# ASSESSMENT of IMPACT of COVID-19 (NOVEL CORONA VIRUS DISEASE) on ADULT INDIAN POPULATION: A CROSS SECTIONAL QUESTIONNAIRE BASED SURVEY

Shweta Patel<sup>#1</sup>, Manindra Rajak<sup>2</sup>, Kamini Khatak<sup>3</sup>, Ranjana Patnaik<sup>4</sup> & Diwakar Chauhan<sup>5</sup>

<sup>#1</sup>PhD scholar, Department of Clinical Research, School of Bioscience and Biomedical

Engineering, Galgotias University, Greater Noida

<sup>2</sup>Research Scholar, Department of Management Studies, Indian Institute of Technology (Indian School of Mines) Dhanbad, Jharkhand.

<sup>3</sup>Research Scholar, AU-KBC Research Centre, Madras Institute of Technology, Anna University, Chromepet, Chennai, Tamil Nadu, 600044

<sup>4</sup>Professor and Dean, School of Bioscience and Biomedical Engineering, Galgotias University, Greater Noida

<sup>5</sup>Professor and Head, Department of Chemistry, School of Basic and Applied Sciences, Galgotias University, Greater Noida

> <sup>#1</sup>shweta.pjbp@gmail.com <sup>2</sup>manindra213@gmail.com <sup>3</sup>mskamini7@gmail.com

<sup>4</sup>ranjana.patnaik@galgotiasuniversity.edu.in <sup>5</sup>diwakar.chauhan@galgotiasuniversity.edu.in

#### Abstract:

## **Background**

As the pandemic COVID-19 (due to novel Corona virus) is widely spreading across the globe, it is creating extensive fear, anxiety, apprehension and stress. These are all inevitable and growing reactions to the changing and uncertain situation in which all of us find ourselves.

#### **Objectives**

This study was carried out to assess the psychological impact of the novel, unprecedented situation arising due to pandemic in adult Indian population.

#### Method

The data was collected with self-reported questionnaire based survey. The survey was circulated in social media as Google form and participation was completely voluntary. Data was statistically analysed by using chi square test for the calculation of significance. Results

The responders had moderate level of perceived stress and anxiety 71%; 63.1% were found to be above average in terms of wellness, 80% were reported to smoke/chew tobacco/consume alcohol and 98.1% were well aware of COVID-19 and seriously followed social distancing.

#### **Conclusion**

Since disruptive effect of COVID-19 social distancing is dominating our daily lives, it is important to maintain connection. Anxiety and fears of each and every individual should be acknowledged and better understood by other individuals, communities and caregivers.

Keywords: COVID-19, Perceived Stress Scale, Stress Coping Resources Inventory Stress, Anxiety, Wellness, Mental Health.

#### INTRODUCTION

Corona virus infection is a recent communicable disease caused by novel Corona virus. A significant number of cases of pneumonia were reported in Chinese city of Wuhan in December 2019. Most of the patients, who got infected, had a history of visit to the local seafood market where wildlife varieties were sold. Later, detection of virus from human patients revealed the identity of novel virus named as 2019-nCov and thereafter it was renamed by the WHO as COVID-19. On 30 January 2020, following the dramatic upsurge of reported cases, WHO declared it an international public health emergency [1].

The spectrum of presentation of this disease is highly variable and ranges from asymptomatic patients to severe most ones, requiring ICU admission and respiratory support. The mortality rate as per the WHO report is 3-4%. [2] Till date, no FDA approved vaccination/medication against this infection is available / formulated. However, several clinical trials are ongoing in different countries throughout the world. The global spread of COVID-19 is alarming and creating an immense public health and clinical crisis [3].

The scenario of lockdown in most of the countries has caused people's lives to come to a standstill. There is a temporary closure of educational institutes, financial set-ups, construction projects, travel and hospitality sector, transport facilities, entertainment industry to name a few. There have been lot of terminations of services of many people worldwide. There is a situation of uncertainty prevailing everywhere. The alarming rate of global spread of the disease within a span of 2-3 months has created a situation of panic, stress, suicidal tendency, fear and anxiety for each and every individual.

Doctors, virologists, scientists, and authorities at various public health organizations are not sure on when we will be relieved of this strange infection. Hence, the need of the hour is to prevent the rapidity of community spread of this virus by increasing public awareness about methods of spread and prevention. Appropriate information on taking precautions according to the recommendations provided by the Ministry of Health & Family Welfare should reach the masses through various media and social platforms available [4]. So far, no research has been published on the impact of COVID-19 on mental health of the general population in India. The purpose of this study is to assess the general population anxiety level during COVID-19 spread.

It is essential to assess the psychological impact of this pandemic among adult Indian population, so that it can be better acknowledged, understood by community, family and caregivers and appropriate actions be taken/prevailing actions be modified so as to deal with this scenario with available resources, utmost care and confidence and thorough co-operation among people and health care workers, while maintaining close virtual/digital connection and following the norms of social distancing.

With this background, the aim of this survey was to assess the impact of COVID-19 (Novel Corona Virus Disease) on Adult Indian Population Specific Objectives were

- 1. To evaluate the level of perceived stress and anxiety among adult Indians
- 2. To evaluate the level of ability to cope up with stress

- 3. To associate socio-demographic factors influencing perceived stress and anxiety
- 4. To associate socio-demographic factors influencing the ability to cope up with stress

#### **METHODOLOGY**

# **Participants**

The present study is a descriptive cross sectional online survey conducted in India, in the month of April to May 2020, during which, Four hundred and twelve subjects (412) participated in the survey. A self constructed questionnaire was constructed using Google form. Online platforms like emails, Whatsapp and other social media were utilised for distribution. The participants were encouraged to share the survey to their contacts as well, for increasing the participation and response rate of the questionnaire. The link was forwarded to many people.

Apart from the first point of contact and belonging to various geographic locations in India, different socio-economic strata, educational levels, professional attributes, marital status, demography, etc so as to have a heterogenous population participating in the survey. On receiving and clicking the link provided, the participants were auto directed to the complete information about this survey and informed consent. Once the participant accepted to take the survey, demographic details, followed by several questions appeared sequentially. After 2 rounds of follow up, a total of 412 respondents completed the survey giving a response rate of 80%.

### Study Instrument & Design

A self constructed questionnaire (attached as annexure 1) which was pilot tested for face and content validity with a team of 5 researchers, including a public health expert and a psychiatrist. A total of 20 respondents participated in the pilot study, the data of which was not included in the final study. A Cronbach's alpha value of 0.895 indicated a good internal consistency & validity. The questionnaire consisted of a total of 30 questions under three major sections i.e. Section II collected specific responses through 13 questions addressing COVID-19 awareness and exposure level, Section III collected specific responses through 10 questions using Perceived Stress Scale (PSS) <sup>5</sup> to measure personal stress and anxiety while Section IV collected specific responses through 7 questions using the Stress Coping Resources Inventory (SCRI) <sup>6</sup> wellness scale to measure stress coping ability respectively, whereas first section consisting of demographic information like age, gender, occupation, illness, on-going medications, marital status, education level and family members.

#### Psychological Measurements

The assessment of psychological impact of COVID-19 (Novel Corona Virus Disease) was done by using PSS (Perceived stress scale), which is one of the precise and validated instruments to measure stress, fear and anxiety. Although originally created in 1983, this method still remains a viable option that helps to understand how different circumstances influence feelings, emotions and perceived stress. The questions in this scale are pertaining to feelings and thoughts during the last one month, relevant in our case corresponding to the period of nation-wide lockdown due to the COVID-19 pandemic

Study population

People who were aged more than 18 years, could read, write and understand English language, with access to the internet and willing to give informed, voluntary consent were a part of this survey.

#### Permissions and consent

Participation in the present study was completely anonymous and voluntary. Approval was obtained for the Institutional Ethics committee (IEC) of YMT Dental College and Hospital, Navi Mumbai, India, with a protocol registration number as YMTDC/IEC/OUT/2020/78

# Sample size

Sample size was determined using a single proportion formula

$$n = \frac{1.96^2 p(1-p)(DEFF)}{d^2}$$

Where p = Estimate of the expected proportion, d = Desired level of absolute precision Assuming the current prevalence / event rate to be atleast 50% and keeping 5% confidence limit, for p=0.05

n = 384

It was estimated that 384 respondents should complete the survey

#### **Statistical Procedures**

The filled responses obtained from online platform were transformed into a MS Office Excel Sheet (v 2010, Microsoft Redmond Campus, Redmond, Washington, United States). The compiled data was subjected to statistical analysis using Statistical package for social sciences (SPSS v 21.0, IBM). Descriptive statistics like frequencies and percentage for categorical data, Mean & SD for numerical data has been depicted. Comparison of frequencies of categories of variables & responses with demographic variables were done by using chi square test. For all the statistical tests, p<0.05 was considered to be statistically significant, keeping  $\alpha$  error at 5% and  $\beta$  error at 20%, thus giving a power to the study as 80%.

#### **RESULTS**

A total of Four hundred and twelve subjects (412) completed the survey, with the mean age of 34.46 ± 10.544 years, with minimum age being 19 years and maximum 83 years. A total of 185(44.9%) participants were females, 225 (54.6%) were males, while 0.5% of the participants preferred not to disclose their gender. Other demographic details have been depicted in table 1. Data from section II of the questionnaire i.e. specific COVID-19 related questions has been depicted in Table 2. Table 3 shows distribution as per PSS individual responses in Percentage. Table 4 shows distribution as per Wellness scale individual responses in Percentage. Data from section III i.e. PSS has been depicted in Figure 1, while Data from section IV i.e. wellness scale of SCRI has been depicted in Figure 2. Table 5 shows comparison of Perceived Stress Scale outcome with independent variables. Table 6 shows comparison of Wellness outcome with independent variables.

The perceived stress was found to be higher among 31-45 years of age group. Statistically significant/highly significant difference reported for the frequencies between the groups (P<0.01, 0.05) showing higher frequency under moderate for <30 years & 31 to 45 years. The stress level was higher in males as compared to females and statistically significant/highly significant difference seen for the frequencies between the groups (P<0.01, 0.05) showing higher frequency under moderate for both males as well as females. The perceived stress was highest among salaried/service class individuals and statistically significant/highly significant difference seen for the frequencies between the groups (P<0.01, 0.05) showing higher

frequency in moderate category for service/ salaried group. Perceived stress level was found to be higher among the individuals who were not having any kind of illness and statistically significant /highly significant difference seen for the frequencies between the groups (P<0.01, 0.05) indicating higher frequency under moderate category for no illness group. Similarly higher level of stress was observed in the peoples who were not taking any medications and statistically significant/highly significant difference observed for the frequencies between the groups (P<0.01, 0.05) having higher frequency under moderate category for no Ongoing medication group. Those having family with them were found to be more stressed and statistically significant/highly significant difference reported for the frequencies between the groups (P<0.01, 0.05) having higher frequency under moderate for with family group. The perceived stress was found to be higher in married individuals and statistically significant /highly significant difference seen for the frequencies between the groups (P<0.01, 0.05) with higher frequency for moderate for both Married & Single. Under the education category the postgraduates were found to be highly stressed and statistically non-significant difference seen for the frequencies between the groups (P>0.05).

Table 6 shows the wellness of the peoples and their capacity to deal with stress; this includes emotions, feelings and thoughts in problematic situations. One the basis of age distribution wellness was found to be above average between 31-45 years and significant/highly significant difference observed for the frequencies between the groups (P<0.01, 0.05) with higher frequency for above average for age groups <30 and 31 to 45. Wellness was found to be almost similar under both the sex including males and females and statistically non-significant difference seen for the frequencies between the groups (P>0.05). On the basis of occupation the service class/salaried and professionals were able to cope up with stress and there wellness was reported to be above average and superior statistically significant / highly significant difference reported for the frequencies between the groups (P<0.01, 0.05) with higher frequency for above average for Service/ salaried & Professional while superior for Service/ salaried & Professional. The individuals with no illness and medication history were found to be above average and superior in maintaining wellbeing, statistically non-significant difference observed for the frequencies between the both the groups (P>0.05). Respondents with the family were much better in there wellness as compared to the single, statistically significant/highly significant difference reported for the frequencies between the groups (P<0.01, 0.05) with higher frequency for above average & superior for with family group. When compared on the basis of marital status married were much better in maintaining their well-being than unmarried and a statistically significant / highly significant difference reported for the frequencies between the groups (P<0.01, 0.05) with higher frequency for above average & superior for Married. On education level postgraduates were better in managing the stress and a statistically non-significant difference observed for the frequencies between the groups (P>0.05) having higher frequency for above average and superior for post-graduation group.

Table 1 showing demographic details of the respondents						
Demographic variables	Ontion	Frequency	Percentage			

# European Journal of Molecular & Clinical Medicine ISSN 2515-8260 Volume 07, Issue 09, 2020

Sex	Female	185	44.9
	Male	225	54.6
Occupation	Business	35	8.5
	Home-maker	27	6.6
	Professional	126	30.6
	Retired with pension	7	1.7
	Service/ salaried	157	38.1
	Unemployed	60	14.6
Medical illness	No	345	83.7
	Yes	67	16.3
Ongoing medication	No	346	84.0
	Yes	66	16.0
Staying with family or single	Single	43	10.4
	With family	369	89.6
Marital status	Divorced	10	2.4
	Married	224	54.4
	Single	173	42.0
	Widowed	5	1.2
Education level	Diploma/ Graduation	162	39.3
	Doctorate (PhD)	25	6.1
	No formal education	4	1.0
	Post-graduation	208	50.5
	Upto High school	13	3.2

Table 2 showing responses to specific COVID-19 related questions

Specific question	Response	Frequency	Percentage
Are you aware about COVID-19 (Novel Corona virus disease?	No	1	.2
	Yes	411	99.8
Are you keeping yourself updated about it?	No	8	1.9
	Yes	404	98.1
Have you suffered from COVID-19?	No	397	96.4
·	Not sure	14	3.4
	Yes	1	.2
If no, what do you think is your chance of getting this disease?	High	33	8.0
	Low	205	49.8
	Moderate	76	18.4
	Nil	98	23.8
Has any of your close family members suffered from COVID-19?	No	411	99.8
	Yes	1	.2
Are you following lockdown seriously?	No	4	1.0
	Yes	408	99.0
Are you following social distancing seriously?	No	7	1.7
, , ,	Yes	405	98.3
Are you following hand hygiene methods seriously?	No	5	1.2
	Yes	407	98.8
Do you step out of your house?	No	145	35.2
• •	Yes	267	64.8
Do you use face mask when you step out of your house?	No	23	5.6
	Yes	389	94.4

Table 3 showing Distribution as per PSS individual responses in Percentage

PSS individual Questions	0-never	1-almost never	2-sometimes	3-fairly often	4-very often
In the last month, How often have you been upset because of COVID-19 scenario	10.40	9.00	47.80	19.70	13.10
In the last month, How often have you felt that you were unable to control important things in your life	19.70	16.50	40.00	16.30	7.50
In the last month, How often have you felt nervous and stressed	20.90	10.90	47.30	13.10	7.80
In the last month, How often have you felt confident about your ability to handle your personal problems	22.80	36.90	29.60	3.40	7.30
In the last month, How often have you felt that things were going your way	9.00	20.60	44.90	17.00	8.50
In the last month, How often have you found that you could not cope with all the things that you had to do?	16.30	20.10	51.20	9.20	3.20
In the last month, How often have you been able to control irritations in your life	18.40	27.20	38.30	8.50	7.50
In the last month, How often have you felt that you were on top of things	6.80	18.40	48.30	15.30	11.20

In the last month, How often have you been angered because of things	16.70	16.50	48.50	12.90	5.30
that happened that were outside of your control					
In the last month, How often have you felt difficulties were piling up so	23.80	28.60	34.00	10.90	2.70
high that you could not overcome them					

Table 4 showing distribution as per wellness scale individual responses

Wellness scale individual Questions	Responses	Percentage
How frequently do you moderately	1-Daily or more often	18
exercise?	2-Once or twice a week	9
	3- Once or twice a month	35.9
	4-Seldom	37.1
How often do you get a full, restful night	1-Most every night	7
of sleep?	2-Four to five times a each week	12.4
	3-Two to three times each week	21.1
	4-Seldom	59.5
To what extent is your energy sufficient	1-to a very great extent	0.7
for your work and daily activities?	2-to some extent	9
	3-to little extent	35.2
	4-to very little extent	55.1
How closely does your weight approach	1-My weight is at the ideal level	3.4
the ideal level?	2-My weight is close to the idea level	32.3
	3-My weight is not close to the ideal level	38.1
	4-I am dangerously overweight (underweight)	26.2
To what extent do you eat a nutritious	2-to some extent	6.8
diet?	3-to little extent	57
	4-to very little extent	36.2
Which of the following best describes your use of tobacco?	1-In no period of my life have I had the habit of smoking or chewing tobacco.	6.1
	2-Early in my life for a short period I smoked or chewed tobacco	3.6
	3-I stopped smoking or chewing tobacco over the past two years	10.2
	4-I currently smoke or chew tobacco	80.1
Which of the following best describes your use of alcohol?	1-I do not abuse alcohol, and never have. (Abuse is defined as drinking more than two drinks within a short period such as an evening.)  2-Very occasionally I abuse alcohol.	2.9 5.3
	3-I have a history of abusing alcohol, but am not presently abusing it.	21.8
	4-I am presently abusing alcohol.	69.9

Table 5 Comparison of Perceived Stress Scale outcome with independent variables

		P	PSS Outcome (n)			Chi-Square Value	P value
	Variables	High	Low	Moderate	Total		
Age groups	<30	4	16	170	190		
	31 to 45	12	52	104	168	67.484	<0.01, 0.05
	>45	4	29	21	54		

		F	PSS Outcome (n)				P value
	Variables	High	Low	Moderate	Total		
Age groups	<30	4	16	170	190		
	31 to 45	12	52	104	168	67.484	<0.01, 0.05
	>45	4	29	21	54		
	Total	20	97	295	412		
Sex	Female	18	30	137	185		
	Male	2	67	156	225	25.390	<0.01, 0.05
	Prefer not to say	0	0	2	2		
	Total	20	97	295	412		
Occupation	Business	2	12	21	35		
	Home-maker	5	9	13	27		
	Professional	6	28	92	126	52.060	<0.01,0.05
	Retired with pension	0	5	2	7		
	Service/ salaried	1	43	113	157		
	Unemployed	6	0	54	60		
	Total	20	97	295	412		
Illness	No	13	74	258	345		
	Yes	7	23	37	67	12.107	<0.01, 0.05
	Total	20	97	295	412		

Ongoing medication	No	13	71	262	346		
	Yes	7	26	33	66	18.864	<0.01, 0.05
	Total	20	97	295	412		
Family	Single	0	17	26	43		
	With family	20	80	269	369	8.377	<0.01, 0.05
	Total	20	97	295	412		
Marital status	Divorced	1	4	5	10		
	Married	17	66	141	224		
	Single	2	25	146	173	27.292	<0.01,0.05
	Widowed	0	2	3	5		
	Total	20	97	295	412		
Education level	Diploma/ Graduation	8	42	112	162		
	Doctorate (PhD)	0	4	21	25		
	No formal education	1	0	3	4	12.556	>0.05
	Post-graduation	11	51	146	208		
	Upto High school	0	0	13	13		
	Total	20	97	295	412		

<sup>\* =</sup> statistically significant difference (P<0.05), \*\* = statistically highly significant difference (P<0.01), # = non-significant difference (P>0.05)

Table 6 Comparison of Wellness outcome with independent variables

Table o Comparison of Wenness outcome with independent variables									
Wellness outcome (n)					Chi- Square				
Variables	Above average	Average	Superior	Total	Value	P value			
Age Groups <30	122	16	52	190					

# European Journal of Molecular & Clinical Medicine ISSN 2515-8260 Volume 07, Issue 09, 2020

	31 to 45	125	3	40	168	51.713	<0.01, 0.05
	>45	13	4	37	54		
	Total	260	23	129	412		
Sex	Female	123	6	56	185		
	Male	135	17	73	225	5.387	>0.05
	Prefer not to say	2	0	0	2		
	Total	260	23	129	412		
Occupation	Business	23	4	8	35		
	Home-maker	14	0	13	27		
	Professional	80	2	44	126	43.457	<0.01, 0.05
	Retired with pension	0	0	7	7		
	Service/ salaried	100	8	49	157		
	Unemployed	43	9	8	60		
	Total	260	23	129	412		
Illness	No	218	22	105	345		
	Yes	42	1	24	67	2.920	>0.05
	Total	260	23	129	412		
Ongoing	No	216	22	108	346		
medication	Yes	44	1	21	66	2.493	>0.05
	Total	260	23	129	412		
Family	Single	22	0	21	43		
	With family	238	23	108	369	8.476	<0.01, 0.05
	Total	260	23	129	412		
Marital	Divorced	3	0	7	10		
status	Married	141	10	73	224		
	Single	115	13	45	173	16.251	<0.01, 0.05
	Widowed	1	0	4	5		
	Total	260	23	129	412		
Education	Diploma/ Graduation	101	13	48	162		
level	Doctorate (PhD)	15	0	10	25		
	No formal education	3	1	0	4	11.534	>0.05
	Post-graduation	130	9	69	208		
	Upto High school	11	0	2	13		
	Total	260	23	129	412		

<sup>\* =</sup> statistically significant difference (P<0.05), \*\* = statistically highly significant difference (P<0.01), # = non-significant difference (P>0.05)

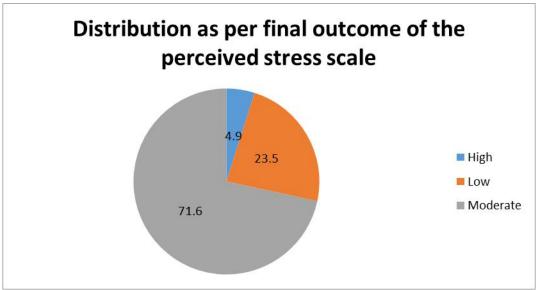


Figure 1 Describing about final outcome of the perceived stress scale

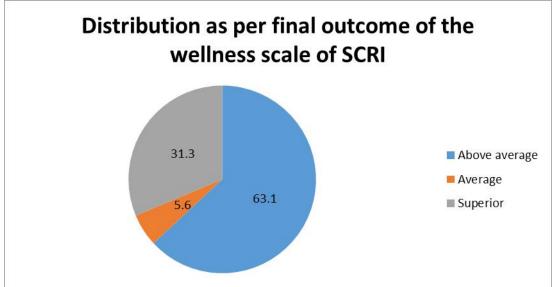


Figure 2 Describing about final outcome of the wellness scale of SCRI

#### **DISCUSSION**

When a disease which is of magnitude of a pandemic, with no diagnostic aid with 100% reliability or definitive treatment available and causes global financial and healthcare crises, it is very natural for people to experience some or the other form of stress ranging from panic to suicidal tendencies. In order to cope with this situation, different people resort to different coping activities/ mechanisms. This survey helped us to understand the association of the mental impact (due to this pandemic) with various demographic variables. It clarified the level of awareness and knowledge that general Indian adults possess about it and also, as to which coping measures are most commonly adopted by this population.

#### **Anxiety and Stress**

Majority of respondents reported to be moderately stressed, out of total 412 participants, 295 i.e. 71% of adult population falls under moderate category (Figure 2). 4.9% were found to be highly stressed and 23.5% falls under the category of lower stress due to pandemic. Maximum no. of individuals perceived stress moderately(Table: 1) they were male and

females both between the age of 31-45 years, professionals/ service class with no illness/ medication history, married as well as single with family.

#### Wellness

Majority 63.1% was found to be above average (Figure 4) in the terms of wellness/wellbeing, whereas 31.3% falls under superior category. Maximum 35.9% individuals were doing exercise once or twice a week, 18% were doing it daily or more often. (Figure 3).. Majority 59.5% of respondents were rarely able to take rest full sleep throughout the night, only 21.1% were able to sleep two to three times a week. 55.1% were able to feel energetic throughout the day to a very little extent, 35.2% were felt energetic to a little extent and only 0.7% were capable to meet their energy demand. 38.1% of respondent marked that there weight do not approaches to ideal level, 32.3% said there weight approaches ideal level, 57% individuals marked that they were eating nutritious diet to very little extent.

### Alcohol/ Smoking/Tobacco Addiction

Majority about 80% reported to smoke/ chew tobacco currently and 10% said they are not smoking/chewing tobacco from last two years (Table 2). Out of 412, 288 reported that they are abusing alcohol presently where Abuse is described as taking more than two drinks in a short period of time. 21% said that they used to abuse alcohol, but presently not abusing it.

## Awareness Level and Social Distancing

Majority of respondents 98.1% were keeping themselves regularly updated about COVID-19 (Figure 5) information through Government websites, Arogya setu app, Family, Relatives, Friends, Newspaper, Internet, News Channels, News on mobile, Social media, only 1.9% were not keeping any updates, 49.8% individuals marked that their chances of getting corona virus infection is low whereas 23.8% said chances are nil. 99% reported that they are following lockdown and social distancing seriously. 94-98% were following hand washing and mask wearing practice while getting step out of home for any essential work.

Suggestive measures to improve mental well-being by following social distancing [6]

- Stay connected and maintain social networks over phone, video call, social media gathering
- Regular exercise and workouts such as yoga, zumba, spot jogging, walking in terrace, room, balcony etc.
- Changing eating habits: Eating healthy and more nutritious food by avoiding high fat/sugar diet.
- Refrain yourself from smoking and alcohol consumption
- Reading books and learning new skills
- Goal setting, finding bad habits and replacing them with some new habits
- Spiritual learning for self-exploration and improvement
- Watching TV, playing online/offline games, listening music
- Watching/listening inspirational stories of successful people all over the world
- Spending quality time with family and relatives and make time to do things that gives feeling of happiness and joy
- Expressing gratitude to the each and every individual working as frontline warriors in this worst situation, help others in family, friends and relatives.

#### LIMITATION OF STUDY

Some of limitations with the study are as follows:

- Sample size- Small sample size
- Accessibility to the population as survey was circulated on digital media due to lockdown
  and people not having android phone and digital media presence were not having access
  to the survey.
- Language, the questionnaire was made in English language only difficult for those who don't understand language

#### **CONCLUSION**

We found that majority of respondents were moderately stressed despite the fact that individuals with perceived stress were young between 30-45 year, males and females both were almost equally affected, they were educated of service class/postgraduate level, married with family and without any illness or on-going medication and there was a highly significant difference observed among the different variables. Furthermore the reason could be many but the common one are long term lockdown, fear of getting corona virus infection and quarantine, frequent maintenance of cleanliness at home and workplace, repeated hand washing practice, social distancing and restriction of social gathering, tension of family, parents, kids etc., unable to meet loved ones and stuck out of home, non-availability of essentials, disturbance of daily schedule, changes in eating/sleeping habits, lack of discipline, fear of losing job/salary, loneliness etc. Furthermore in-depth studies are required to understand the behavioural changes with larger group of population. This reflects that it's the time to take charge/ responsibility of our own life; many people are taking it for granted at very lighter note whereas some are becoming more anxious. The need is to understand the severity of disease by intensifying awareness and to address the health care requirements of the people during COVID-19 pandemic. We need to be more cautious, active and patient so that we are in better condition to help/take care of others in family, community and society. This study may serve as a basis for future scientific research in the field of psychiatry as well as psychology.

# **Conflict of Interest**

All the authors declare that no personal interest was involved in the course of study/there is no conflict of interest

#### **Funding**

No funding has been granted for the conduct of this study.

#### REFERENCES

- [1] Sun J, He W, Wang L, Lai A, Ji X, Zhai X et al. COVID-19: Epidemiology, Evolution, and Cross-Disciplinary Perspectives. Trends in Molecular Medicine. 2020;26(5):483-495.
- [2] WHO, 2020b. Coronavirus Disease 2019 (COVID-19) Situation Report 46. URL https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200306-sitrep-46-covid-19.pdf?sfvrsn=96b04adf 2
- [3] Applegate W, Ouslander J. COVID-19 Presents High Risk to Older Persons. 2020.
- [4] #IndiaFightsCorona COVID-19 [Internet]. MyGov.in. 2020 [accessed 20 May 2020]. Available from: https://www.mygov.in/covid-19
- [5] Cohen, S., Kamarck, T., and Mermelstein, R. A global measure of perceived stress, Journal of Health and Social Behavior, 24,1983, 386-396
- [6] Kenneth B. Matheny, ABPP and Christopher J. McCarthy. Write Your Own

Prescription for Stress. New Harbinger Publications, Inc, 2000; 2000
[7] HealthyAtHome [Internet]. Who.int. 2020 [accessed 20 May 2020]. Available from: https://www.who.int/news-room/campaigns/connecting-the-world-to-combat-Coronavirus/healthyathome/healthyathome---mentalhealth.