

# Hold-Relax PNF Pectoral Stretching in Covid Survivors: A Pilot Study

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## ABSTRACT

**Background:** The outbreak of Covid19 with remarkably higher transmission is known to have long term sequelae and complications. As the long term sequelae of Covid19 is concerned, exertional dyspnea, fatigue and impairment in pulmonary function and exercise intolerance is evident. Physiotherapy being an essential component for post COVID-19 patients in facilitating maximum functional recovery. PNF stretching for subject appears to be safe and effective in chronic respiratory patients with adaptive shortening and stiffness around the upper limb muscle treatment. Hence, the current study aimed to evaluate the effectiveness of Hold-relax PNF Pectoral stretching in Covid19 survivors.

**Methods:** In this Experimental type of study, 20 patients were selected by purposive sampling technique as per inclusion criteria, both male and females, COVID-19 with mild and moderate impairment who are asymptomatic and does not need oxygen support on activity MMRC dyspnea grade <2. Pre intervention components i.e., Chest expansion, Fatigue and Pulmonary functions (FEV1, FVC, and FEV1/FVC) were assessed. PNF stretching was given to the subjects for a week and all the outcome measures were assessed on day 7. Data collected was analyzed using Paired t-test and Wilcoxon method.

**Results:** P values for FEV1, FVC and chest expansion are 0.0001, 0.0005 and 0.0001 respectively which are (<0.05) statistically significant whereas P values for FEV1/FVC and Fatigue was 0.0092 and 0.7422 respectively which was insignificant. Mean values of all outcomes have shown significant change, pre and post intervention.

**Conclusion:** Hold relax PNF pectoral stretching has a significant effect on improving chest expansion and pulmonary function in COVID19 survivors.

**Keywords:** PNF, COVID

