



## A SURVEY STUDY TO ASSESS THE ROLE OF *YOGA* PRACTICES ON PSYCHOLOGICAL BEHAVIOR - DURING LOCK-DOWN PERIOD

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### ABSTRACT

**INTRODUCTION:** The current pandemic of COVID-19 has led to a panic situation and had a negative impact on mind. There is uncertainty about the duration of the pandemic and factors like social distancing, increased unemployment, decrease in economy etc has spread the fear. Surge in cases and mortality results in adverse mental health consequences.

**MATERIAL AND METHODS:** A Questionnaire was prepared to assess the mental status of the population and role of *Yoga* for maintaining mental health during the present situation. Response from 250, apparently healthy individuals of either sex, 16 or 16 years above were recorded and data was analyzed after receiving the responses.

**RESULTS :** After analysis it was concluded that the person who were not practicing *Yoga* have higher psychological distress compared to those who practicing regularly.

**CONCLUSIONS:** Fear of unforeseen circumstances induces the psychological symptoms. Which further affects the health negatively. Yogic postures along with breathing practices helps to attain the stability in the mind and also improve the quality of life specially during the pandemic situations.

**Key Words:** Pandemic, COVID-19, *Yoga*, Psychological health issues

**INTRODUCTION:** As social distancing is a critical means to stop the spread of infection and break the cycle<sup>[1]</sup>. Lockdown was announced in almost all over the countries. This has resulted in significant decrease in growth rate of virus and increased doubling time of cases because of the lock-down<sup>[2]</sup>. WHO has identified social isolation, lock down, fear, deaths, loss of income and unemployment as some of the major psychological stressor<sup>[3]</sup>.

The pandemic caused severe threat to lives and physical health of people and increase the psychological problems like- anxiety, depression, panic disorders etc. Due to reduced access to family, friends, and other social support systems and increased

insecurities, loneliness, financial problems etc<sup>[4]</sup>. Thus, it is the need of an hour that during such stressful situation, individuals need to look into some intervention and adopt necessary measures to maintain their mental health. In this regard *Yoga* has positive role to play. *Yoga* as research-based success stories in case of mental disorders as an intervention either with other conventional treatments or even solely. In anxiety disorder both in clinical and non-clinical cases *Yoga* plays an important role<sup>[5]</sup>. Several clinical benefits from *Yoga* also have reported and changes in certain biological markers were observed as they lowers psychological marker in depression<sup>[6]</sup>.

## AIM AND OBJECTIVE

To assess the mental status of the population during Pandemic.

To assess the role of *Yoga* for maintaining mental health during Pandemic.

## MATERIAL AND METHOD

A questionnaire was prepared related to mental health and *Yoga*<sup>[7]</sup>. Which was tested and approved by the peer group. An epidemiological survey study was conducted on 250 volunteers in April to June 2020 by sending the Link of the survey form. Where single response were allowed by same person. The responses were analyzed and Mental health status of individuals in relation to *Yoga* was explored.

Questionnaire were divided into 9 section, 1<sup>st</sup> section consist questions related with demo-graphical data, 10 questions related to mental health were asked in 2<sup>nd</sup> section. On the basis of 3<sup>rd</sup> section individual were divided under *Yoga* and Non-*Yoga* Group. After 3<sup>rd</sup> section on-wards, questions were applicable only for yoga group, as question related to *Yoga* and *Pranayama* were asked. The Questionnaire was circulated by the contacts hence, participation was recorded from all over India.

## INCLUSION CRITERIA

Subjects willing to participate of either sex above 16 or above years of age.

## EXCLUSION CRITERIA

Subjects below 16 years of age.

## Mental health variables

Questions related to psychological issues were asked and mental health status was assessed for both one who are practicing *Yoga* and other who are not

## Yoga Practice Variables

Individual survey questions were used to assess: styles of *Yoga* practiced, duration of practice (days per week and amount) (minutes per day) of specific *Yoga* techniques (physical poses, breathing exercises and meditation) etc.

## Statistical method

The results were analyzed using Chi-square test.

## Observation and Result

After assessment of the data we found the responses from 16 - 65 years, 58 % female and 42 % of male. 42.8 % were students, 30.8% were health care worker, 12.8% were Academician, 17 % employee, 7% home maker, 4 % Business. 86.8% were healthy individuals, 6% Diabetic, 6 % Asthma, 4 % Hypertensive.

Out of 250 participants, 168 were performing *Yoga* in lockdown period whereas, 32.8 were not practicing *Yoga*. Among 168 participants, 8 participants were practicing *Yoga* for less than 2 days (Fig.1) so they were considered in non-*Yoga* group. In the *Yoga* group 69.6% were practicing *Yoga* before lockdown as well. (Fig. 2).

Both groups were assessed for relationship between mental health and *Yoga* practices by using chi-square Table 1). There was Significant difference among the following variables-

Q. During this lockdown, how often you felt upset because of unexpected occurrence of events? (Table 2) The chi-square statistic is 16.1288. The  $p$ -value is .002851. The result is significant at  $p < .05$ .

Q. In the last month, how often have you felt sad nervous, depressed and stressed? (Table 3)

The chi-square statistic is 14.4979. The  $p$ -value is .005864. The result is significant at  $p < .05$ .

Q. In the last month, how often have you felt irritated and found that you could not cope with all the things that you had to do? (Table 4)

The chi-square statistic is 26.4401. The  $p$ -value is .000026. The result is significant at  $p < .05$ .

Q. In the last month, how often have you been angered because of things that happened that were outside of your control? (Table 5)

The chi-square statistic is 13.0311. The  $p$ -value is .011125. The result is significant at  $p < .05$ .

Q. In the last month how often were you afraid for the future? (Table 6)

The chi-square statistic is 14.5055. The  $p$ -value is .005845. The result is significant at  $p < .05$ .

## DISCUSSION

Objective of the present study was to assess the mental health status of the individuals and the results signify that the majority of the person feels fearful about the situation. Feeling of being isolated as the individuals have to stay away from their family as a preventive measure followed by unpredictable events like sudden job loss, increase in COVID cases or death may result in situation in which an individual is unable to cope up and to control the situation.

*Yoga* consists several postures, breathing exercises etc. During Pandemic prevention is considered as best measure to control the suffering. Where *Yoga* and Meditation plays significant role that's why many individuals started practicing *Yoga* and meditation after Covid-19 onset, which shows that person are becoming aware about the benefits of them. It is viewed as a holistic technique for the management of stress. It has been observed that *Yoga* has helped people to feel relax, improve efficiency, increase attentiveness and helped in having an optimistic outlook in this pandemic situation<sup>[8]</sup>

Regular practice with proper method is necessary, and in the observations, it is found that 35.7% population practicing *Yoga* daily whereas, 31.5 % practicing for 4-6 days per week and majority of population practicing *Yoga* for 20-40

minutes, and only 10.1 % practicing *Yoga* for more than 60 minutes that reflects the habituation that the person practicing *Yoga* before lockdown are performing it for more time than others.

*Yoga* is the combination of *Asana*, *Pranayama*, *Dhyana* but it depends on various factor-like regularity in practice, need of the person, physical conditions, energy of the body. Young person can perform all forms but older might found it tough<sup>[9]</sup>. 53% of population practice all form of *Yoga*, whereas 27.4% only doing *Dhyana*.

Daily routine starts with the sun rises and this is ideal time to practice *Yoga* because of less distractions and body have full energy with relax mind, and no work related stress and it's good to know that majority of population know about it and practice *Yoga* in morning hours, but few participants practicing *Yoga* other than morning hours 3% population practice *Yoga* and meditation at night and performs only breathing technique which helped them with mental relaxation and sound sleep<sup>[10]</sup>.

*Yoga* must be practiced empty stomach to avoid gastric irritations and heaviness, after observing results it is found that no one is practicing *Yoga* after meal<sup>[11]</sup>.

Different form of *Pranayama* and *kriya* performed by *Yogis*, where *Anulom- Vilom* and *Kapalbhati* are commonest and popular among people that's why majority of Population performing *Anulom- Vilom* and *Kapalbhati*. Whereas, *Bhastrika* and *Bhramari* are less popular in common people because of which it is why practiced less.

Proper Guidance is must in performing the *Yoga* for better results but majority of population performing *Yoga* and meditation by their self only, and other are practicing under different guidance including Teachers, Instructor etc.

*Yoga* and meditation helped the population to cope up with the stress during the lock down situation which proves the positive impact of *Yoga* and *Pranayama* on mental health. There has been a connection between persons overall health and inner peace with *Yoga*.

*Yoga* and Breathing practice must incorporated in the integrated protocol for the treatment of the Covid patient and also for the healthy individuals but it should be under observation of any expertise to avoid the complications. Awareness programme for promotion of the *Yoga* should be run in every corner of the globe for enhancing the vital power.

**CONCLUSION:** *Yoga* and meditation are non-pharmacological measure to prevent and to cure various disorders especially stress without any documented complication. Unpredictable situations lead to fear and poor mental health which influence physical health also, So, *Yoga*, *Pranayama*, and Meditation should be adopted by the population to bring solace from problems and hence improve the quality of life specially during the pandemic situations.

**Table 1: Relation of *Yoga* and Mental health questions.**

Question	YOGA GROUP(%)					NON-YOGA GROUP(%)				
	Never	Almost Never	Sometimes	Fairly Often	Very Often	Never	Almost Never	Sometimes	Fairly Often	Very Often
In the last month how often do you feel lonely or isolated	43.75	20.62	31.87	3.12	0.62	41.11	14.44	34.44	8.88	1.11
During this lockdown, how often you felt upset because of unexpected occurrence of events?	25	16.25	50.62	4.375	3.75	22.22	16.66	35.55	17.77	7.77
In the last month, how often have you felt sad nervous, depressed and stressed?	37.5	19.375	36.875	5	1.25	27.77	15.55	34.44	16.66	5.55
In the last month, how often have you felt	35.625	20	38.75	4.375	1.25	30	14.44	26.66	20	8.88

irritated and found that you could not cope with all the things that you had to do?										
In the last month, how often have you been angered because of things that happened that were outside of your control?	28.75	20	43.125	5	3.125	30	16.66	30	12.22	11.11
In the last month how often have you feel fatigued or tried and mentally exhausted even after an adequate sleep?	37.5	16.875	37.5	4.375	3.75	34.44	11.11	34.44	8.88	11.11
In the last	46.875	20	26.875	3.125	3.125	35.55	23.33	28.88	7.77	4.44

month how often you feel panic?										
In the last month how often did you experience fear without a reason?	54.375	17.5	21.875	5	1.25	42.22	17.77	28.88	7.77	3.33
In the last month how often were you afraid for the future?	26.875	15	40.625	11.875	5.625	15.5	15.55	36.66	12.22	20
In the last month about how often did you face trouble relaxing?	40	19.375	32.5	5	3.125	32.22	13.33	37.77	10	6.66

**Table 2. Response of feeling upset in Yoga and Non-Yoga Group**

Results						
	Never	Almost never	Sometimes	Fairly often	very often	RowTot als
Yoga	40 (38.40) [0.07]	26 (26.24) [0.00]	81 (72.32) [1.04]	7 (14.72) [4.05]	6 (8.32) [0.65]	160
Non-Yoga	20 (21.60) [0.12]	15 (14.76) [0.00]	32 (40.68) [1.85]	16 (8.28) [7.20]	7 (4.68) [1.15]	90
<b>Colu mn Total s</b>	60	41	113	23	13	<b>250 (Gr and Total)</b>

**Table 3. Response of feeling sad nervous, depressed and stressed in Yoga and Non-Yoga Group**

Results						
	Never	Almost never	Sometimes	Fairly often	very often	RowTot als
Yoga	60 (54.40) [0.58]	31 (28.80) [0.17]	59 (57.60) [0.03]	8 (14.72) [3.07]	2 (4.48) [1.37]	160
Non-Yoga	25 (30.60) [1.02]	14 (16.20) [0.30]	31 (32.40) [0.06]	15 (8.28) [5.45]	5 (2.52) [2.44]	90
<b>Colu mn Total s</b>	85	45	90	23	7	<b>250 (Gr and Total)</b>

**Table 4. Response of feeling Irritated and unable to cope up with the condition in Yoga and Non-Yoga Group**

Results						
	Never	Almost never	Sometimes	Fairly often	very often	RowTot als
Yoga	57 (53.76) [0.20]	32 (28.80) [0.36]	62 (55.04) [0.88]	7 (16.00) [5.06]	2 (6.40) [3.03]	160
Non-Yoga	27 (30.24) [0.35]	13 (16.20) [0.63]	24 (30.96) [1.56]	18 (9.00) [9.00]	8 (3.60) [5.38]	90
<b>Colu mn Total s</b>	84	45	86	25	10	<b>250 (Gr and Total)</b>

**Table 5. Response of feeling angered because of unable to control the conditions in Yoga and Non-Yoga Group**

Results						
	Never	Almost never	Sometimes	Fairly often	very often	RowTot als



Yoga	46 (46.72) [0.01]	32 (30.08) [0.12]	69 (61.44) [0.93]	8 (12.16) [1.42]	5 (9.60) [2.20]	160
Non-Yoga	27 (26.28) [0.02]	15 (16.92) [0.22]	27 (34.56) [1.65]	11 (6.84) [2.53]	10 (5.40) [3.92]	90
<b>Column Totals</b>	73	47	96	19	15	<b>250 (Grand Total)</b>

**Table 6. Response of feeling afraid for the future in Yoga and Non-Yoga Group**

Results						
	Never	Almost never	Sometimes	Fairly often	very often	Row Totals
Yoga	43 (36.48) [0.17]	24 (24.32) [0.00]	65 (62.72) [0.08]	19 (19.20) [0.00]	9 (17.28) [3.97]	160
Non-Yoga	14 (20.52) [2.07]	14 (13.68) [0.01]	33 (35.28) [0.15]	11 (10.80) [0.00]	18 (9.72) [7.05]	90
<b>Column Totals</b>	57	38	98	30	27	<b>250 (Grand Total)</b>

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