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# A Promising Intervention for Comprehensive Pulmonary Rehabilitation for Asthma COPD Overlap Syndrome

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Dear Editor,

We read with great interest the article by Orooj et al, entitled: "Effect of Pulmonary Rehabilitation in Patients with Asthma COPD Overlap Syndrome: A Randomized Control Trial" published in the May 2020 issue of the *Oman Medical Journal*.[1] Firstly, we would like to congratulate the authors for sharing the first randomized control trial that assessed the effectiveness of a comprehensive six-week pulmonary rehabilitation (PR) program in patients with asthma-chronic obstructive pulmonary disease (COPD) overlap syndrome (ACOS). The PR program was an institution-based, which is highly recommended considering the high possibility of cardiopulmonary adverse events in an intervention that has not been investigated among the ACOS population.

In the study, patients in the intervention group received a structured program educating on self-management in addition to the standard care. In contrast, patients in the control group only received standard medical care in accordance with the standard guidelines by a qualified practitioner, without the benefit of a structured program educating on self-management. At this juncture, one might argue on the justification for excluding the educational intervention to the control group as it has the advantage of not requiring the subjects to be at the institution. Furthermore, similar educational-based interventions in PR and cardiac rehabilitation have shown to reduce the mortality rate among patients with COPD and congestive heart failure, respectively.[2,3] Precluding such program in the control group may have led to two major issues: 1) the improvement observed in the outcomes measures may have been contributed by the separate components of the PR, and 2) ethics. Regarding statistical analysis, the datasets in the article were not normally distributed and were log-transformed.[4] We suggest using a non-parametric test to meet less statistical assumptions, and test the differences within subjects. The difference within the same group was not statistically tested and compared between the baseline and at six weeks. We agree with the authors that a six-week PR program is relatively short, and the sample size is quite narrow to provide a statistically significant difference in the main outcomes, as stated in the limitation section. Nevertheless, as the study was a pioneer of the subject, we would recommend the future research to be further improved by conducting a multi-center study.

## REFERENCES

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