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respiratory function, functional capacity, and quality of life in
patients with chronic obstructive pulmonary disease**

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Effect of a home-based pulmonary rehabilitation programme on respiratory function, functional capacity, and quality of life in patients with chronic obstructive pulmonary disease

Background and objective: Previous studies have suggested that home based pulmonary rehabilitation (HBPR) is effective alternative to institution-based PR for management of COPD, but there are limited studies that have been done on the impact of the HBPR program in patients with COPD in the Indian healthcare system. This study assessed the effect of a home-based pulmonary rehabilitation programme on respiratory function, functional capacity, and quality of life in patients with chronic obstructive pulmonary disease . **Methods:** This pilot feasibility study was conducted on 17 patients diagnosed as COPD based on GOLD guidelines who fulfilled the inclusion and exclusion criteria were studied from December 2019- March 2021. Patient received home based pulmonary rehabilitation programme including breathing exercises, aerobic exercises and relaxation techniques for 4 weeks in structured manner. Functional capacity, respiratory functions and quality of life was assed at baseline and after 4 weeks six-minute walk test (6MWT), Pulmonary Function Test, Respiratory Muscle Strength, St. George respiratory questionnaire C. **Result:** Study comprised 12 male (70.6%) and 5 (29.4%) females. The mean age of patients was 59.82 ± 7.96 . All three domains of the St. George respiratory questionnaire have improved substantially, including activity ($p=0.007$), impact (0.01), and symptom (0.004). MIP ($p=0.035$) showed a greater increase than MEP (0.003). **Conclusion:** This study showed improvement in quality of life and respiratory function with 4 weeks of home-based pulmonary rehabilitation in COPD patients.