

## Effectiveness of Deep Breathing Exercise Regarding Dyspnea Among Covid19 Patients in Selected Hospitals at Kashmir.

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### Keywords:

Effectiveness, deep breathing, exercise, dyspnea, COVID-19, Hospital

### Abstract

Background of the study: The outbreak was just labeled a deadly disease by the World Health Organization. Respiratory infection has been classed as a sepsis illness under China prevention and stopping of infection, with prevention and control procedures for Category A infectious diseases in place. Breathlessness, often known as difficulty breathing is a common and uncomfortable respiratory ailment. It has been proposed that the central nervous system's participation in the awareness of other subjective feelings influences the sense of dyspnoea. Dyspnoea is a common and uncomfortable respiratory ailment. It has been proposed that the subjective sense of difficulty breathing is related to the central nervous system. Breathlessness, commonly known as difficulty breathing, is a frequent and distressing ailment. It has been postulated that the impression of this condition is governed by a central nervous system pathway involved in the feeling of dyspnoea, regardless of the underlying aetiology. The primary goal of this study was to compare the level of dyspnea in covid19 customers in the study group before and after breathing exercise.

#### METHOD:

Quasi experimental research design, non-randomized control group pre test-post test technique was used in this work. The 120 patients for the study were chosen using a purposive sample technique. The study was carried out in a government hospital in the Kashmir region, and data collection methods included demographic information, the modified difficulty breathing point, and a deep breathing exercise intervention. The instrument was finalized by five medical and nursing specialists, and a pilot study was conducted to assess its clarity, ambiguity, and feasibility on a similar topic. Statistical analysis was utilized to evaluate the experimental data. The dyspnea was evaluated using the modified Borg scale. In place of counseling, the experimental group received a 25-minute deep breathing exercise intervention twice a day.

#### RESULTS:

The 't' value for the study group was 8.51, which was indication at the p0.05 level. As a result, H2 is adequate. Deep breathing exercise was found to be useful in lowering dyspnea in the experimental group of covid-19 patients. In the control group, the obtained 't' value was 1.90, which was not important at the p0.05 level. As a result, H2 is adequate. There is no statistically significant difference between the pretest and posttest in the control group. In covid-19 patients, there was a significant relationship between dyspnea and demographic variables such as educational status; however, there was no relationship between age, gender, marital status, occupation, family history of corona virus 2019, duration of covid-19, smoking habits, and continuous breathing difficulty.

#### CONCLUSION:

Study concluded that current investigation. Deep breathing exercises are useful in reducing respiratory problems in covid-19 patients.

## 1. Introduction:

China republic (2020). Corona virus disease 2019 (COVID-19) has overrun the globe, causing a worldwide public health emergency. The epidemic has just been labelled a deadly disease by the World Health Organization. COVID-19 has been classed as a Category B infectious disease under the People's Republic of China's Law on Infectious Disease Prevention and Control, with Category A infectious disease prevention and control measures in place. China health commission has issued a number of corona virus 2019 treatment, investigation rules, all of which have helped to bring the pandemic under control. Despite the fact that HIV/AIDS has been responsible for over 2 million deaths, according to the National Health Commission. Despite the fact that COVID-19 has been blamed for over 2 million fatalities, according to National Health Commission data, over 78,000 people have now recovered and been discharged. Because COVID-19 patients have varied degrees of respiratory, physical, and psychological impairment, both inpatient and discharged patients require pulmonary rehabilitation. Patients are receiving medical attention for their ailments. As a result, many respiratory guidelines for COVID-19 clients have been available in China to strengthen the pulmonary rehabilitation of admitted clients as well as the proper treatment and follow up management, allowing clients to get better and come back to community more quickly and carefully.

M. Parshall, R. Schwartzstein, and others (2012). Breathlessness, often known as breathlessness, is a common and annoying respiratory illness. It has been proposed that the involvement of the central nervous system in the perception of other subjective sensations worsens the impression of dyspnoea. Dyspnoea is a common and uncomfortable respiratory ailment. The central nervous system has been related to the subjective sense of shortness of breath. Breathlessness, often known as dyspnoea, is a frequent and distressing condition. It has been proposed that the perception of this condition is governed by a central nervous system circuit involved in dyspnoea feeling, regardless of the underlying reason.

WHO (2020). The most prevalent COVID-19 symptoms are increase body temperature, dry cough, and tiredness. Other uncommon symptoms that some

people may experience include: loss of taste or smell, Conjunctivitis (sometimes known as red eyes) in conjunction with nasal congestion Throat discomfort, Headache, Discomfort in the muscles or joints Rashes on the skin can take many different shapes. Shortness of breath, loss of appetite, confusion, persistent pain or pressure in the chest, and a high temperature (over 38 °C) are all symptoms of severe COVID19 disease. Anxiety, Depression, Sleep Disorders, and Other Less Common Symptoms More severe and infrequent neurological effects include strokes, brain inflammation, insanity, and nerve damage. People of all ages who have a fever and/or a cough that is painful.

Rodriguez-Morales and colleagues (2020). Dyspnoea was seen in 45.6% of the population (95% confidence interval: 10.9-80.4%). Li et al. recently conducted a comprehensive study comprising 1,994 patients. The overall percentage of patients suffering from dyspnoea was 21.9%. Differences in how dyspnoea was investigated and documented can explain some of the disparity in prevalence between studies. It could have anything to do with the surroundings. Huang et al. discovered an incidence of dyspnoea as more as 92% in clients admitted to coronary care unit 56% in clients admitted to no intensive care unit in a prospective research of COVID-19 patients.

Indeed, Zhao J, Hu Y, et al (2021). A study of 1,099 individuals revealed a level of difficulty breathing as low as 18.6%, despite the fact that 86% had abnormal CT scans and poor PaO<sub>2</sub>/FiO<sub>2</sub> ratios. Other case studies have discovered "silent hypoxemia" in people with elevated PaCO<sub>2</sub>, which should cause dyspnea when combined with a low PaO<sub>2</sub>. Indeed, as discussed further below, respiratory centres are especially susceptible to CO<sub>2</sub> increases, resulting in fast increases in minute ventilation and total respiratory discomfort. This has been observed in patients both with and without co-morbidities.

So deep breathing exercise is important for the covid-19 patients to reduce breathing difficulty, patient practice daily exercise.

## 2. Material and Methods:

### Research area and duration:

Research was conducted in the selected hospitals of Kashmir.

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Research design for this study is pre experimental research design with one group pretest and post test research design.

## Population

Research population: Covid-19 clients selected hospitals at Kashmir, having dyspnea

## Inclusion criteria

- Clients who are having covid-19.
- Covid-19 clients involved in the study
- Client who are able to write and talk Urdu

## Exclusion criteria

- Client not available during data collection
- Client using other treatment
- Client not available during data collection

## Sample Size

A sample of 120 COVID-19 clients who fulfilled. The significance were preferred (60 samples for the study assembly and 60 samples for the non study group)

Total sample 120

## Sample technique

Purposive sampling was chosen as the sample approach for this study.

## 3. Results

### Demographic variables of the study participants

Table 1 result showed that the frequency and fraction allocation of the demographic variables of COVID-19 clients in study group and non study group. According to their age in experimental group majority (48.3%) were in more than 40 years of age, 21(35%) were in 31-40 years of age and 10 (16.7%) were in 21-30 years of age. In control group most 24(40%) were in 31-40 years of age, 19(31.7%) were in 21-30 years of age and 17(28.3%) were in >40 years of age.

Regarding gender of COVID-19 Patients, in experimental group maximum 34(56.7%) were female clients and 26(43.3%) were male. In control group maximum 31(51.7%) belongs to male and 29(48.3%) belongs to female.

Regarding religion of COVID-19 Patients, in experimental group maximum 25(41.7%) belongs to Muslim, 18(30.0%) belongs to Sikh and 17(28.3%) belongs to Hindu. In control group maximum 22(36.7%) belongs to Muslim and Hindu, 16(26.7%) belongs to Sikh religion

With regard to educational status of COVID-19 Patients, in experimental group 19(31.7%) were non formal education and 14(23.3%) were nursery education,12(20.0%) were secondary education,10(16.7%) were graduation and above and 5(8.3%) were higher secondary. In control group 28(46.6%) were illiterate,22(36.6%) were primary education,4(6.7%) were secondary and higher secondary and 2(3.5%) were Graduation and above.

Regarding marital status of COVID-19 Patients, in experimental group maximum 29(51.6%) single, 22(33.3%) belongs to married and 9(15.0%) were widowed/divorced. In control group maximum 29(48.3%) were single, 22(36.7%) were married and 9(15%) were widowed/divorced.

According to occupational status of COVID-19 Patients, in experimental group majority 26(43.3%) were industrial workers, 15(25%) were private workers,12(20%) were government employee,3(5%) were farmer,2(3.3%) were house wife,1(1.7%) were no job and students. In non experimental group majority 20(33.3%) were private worker,16(26.6%) were industrial workers,11(18.3%) were government employee and 4(6.7%) were students and 3(5%) were farmer, house wife and unemployed.

Regarding family monthly income of COVID-19 Patients, in experimental group maximum 29(48.3%) were monthly income 10,000 to 20,000, 27(45%) were monthly income less than 10,000 and 4(6.7%) were monthly income more than 20,000. In control group maximum 26(43.3%) were monthly income less than 10,000, 17(28.3%) were monthly income 10,000 to 20,000 and more than 20,000.

Regarding family history of COVID-19 Patients, in experimental group maximum 40(66.67%) were having history of COVID-19 and 20(33.33%) were no covid-19. In control group maximum 42(70%) were covid-19 history, 18(30%) no history of covid-19.

With regard to Duration of covid-19, in experimental group majority 19(31.7%) were 6-10 days, 16(26.7%)



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were 11-15 days and 11(18.3%) were more than 16 days and 14(23.3%) were less than 5 days. In control group majority 22(36.66%) were less than 5 days, 16(26.66%) were more than 16 days. 11(18.33%) were 6-10days and 11-15 days duration of covid-19.

Regarding smoking habits of COVID-19 Patients, in experimental group maximum 36(60%) were having habits of smoking cigarette, 24(40%) were not having habits of smoking cigarette. In control group maximum 42(70%) were having habits of smoking

cigarette and 18(30%) were not having habits of smoking cigarette.

With regard to continuous breathing difficulty of COVID-19 Patients, in experimental group 18(30%) were sleeping at night and 16(26.7%) were getting breathing difficulty during walking, 10(16.7%) were during wakeup. In control group 19(31.7%) were getting breathing difficulty during walking, 15(25%) were getting breathing difficulty during wakeup and while sleeping at night (**Table1**).

**Section: I:** Distribution of undergraduate students' demographic factors by frequency and proportion.

N=60

Demographic variables		Experimental		Control	
		Group (N=60)		Group (N=60)	
		f	%	f	%
Age in years	21-30 years	10	16.7	19	31.7
	31-40 years	21	35.0	24	40
	>40 years	29	48.3	17	28.3
Sex	Male	26	43.3	31	51.7
	Female	34	56.7	29	48.3
Religion	Muslim	25	41.7	22	36.7
	Hindu	17	28.3	22	36.7
	Sikh	18	30.0	16	26.7
Educational status	Illiteracy	19	31.7	28	46.6
	Primary Education	14	23.3	22	36.6
	Secondary education	12	20.0	4	6.7

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	Higher secondary	5	8.3	4	6.6
	Graduation and above	10	16.7	2	3.5
<b>Marital status</b>	Single	29	51.6	29	48.3
	Married	22	33.3	22	36.7
	Widowed/Divorced	9	15.0	9	15.0
<b>Occupation</b>	Industrial worker	26	43.3	16	26.6
	Private worker	15	25.0	20	33.3
	Government employee	12	20.0	11	18.3
	Farmer	3	5.0	3	5.0
	House wife	2	3.3	3	5.0
	Unemployed	1	1.7	3	5.0
	Student	1	1.7	4	6.7
<b>Monthly family income</b>	<10000	27	45.0	26	43.3
	10000 -20000	29	48.3	17	28.3
	>20000	4	6.7	17	28.3
<b>Family history of covid19</b>	<b>Yes</b>	40	66.67	42	70
	<b>No</b>	20	33.33	18	30
<b>Duration of covid-19</b>	< 5 Days	14	23.3	22	36.66
	6-10 Days	19	31.7	11	18.33
	11-15 Days	16	26.7	11	18.33
	>16 Days	11	18.3	16	26.66
<b>Smoking habits</b>	<b>Yes</b>	36	60	42	70
	<b>No</b>	24	40	18	30
<b>Continuous breathing difficulty presented at</b>	Wake up	10	16.7	15	25.0
	Walking	16	26.7	19	31.7

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	Sleeping at night	18	30.0	15	25.0
	Exercise	16	26.7	11	18.3

**Table 2:** Breathing exercise frequency and percentage among covid-19 clients in the non study group and study groups N=60+60=120

Breathing level	Experimental group				Control group			
	Pre test		Post test		Pre test		Post test	
	f	%	f	%	f	%	f	%
No dyspnea	-	-	-	-	-	-	-	-
Very very less	4	6.6	20	33.33	-	-	-	-
Very slight	5	8.3	15	25	-	-	-	-
Slight breathlessness	4	6.6	20	33.33	-	-	-	-
moderate	6	10	5	8.3	-	-	12	20
Somewhat severe	-	-	-	-	-	-	-	-
severe breathlessness	-	-	-	-	-	-	-	-
Very severe breathlessness	-	-	-	-	15	25	8	13.33
Very very severe breathlessness	10	16.66	-	-	10	16.66	16	26.67
Maximum	16	26.67	-	-	15	25	24	40
Almost	15	25	-	-	20	33.34	-	-
<b>Total</b>	<b>60</b>	<b>100</b>	<b>60</b>	<b>100</b>	<b>60</b>	<b>100</b>	<b>60</b>	<b>100</b>

Table 2 reveals that in the study group pretest score on the degree of dyspnea were less were 15(25%) almost severe, 16(26.67%) maximum, and 10(16.66%) very very severe. respiration pattern 6 (ten percent) had mild 4(6.6%) had slight breathlessness, 5(8.3%) experienced very minor breathlessness, and 4(6.6%) experienced very very slight breathlessness. Post-test results on the level of very very slight were 20(33.33%). 15 percent had a very slight breathing pattern, 20 percent had a slight breathing pattern, 5 percent had severe dyspnea, and

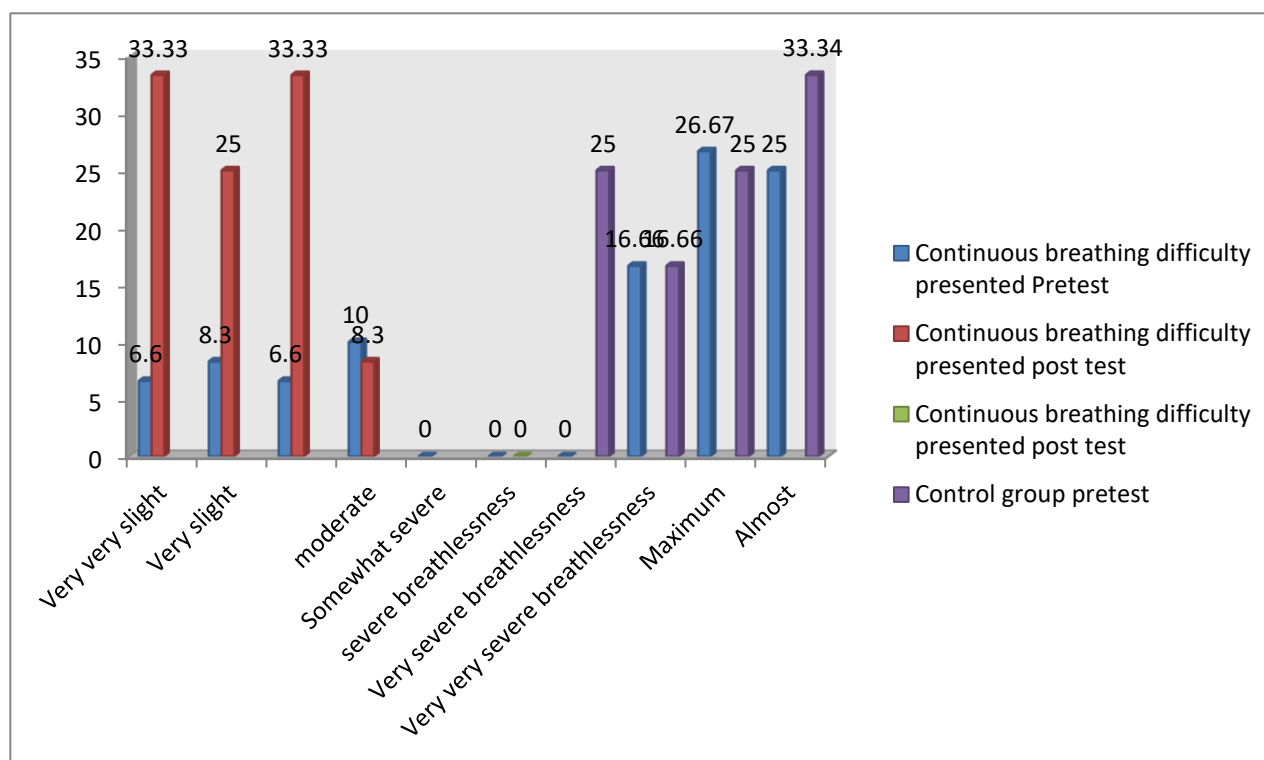
no one had a maximum breathing pattern. This finding indicates that in the experimental group, after administering the dyspnea exercise to Covid-19 patients, the post test was as low as the pretest.

The per test results on the level of respiration pattern in the control group Almost 20(33.34%) had difficulty breathing, maximum of dyspnea among clients 15(25%), very severe were 10(16.66%) had very severe, and 15(25%) had extremely severe dyspnea. In the post-test results for moderate breathing, 24 (40%)

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had maximum breath, 16 (26.67%) had more dyspnoea, 8 (13.33%) had very severe dyspnea, and

12 (20%) had moderate breathlessness.



**Figure 1:** A bar diagram depicts the effectiveness of deep breathing exercises in Covid-19 patients.

**Table 3** shows the mean, standard deviation, and paired 't' -test results for the Control group's pre and posttest levels of breathing pattern. N=60

Group	Pretest		Post test		Mean difference	't' Value
	Mean	SD	Mean	SD		
Control group	6.41	1.356	6.88	1.303	0.47	1.903

(\* - P<0.05, significant and \*\* -P<0.01 & \*\*\* -P<0.001, Highly significant)

The computed "t" value in the control group was 1.903, which was not statistically significant at the P0.05 level, according to Table 3. In the control

group, there is no significant difference between before and after the exam.

**Table 4:** Mean, standard deviation, and paired 't' -test of before and posttest breathing pattern levels in the Experimental group N=60

Group	Pretest		Post test		Mean difference	't' Value
	Mean	SD	Mean	SD		
Experimental group	4.58	1.046	2.73	1.163	1.85	8.451

(\* - P<0.05, significant and \*\* -P<0.01 & \*\*\* -P<0.001, Highly significant)

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The computed "t" value in the experimental group was 8.451, which was statistically significant at the P0.05 level, according to table 4. As a result, H1 is

approved. Deep breathing exercise was found to be useful in lowering dyspnea in covid-19 patients.

**Table 5:** Mean, standard deviation, and paired 't' -test of pre and posttest breathing pattern levels in the Control and Experimental groups N=60

	Control Post test		Experimental Post test		Mean difference	't' Value
	Mean	SD	Mean	SD		
Dyspnea among covid-19 patients	6.88	1.303	2.73	1.163	1.85	4.51*

(\* - P<0.05, significant and \*\* -P<0.01 & \*\*\* -P<0.001, Highly significant)

The obtained 't' value between the control and experimental groups is 4.51, which is significant at the p0.05 level, according to table 5. As a result, H1 is approved. It may be inferred that the deep breathing

exercise was more effective than the control group in lowering dyspnea in the experimental group of covid-19 patients.

**Table 6:** Compare the pretest and posttest level of breathing difficulty in Control and Experimental group N=60

		Pre test		Post test		Mean difference	't' Value
		Mean	SD	Mean	SD		
Dyspnea among covid-19 patients	Experimental group	4.58	1.046	3.53	1.243	1.05	8.45*
	Control group	6.41	1.356	6.88	1.303	0.47	1.90

(\* - P<0.05, significant and \*\* -P<0.01 & \*\*\* -P<0.001, Highly significant)

## Study group

According to Table 6, the resulting 't' value in the experimental group was 8.51, which was significant at the p0.05 level. As a result, H2 is acceptable. The deep breathing exercise was found to be useful in lowering dyspnea in the experimental group of covid-19 patients.

## Non study group

According to Table 6, the obtained't' value in the control group is 1.90, which is not significant at the p0.05 level. As a result, H2 is acceptable. It can be inferred that there is no significant difference between the pretest and posttest in the control group.



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**Table 7:** The experimental group's pre-test level of breathing difficulty was associated with chosen demographic characteristics. N=60

Demographic variables		Pre-test level of Breathing Difficulty						$\chi^2$	df	p value
		No Breath Less ness	Very very slight	Very slight	Slight breath less ness	Moderate	Somewhat severe			
Age in years	21-30 years	0	1	1	4	4	0	8.806	10	0.551 <sup>NS</sup>
	31-40 years	0	2	6	6	7	0			
	>40 years	2	4	8	9	4	2			
Gender	Male	0	4	6	8	7	1	2.257 <sup>a</sup>	5	0.813 <sup>NS</sup>
	Female	2	3	9	11	8	1			
Religion	Muslim	1	5	7	7	5	0	13.932 <sup>a</sup>	10	0.176 <sup>NS</sup>
	Hindu	1	0	3	4	7	2			
	Sikh	0	2	5	7	3	0			
Educational status	Non formal education	0	2	6	8	2	1	12.124 <sup>a</sup>	20	0.012 <sup>*S</sup>
	Primary Education	1	2	1	4	5	1			
	Secondary education	0	1	4	3	4	0			
	Higher secondary	0	1	1	2	1	0			
	Graduation and above	1	1	3	2	3	0			
Marital status	Single	0	5	8	9	8	1	6.082 <sup>a</sup>	10	0.808 <sup>NS</sup>
	Married	1	1	6	6	5	1			

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	Widowed/Divorced	1	1	1	4	2	0			
<b>Occupation</b>	Industrial worker	2	4	7	8	4	1	2.975	4	0.562 <sup>NS</sup>
	Private worker	0	2	4	5	3	1			
	Government employee	0	1	2	4	5	0			
	Farmer	0	0	1	1	1	0			
	House wife	0	0	0	1	1	0			
	Unemployed	0	0	0	0	1	0			
	Student	0	0	1	0	0	0			

Demographic variables		Pre-test level of Breathing Difficulty						$\chi^2$	df	p value
		No Breath Less ness	Very very slight	Very slight	Slight breath less ness	Moderate	Somewhat severe			
<b>Family monthly income</b>	<10000	1	3	7	8	6	2	3.593 <sup>a</sup>	10	0.964 <sup>NS</sup>
	10000 - 20000	1	3	7	10	8	0			
	>20000	0	1	1	1	1	0			
<b>Family history of covid19</b>	<b>Yes</b>	1	22	6	7	2	1	4.870 <sup>a</sup>	10	0.900 <sup>NS</sup>
	<b>No</b>	1	15	2	1	1	0			
<b>Duration of covid-19</b>	< 5 Days	0	3	3	5	2	1	16.673 <sup>a</sup>	15	0.339 <sup>NS</sup>
	6-10 Days	1	2	5	4	6	1			
	11-15 Days	1	0	4	7	4	0			

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	>16 Days	0	2	3	3	3	0			
Smoking habits	Yes	2	24	5	4	1	0	4.324 <sup>a</sup>	5	0.516 <sup>NS</sup>
	No	0	14	3	4	2	1			
Continuous breathing difficulty presented at	Wake up	1	3	2	0	4	0	16.673 <sup>a</sup>	10	0.339 <sup>NS</sup>
	Walking	0	3	4	6	2	1			
	Sleeping at night	1	1	5	6	4	1			
	Exercise	0	0	4	7	5	0			

(\* -P>0.05, significant) (NS=Not significant)S=(significant)

The above table 7 revealed that while there was a significant association between difficulty breathing among covid-19 clients and demographic variables such as educational status, there was no association

between age, gender, marital status, occupation, family history of covid-19, smoking habits, and continuous breathing difficulty presented at.

**Table 8:** Association between pre-test level of Breathing difficulty among covid-19 patients with selected demographic variables in Control group.

Demographic variables		Pre-test level of Breathing Difficulty						$\chi^2$	df	p value
		Slight breath less ness	Mode rate	Somew hat severe	Severe breath less ness	Very severe breathlessnes s	Very very severe breathlessne ss			
Age in years	21-30 years	1	15	0	3	0	0	13.140 <sup>a</sup>	15	0.591 <sup>NS</sup>
	31-40 years	1	13	6	1	2	1			
	>40 years	0	10	2	4	1	0			
Gender	Male	1	16	6	5	2	1	4.719 <sup>a</sup>	10	0.451 <sup>NS</sup>
	Female	1	22	2	3	1	0			

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<b>Religion</b>	Muslim	2	13	3	3	0	1	8.260 <sup>a</sup>	10	0.603 <sup>NS</sup>
	Hindu	0	15	3	3	1	0			
	Sikh	0	10	2	2	2	0			
<b>Educational status</b>	Non formal education	1	16	4	5	1	1	10.719 <sup>a</sup>	20	0.953 <sup>NS</sup>
	Primary Education	1	15	2	3	1	0			
	Secondary education	0	3	1	0	0	0			
	Higher secondary	0	3	0	0	1	0			
	Graduation and above	0	1	1	0	0	0			
<b>Marital status</b>	Single	0	21	3	1	3	1	14.853 <sup>a</sup>	10	0.138 <sup>NS</sup>
	Married	2	11	3	6	0	0			
	Widowed/ Divorced	0	6	2	1	0	0			
<b>Occupation</b>	Industrial worker	0	11	3	2	0	1	16.643	10	0.027 <sup>*S</sup>
	Private worker	1	12	4	3	0	1			
	Government employee	0	7	0	2	1	0			
	Farmer	1	2	0	0	0	0			
	House wife	0	1	0	0	0	0			
	Unemployed	0	2	0	0	0	0			
	Student	0	3	0	1	0	0			



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Demographic variables		Pre-test level of Breathing Difficulty						$\chi^2$	df	p value
		Slight breath less ness	Mode rate	Somew hat severe	Severe breath less ness	Very severe breathlessnes s	Very very severe breathlessne ss			
Family monthly income	<10000	0	24	0	2	0	0	1.593 <sup>a</sup>	10	0.964 <sup>NS</sup>
	10000 - 20000	1	8	4	2	1	1			
	>20000	1	6	4	4	2	0			
Family history of covid19	Yes	2	24	6	6	3	1	3.609 <sup>a</sup>	5	0.607 <sup>NS</sup>
	No	0	14	2	2	0	0			
Duration of covid-19	< 5 Days	0	12	4	4	2	0	16.309 <sup>a</sup>	10	0.362 <sup>NS</sup>
	6-10 Days	1	9	0	0	0	0			
	11-15 Days	1	5	3	3	0	1			
	>16 Days	0	12	1	1	1	0			
Smoking habits	Yes	2	28	3	6	2	1	5.666 <sup>a</sup>	5	0.340 <sup>NS</sup>
	No	0	10	5	2	1	0			
Continuous breathing difficulty presented at	Wake up	0	9	2	4	0	0	13.140 <sup>a</sup>	15	0.591 <sup>NS</sup>
	Walking	0	13	3	0	2	1			
	Sleeping at night	1	10	2	2	0	0			
	Exercise	1	6	1	2	1	0			

(\* -P>0.05, significant) (NS=Not significant)S=(significant )

Table 8 revealed that there was a important relationship between difficulty breathing among covid-19 patients and their demographic variables such as occupation, no association between such as

age, sex, marital status, education, family history of covid-19,duration of covid-19, smoking habits, continuous breathing difficulty presented at.

## 4. Discussion:

The results provided above are reliable with those of Judith A. prasom et al. (2020), who investigated the helpfulness of breathing exercises in lowering dyspnea in Covid-19 patients. The control and experimental groups were assigned at random to 60 patients. Data was gathered using the dyspnea lowering exercises and the difficulty breathing point. The treatment was given to the study group. Data research demonstrated that difficulty breathing differed before and after the dyspnea. The calculated 't' value for the study was 4.51 at p level 2.00. Finally, they stated that the results are more important, implying that breathing exercises were useful in reducing dyspnea in Covid-19 patients.

Cengiz H, Muge A, et al (2021) investigated a similar topic. The research investigates the effect of respiratory exercise programme (breathing exercises) on respiratory recovery in COVID-19 clients admitted to a non-ICU setting. The study comprised 173 people who had moderate to severe COVID-19. All patients were given normal COVID-19 treatment, and 94 of them were given breathing exercises like breathing control, diaphragmatic breathing, deep breathing, or chest expansion exercise, puffing (forced expiratory approach), and coughing. Mean values of peripheral oxygen saturation (SpO<sub>2</sub>), need for oxygen therapy (litres/min), respiratory rate (breaths/minute), and heart rate (beats/minute) were obtained at baseline, four days later, and seven days later. Using analysis of variance, the mean value of outcome measures from all time points was compared. The mean (SD) ages of the intervention (69.6% men) and control (62.1% men) groups were 50.1 (10.5) and 51.5 (10.4) years, respectively. At the 4-day follow-up, the intervention group's SpO<sub>2</sub> (98% 2.8 vs 80.9% 1.8, P 0.001), oxygen supplement. Differences in oxygen saturation and the need for oxygen therapy remained significant at the 7-day follow-up (P 0.001).

Jesús Peteiro, Domingo López (2021). A study was carried out to look into differences in clients referred to work out strain testing during the corona virus 2019 crisis, as well as the feasibility and outcomes of these tests while wearing a facemask. Before and after propensity score matching, all clients submitted for an exercise test between 1 June and 30 September 2020 were compared to clients treated during the same time

period in 2019. All recommended patients would be forced to wear a facemask by 2020. The experiment included 854 people, with 398 joining in 2020 and 456 joining in 2019. There were no statistically important differences in demographic patient characteristics, which were around three times higher in 2020 than in 2019.

. The test findings in both groups were consistent, with around 80% of more investigations, equivalent functional ability, and more than 20% of positive exercise tests. These outcome remained after propensity score matching. Both groups' test results were consistent, with around 80% of maximal tests, equal functional ability, and more than 20% of positive exercise tests. After propensity score matching, these results remained. The COVID-19 pandemic had no effect on the clinical profile of exercise testing subjects. Exercise tests can also be performed while wearing a facemask, with no effect on functional abilities or clinical outcomes.

## 5. Conclusions

The study indicated that deep breathing exercise effectively reduces dyspnea in Covid-19 patients. Research indicated that demonstrated that breathing exercises acting an important impact in reducing dyspnea in covid-19 patients.

### Data Availability

Researchers may give the information analyzed and utilized in this research upon request.

### Competing Interests

There is no conflict of interest related to the publishing of this study report.

### The authors' contributions

All the authors helps for developing report, data collection, analysis and final submission.

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