

# EFFICACY OF DEEP BREATHING EXERCISES AMONG CHRONIC OBSTRUCTIVE PULMONARY DISEASE PATIENTS AT SELECTED HOSPITALS IN GONDA DIST, UTTAR PRADESH

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## INTRODUCTION

In a quasi-experimental trial in Gonda District, deep breathing exercises were evaluated in patients with chronic obstructive pulmonary disease. The study's purpose was to look at the respiratory patterns of people with chronic obstructive pulmonary disease before and after exercise, as a means of testing the efficacy of deep breathing exercise in a group of COPD patients. Correlations between experimental and control groups will be discovered, as well as a comparison of specific demographic parameters.

## Methodology

A quasi-experimental pre-and-post-test design with a non-randomized control group was used in this study. Purposive sampling was used to choose 50 patients for the investigation. Demographic data, the modified dyspnea Borg scale, and an intervention incorporating deep breathing exercises were used to collect data at the government headquarters hospital in Gonda District. A team of five medical and nursing specialists created the instrument, and a pilot study was conducted to examine its clarity, ambiguity, and feasibility on a similar topic. A modified Borg scale was used to assess the dyspnea. In place of treatment, the experimental group received twice-daily 25-minute bouts of deep breathing exercises.

The Results of the study were

According to the ages of the participants, 39% in the experimental group and 34% in the control group are between the ages of 51 and 60 years; 40% in the experimental group and 40% in the control group are between the ages of greater than 60 years; and in terms of age, 50% of those in the experimental group and 44% of those in the control group are between the ages of 51 and 60 years old, while 40% of those in the experimental group and 33% of those in the control group are over 60 years old. Taking gender into account, 53.3 percent of those in the experimental group and (45.3 percent) of those in the control group were females, with the other patients being males. According to educational attainment, 40% of participants in the experimental group had completed high school and (33.1%) were illiterate, whereas (28.5%) of participants in the control group had completed high school and (40%) had completed higher secondary education.

The experimental group was made up of 40% self-employed people and 60% industrial workers, whereas the control group was made up of 43.8% self-employed people and 25.8% industrial workers. In terms of marital status, 75.1 percent of the experimental group was married and 20% were unmarried, while 44.4 percent of the control group was married and 25% were unmarried. In terms of previous COPD history, 55 percent of individuals in the experimental group and 70 percent of those in the control group indicated no prior COPD experience. Taking the length of the illness into account, (34.1%) individuals had 6 years in the experimental group and (46.7%) subjects had 2–5 years in the control group, while (44.4%) subjects had 6 years and (32.2%) subjects had 2–5 years in the experimental group.

In terms of treating COPD, 52.4 percent of participants in the experimental group and 53.3 percent of subjects in the control group responded well. The results of the control group's pre-test level of breathing revealed that 7.9 percent had moderate levels of breathing difficulty and 18.8 percent had severe levels of breathing difficulty. In terms of gender, the experimental group contained 59.1% female individuals, whereas the control group had 48.1% female subjects, with the other subjects being males. According to educational attainment, 32% of those

in the experimental group had a high school education and 46.1%) of those in the control group were illiterate, whereas 29% of those in the experimental group had a high school education and 60.1% of those in the control group had a higher secondary education. In the experimental group, 36% were self-employed and 40% were industrial employees, whereas 46% were self-employed and (32.7%) were industrial workers in the control group, suffering from substantial levels of respiratory difficulties. The degree of breathing difficulty in the control group following the test revealed that 8.7 percent of individuals had moderate to severe breathing difficulty, while 10 subjects (35.4 percent) experienced mild breathing problems. The experimental group's pre-test level of breathing pattern (47.7 percent) had the highest level of breathing difficulty (6.2 percent) had the lowest level of breathing difficulty (6.2 percent) and the experimental group's post-test level of breathing difficulty (55 percent) had the very very slightest level of breathing difficulty (45.3 percent) had the slightest level of breathing difficulty (level of breathing in the experimental group).

The computed t values for the control group were 3.34, which is not statistically significant. According to the data, there were no statistically significant alterations in the degree of breathing pattern in individuals with chronic obstructive pulmonary disease before and after the test.

The estimated 't' value in the experimental group, 6.14, was determined to be statistically significant at the p0.05 level, showing that there was a significant reduction in the level of breathing pattern among patients with chronic obstructive pulmonary disease after breathing exercise. As a consequence, hypotheses 1 and 2 are accepted. The acquired t values for the difference in pain levels between the control and experimental groups were found to be 4.22, which was highly significant at the 0.05 level of significance. When the experimental and control groups were compared, it was observed that the experimental group had a lower level of breathing pattern after being given breathing exercise. As a result, H2 of the study hypothesis has been approved.

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