



## Pulmonary Rehabilitation in COPD Patients

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### Aims and Objectives

1. To study the efficacy and feasibility of pulmonary rehabilitation offered through tele-medicine
2. To study the outcomes of patients on pulmonary rehabilitation offered through tele-medicine

### Material and Method

Sample Size: 50

#### Inclusion Criteria

- 1) Patients diagnosed COPD and on regular follow-up in OPD
- 2) Patients classified as GOLD 1 and GOLD 2 stage of severity
- 3) Patients consenting for the study
- 4) Patients with access to internet enabled smartphone devices
- 5) Patients willing to spare at least 30 minutes per day

#### Exclusion Criteria

- 1) Patients not consenting for the study
- 2) Patients with comorbidities
- 3) Patients with active pulmonary tuberculosis
- 4) Patients with recent history of cerebrovascular accident in past 3 months

### Methodology

Home based pulmonary rehabilitation programme was offered to the study subjects fulfilling the inclusion criteria. Pulmonologist were actively involved. Baseline characteristics of the study subjects were collected. Duration of the programme was 24 weeks. CAT scores and quality of life was assessed of all the study subjects.

### Results

1. Our study was male dominated with 68% males and 32% females
2. Age group was 45±5
3. CAT scores improved from 38±5 pre initiation of programme to 22±5 post 24 weeks of programme
4. There was reduced healthcare utilization in terms of urgent hospital visits. Only 4% study population developed exacerbation during the study period and required hospitalization
5. There was improvement in overall quality of life as suggested by BODE index
6. 3% study subjects had to be dropped-out due to technical difficulties
7. Overall satisfaction rate as measured on likert scale was 99%

**Conclusion**

Pulmonary rehabilitation programme if offered through tele-pulmonology in COPD patients have a vast potential in influencing the patient lifestyle and improving the overall quality of life in COPD. Provision of basic internet enabled smartphone and technical know-how are however essential in the success of such programmes.

**Reference**

1. Tele-pulmonology in covid pandemic Sarang Patil, et, al Journal CHEST vol 160 issue 4 DOI10.1016/j.chest.2021.07.1923.