

living. Intra-dialysis exercise programmes may help to partly reverse this situation. Exercise during the first 2-h of dialysis has proven to be safe. Our group showed that an acute session of virtual reality exercise during the last 30 min of HD was safe too. The aim of this study was to compare the impact of non-immersive virtual reality intra-dialysis during the first 2-h versus the last 2-h of dialysis on lower-limbs muscle strength.

METHOD: This was a randomized controlled trial. Participants were randomized in two groups: group A performed the exercise during the first and second hour of the HD session and group B performed it during the third and fourth hour. Strength was measured bilaterally with a hand-held Lafayette dynamometer in three movements of the lower limbs (hip flexion, hip abduction and plantar flexion) during the HD session. The intradialytic exercise consisted of a non-immersive virtual reality video game adapted to the dialysis session, in which the patient must catch treasures while avoiding bombs by moving the lower extremities, with a progressive duration of 25–45 min, over a 12-week period.

RESULTS: A total of 33 subjects were included in the analysis, 17 subjects (median age 71.8 years; 10 men) in group A and 16 subjects (median age 73.3 years, 9 men) in group B. At baseline the period analysed, there were no significant differences between the two groups in any of the movements analysed. The force analysed in the different movements showed that there was a significant increase in all the movements analysed in both groups. There was an increase in force in the movements of the lower right limb of 3.31 N in hip flexion, 2.01 N in hip abduction and 1.10 N in plantar flexion, as well as an increase in the outside in the lower left limb of 3.82 N in hip flexion, 2.47 N in hip abduction and 4.63 N in plantar flexion. There were no significant differences in the increase in strength in the movements analysed between both groups in the movements analysed after the 12-week period analysed.

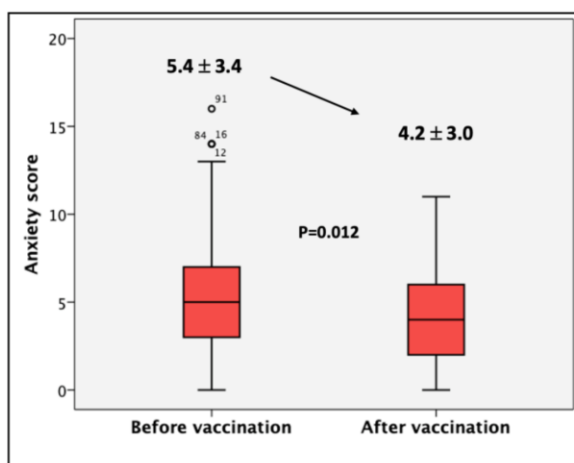
CONCLUSION: There are no differences in the application of an intradialytic exercise at the beginning versus at the end of the HD session to improve strength with non-immersive virtual reality. An intradialytic exercise with non-immersive virtual reality improves limb strength in HD patients.

MO1050 COVID-19 VACCINATION IMPROVED PSYCHOLOGICAL DISTRESS (ANXIETY AND DEPRESSION SCORES) IN CHRONIC KIDNEY DISEASE PATIENTS: A PROSPECTIVE STUDY

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BACKGROUND AND AIMS: To our knowledge, the psychological impact of coronavirus disease (COVID-19) vaccination has not yet been evaluated for the general population nor for chronic kidney disease (CKD) patients. The purpose of the study is to analyse the impact of vaccination against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) on anxiety and depression scores in patients with different modalities of CKD.



METHOD: A total of 117 renal patients (50 haemodialysis patients, 13 peritoneal dialysis patients, 32 kidney transplants and 22 advanced CKD patients at pre-dialysis care) were evaluated for depression, anxiety, health-related quality of life (HRQOL) and perceived fears and resources with standardized (The Hospital Anxiety and Depression Scale; HADS) and self-reported questionnaires. The measure points were before vaccination and 15 days after vaccination.

RESULTS: The main finding of the study is that there is a decrease in the global mean of normal scores for anxiety and depression symptoms in CKD patients, post-vaccination. We did not find statistically significant differences in depression or anxiety scores, nor HRQOL differences between the treatment groups. The three main fears reported by the participants at baseline were those of adverse effects, not getting the vaccine and lack of information.

CONCLUSION: These findings highlight the potential interest of assessing psychological variables related to the impact of vaccination against SARS-CoV-2. New studies will be required to assess the impact of comprehensive vaccine coverage and its psychological impact.

MO1051 STANDARDIZED SIMULATION EDUCATION PROGRAM WITH SUMMATIVE ASSESSMENT ON EXCHANGE PROCEDURE OF ULTRABAG SYSTEM FOR PERITONEAL DIALYSIS: INNOVATIONS IN PRACTICAL RECOMMENDATIONS

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BACKGROUND AND AIMS: Inexperience in practicing peritoneal dialysis (PD) and lack of standard education program under the instruction of qualified renal nurses are known causes of peritonitis in patients with chronic renal failure [1]. Thus far, the standardized and validated curriculum for Continuous Ambulatory Peritoneal Dialysis (CAPD) training has not been well-established under simulation-based education model [2]. We aimed i) to develop a well-structured and standardized educational training program on exchange procedure of Ultrabag system and ii) to evaluate the degree of acquisition in domains of cognitive (knowledge) and psychomotor (skills) by summative assessment using valid and reliable knowledge evaluation index and performance checklist.

METHOD: Following an invention of 3D-printed CAPD device, 'Helping Hands' in closed system operation, the Renal Unit in the Department of Medicine and Multi-Disciplinary Simulation and Skills Centre (MDSSC) in Queen Elizabeth Hospital (QEH) formulated a standard 5-day CAPD training to equip PD patients with knowledge and skills for safe Ultrabag exchange. In order to optimize training effectiveness and assessment standards, the program was designed with '6 (+2 additional) guiding questions' from the International Society for Peritoneal Dialysis (ISPD) document [3]. Scoring Checklist with specific and relevant items, such as fixation of the connecting catheter, parallel point-to-point connection and procedures in placing disinfection cap, could strengthen internal validity.

RESULTS: In 2021, 17 CAPD patients with partial impairment in vision (12, 71%) or eye-hand coordination (13, 77%) attended this education program. Post-training assessment showed that participants had improved cognitive knowledge (M = 71%; A Grade (>80 marks) = 5, 29%; B Grade (60–80 marks) = 9, 53%; C Grade (<60 marks)

