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**Title:** Effectiveness of low-intensity aquatic exercise on COPD: A randomized clinical trial

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**Body:** Background: Despite the growing number of studies reporting therapeutic success in water environments, research involving aquatic exercise among patients with Chronic Obstructive Pulmonary Disease (COPD) is scarce. This study evaluates the impact of low-intensity water and floor exercises on COPD. Methods: Forty two individuals with moderate to very severe COPD, divided into 3 groups: Control Group (CG), Floor Group (FG) and the Aquatic Group (AG). All participants were assessed using spirometry, respiratory muscle strength (MIP and MEP), the 6-Minute Walk Test (6MWT), Medical Research Council (MRC), BODE index and the St George's Respiratory Questionnaire (SGRQ). Results: A difference was recorded after intervention for the 6MWT in the AG ( $p=0.02$ ); for VEF1 in the FG ( $p=0.001$ ) and AG ( $p=0.01$ ); for MIP in the FG ( $p=0.01$ ) and AG ( $p=0.02$ ); for MEP in the FG ( $p=0.02$ ) and AG ( $p=0.01$ ); the MRC fell in the AG ( $p=0.003$ ). The FG showed improved quality of life evidenced by the total score on the SGRQ ( $p=0.002$ ). The BODE index decreased in the FG ( $p=0.02$ ) and AG ( $p=0.007$ ). Conclusion: Results show that both forms of low-intensity physical exercise benefit patients with moderate and very severe COPD. The AG exhibited additional benefits in physical ability, indicating a new therapeutic modality targeting patients with COPD. Trial registration number: Australian New Zealand Clinical Trials Registry number 308168.