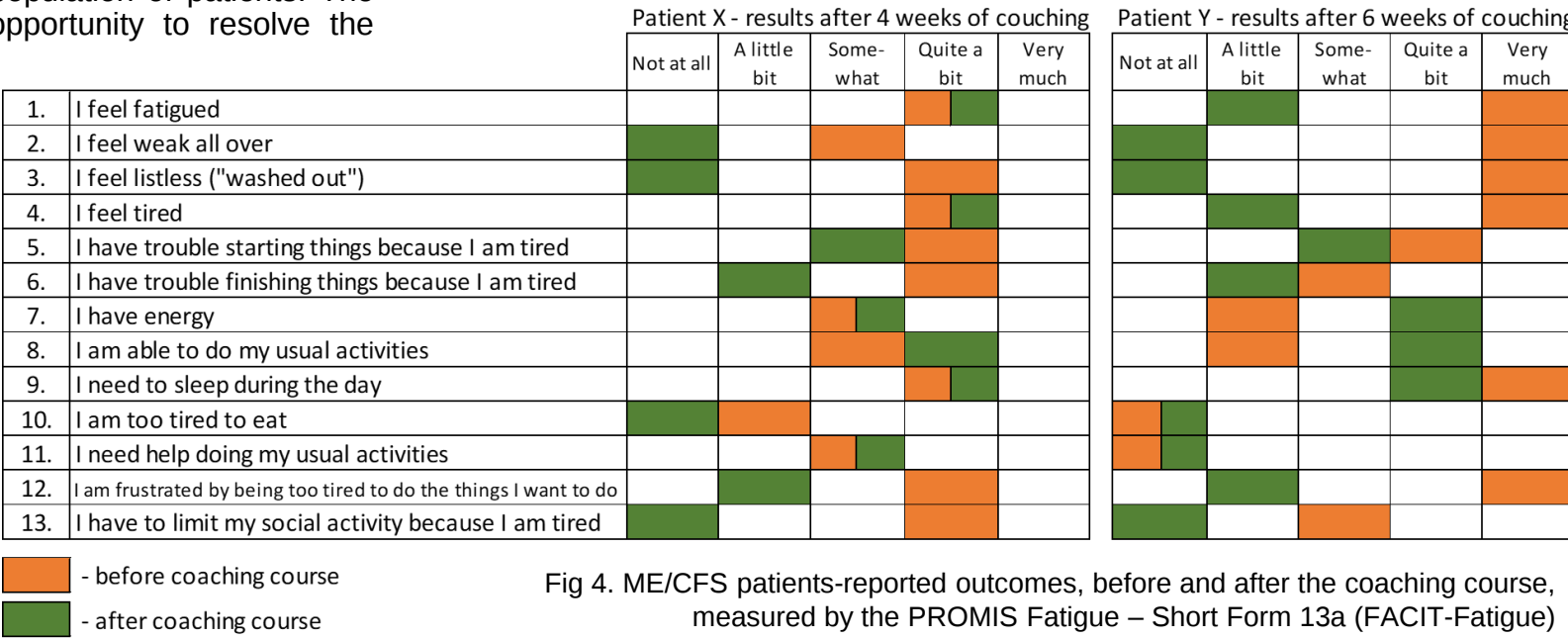


Fig 4. ME/CFS patients-reported outcomes, before and after the coaching course, measured by the PROMIS Fatigue – Short Form 13a (FACIT-Fatigue)

Conclusion

Ethics approval

The study was supported by the Latvian Council of Science, Fundamental and Applied Research project No.lzp-2019/1-0380 'Selection of biomarkers in ME/CFS for patient stratification and treatment surveillance/ optimization', with the approval of the Research Ethics Committee of the Riga Stradins University (Decision No. 6-1/05/33 – 30 April 2020, Riga).