# An Empirical Study of Psychological Pressure on Doctors During Covid-19 at North Karnataka

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Abstract - The pandemic Covid-19 has infected and affected unprecedented public health crisis. It has created unparalleled amount of psychological pressure on doctors while treating covid-19 patients. In this paper it has been analyzed and examined the potential areas and for measures to minimize psychological pressure on frontline warriors doctors. The total 112 doctors have responded in the survey. The data collected through structured questionnaire for the period from 29th October,2020 to 16thDecember,2020. The doctor who directly engaged in the diagnosis, treatment, and care of Covid -19 patients were affected more and got lot of psychological pressure. Doctors feared contagion and infection to their family members, friends, and colleagues. Some of doctors felt uncertainty and expressed severe disapproval for the profession and wanted to resign. But doctors took it as a challenge, and they have served the covid-19 affected patients.

**Index Terms** - Psychological pressure, covid-19 patients and Doctors

### INTRODUCTION

Since December 2019, the whole world has been facing the public health crisis of Covid -19 pandemic disease. The Corona viruses is said to have started from wholesale fish market in Wuhan regions of China. These viruses got transmitted from animals to humans then started transmitting to human to human. This pandemic disease causes illness of common cold to more severe diseases like Severe Acute Respiratory Syndrome, shortness of breath, chest pain or pressure, fever, dry cough, weakness, and possible symptoms of headaches and joint pains, diarrhea, fatigue, sore throat and loss of taste and smell (WHO 2020).

In India Covid -19 has infected 10,871,060 people, there have been death of 1,55,399 people. And 10,571,629 people have been recovered up to 11

February 2021, as per(worldometers.info). Corona Virus Covid-19 has rapidly spread globally and was declared as pandemic. This

Pandemic Covid-19 has caused unprecedented situation for all citizens, leaders, policy makers, politicians and mainly all health care professionals. So, doctors were under severe psychological pressure. Psychological pressure is a state of mental and emotional strain or tension or it is an any action that places special physical or Psychological demands upon a person, anything that can unbalance his individual equilibrium. Professional psychological pressure is a potential cause of concern in Doctor is associated with more number of work hours, anxiety, sleeplessness, depression. All Doctors and Health workers started thinking every clinician is also a Patient during COVID-19 pandemic. During the public health crisis of the COVID-19 pandemic, it is very important to accept & admit the Psychological pressure & increasing threat on doctors.

Indians consider doctor as God and his service as scared one. That is why there is a shlok "AushadamJanhvitoyamVaidyoNarayanoHarihi".

The meaning is any medicine should be considered as sacred as water from the river Ganga. And all doctors should be considered as Lord Narayana. Therefore, doctors were deeply honored and respected also expected lot of service. During lock down also doctors were working. It is a great challenge, to know the stress levels in doctors and to identify causes for the stress. We conducted survey based on questionnaire study and received some suggestions to measures and to minimize Psychological pressure on Doctors.

**OBJECTIVES OF STUDY** 

To investigate the significance influence of demographic factors on Psychological Pressure on Doctors

To analyze Impact on doctor's health, while treating covid-19 pandemic patients.

#### RESEARCH METHODOLOGY

Both primary and secondary Source of data is used for the study.

With the help of structured questionnaires primary data was collected from 112 doctors who were treating the covid-19 patients. The responses were collected through telephonic conversation and personal interviews.

Secondary data was collected from the published in reputed journals and reports.

#### SAMPLING METHOD

Conveniences sampling technique is used for the study from the North Karnataka region (Bagalkot,Bijapur, Gadag, Haveri, Dharwad, Belagavi, Ballari, Koppal, Raichur, Yadagiri, Gulabarga and Bidar)

Sample size:112 doctors were responded in the survey.

Based on the identified difficulties, problems, and the objectives some of the following hypotheses were formed:

- The gender, Marital status and work experience has significant impact on doctor's Psychological pressure during Covid -19.
- 2. Doctor's health wills significant influence in treating Covid-19 patients during the pandemic.

### **DATA ANALYSIS**

During the analysis of the study, it has been observed that among 112 respondent doctors. 14(12.5%) Respondent were having 1 to 5 Years of work experience. 36(32.14%) Respondent were having 5 to 10 Years of work experience. 32(28.6%) Respondent were having 10 to 20 Years of work experience. 30(26.8%) Respondent were having 20 Years and above of work experience 26(23.2%) Respondent were government employees.86(76.8%) Respondents were private doctors. 100(89.3%) respondents are male. 12(10.7%) Respondent were female. 94(83.9%) respondents were married. 18 (16.1%) Respondent were unmarried.

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Response	No of Doctors considered as frontline		Difficulty in wearing PPE kit		Consideration of Covid-19 Duty as over	
	worrier				time	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	92	82.1	108	96.42	68	60.71
No	20	17.9	4	3.57	44	39.28
Total	112	100	112	100	112	100

Table No 1

In the survey 92(82.1%) Respondents were of opinion that they were front line Covid-19 warriors and 20(17.9%) respondents were considered as non-front line Covid-19 warriors. 108(96.42%) Doctors were not comfortable with PPE kit and it has caused tension

among them. Only 4 Doctors (3.57%) were comfortable.

68(60.72%) Responded Doctors were felt the time scheduled was over time and it was burden to them. For Remaining 44 Doctors (39.28%) it was not burden they were doing their job with interest.

Table No. 2

Response	Doctors ignoring their own physical		Doctors putting their life at risk and avoiding patients and			
	limitations		colleagues.			
	Frequency	Percentage	Frequency	Percentage		
Strongly Agree	36	32.14	11	9.82		
Agree	66	58.92	35	31.25		
Disagree	6	5.35	42	37.50		
Strongly Disagree	4	3.57	24	21.42		
Total	112	100	112	100		

Affect on personal life: 36 (32.14%) Doctors strongly agreed, and 66 Doctors (58.92%) agreed. That is 91 % of Doctors responded that the pandemic covid-19 has

affected on their personal life. And also, they have ignored their physical limitations. Whereas 6 (5.35%) Doctors Disagreed and 4(3.57%) Doctors strongly

disagreed that is 9% of doctors has revealed the Covid -19 has not affected their personal life.

Doctors life at risk: 11 (9.82%) Responded Doctors strongly agreed and 35(31.25%) Doctors agreed that is 41.08% Doctors felt treating Corona patients risk to their life and they were avoiding the patients and other Table No. 3

doctor colleagues also during this pandemic. Remaining 42(37.5%) Doctors disagree and 24(21.42%) Doctors strongly disagreed for life at risk that is 58.92% doctors felt life was not at risk and they were not avoiding the patients and other doctor colleagues.

Response	Doctors getting job satisfaction		Doctors Showing frustration on near	0	Doctors are the reason of spreading Corona	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Strongly Agree	12	10.71	08	7.14	52	46.42
Agree	68	60.71	60	53.57	44	39.28
Disagree	28	25	40	35.71	8	7.14
StronglyDisagree	4	3.57	4	3.57	8	7.14
Total	112	100	112	100	112	100

Job satisfaction of doctors during Covid -19 pandemic: 12(10.71%) doctors strongly agreed that they were getting job satisfaction and 68(60.71%) doctors agreed that they were getting job satisfaction total 71.42% doctors were getting job satisfaction. Remaining 28(25%) doctors disagreed and 4(3.57%) strongly disagreed.

Anger and feeling of being upset (frustration): 8 (7.14%) doctors strongly agreed and 60(53.57%) agreed that they were showing anger and frustration on the people who are nearest to them. And 40(35.71%) doctors disagreed and 4(3.57%) doctors strongly disagreed.

52(46.42%) Doctors strongly agreed and 44 (39.28%) doctors agreed that they are the reason for spreading Table No. 5

Corona virus among their family members. 8(7.14%) doctors disagreed, and 8(7.14%) doctors strongly disagreed for the reason of spreading Corona.

Table No 4

Available alternative to treat Covid -19 patients Yes/No if yes please do suggest.					
Response	Frequency	Percentage			
YES	76	67.85			
NO	36	32.14			
Total	112	99.99			

76 (67.85%) Doctors have given some alternatives and suggestions. And 36(32.14%) Doctors have not given any suggestions. Given Suggestions: Polythene screen in between Doctors and patients. More number of ventilators has to Kept ready at hospital.

Response	Doctors meeting family members after the workers		Friends and neig	Friends and neighbors avoiding doctors		
	Frequency	Percentage	Frequency	Percentage		
Always	12	10.71	20	17.85		
Most of the times	16	14.28	36	32.14		
Sometimes	32	28.57	40	35.71		
Never	52	46.42	16	14.28		
Total	112	100	112	100		

52 (46.42%) doctors said never they met family members and 32(28.57%) doctors said sometimes they met their family members and 16(14.28%) doctors said most of the time and 12(10.71%) doctors responded for always they used to meet their family members after the working hours.

20(17.85%) doctors felt that always their friends and neighbors started to avoid them. 36(32.14%) doctors felt most of the time and 40(35.71%) doctors

Sometimes and 16(14.28%) doctors felt never their friends and neighbors avoided because of Corona fear. Table No. 6

Response	Doctors feeling bad about their			
	profession and decided to resign.			
	Frequency Percentage			
Strongly Agree	4	3.57		
Agree	22	19.64		
Disagree	56	50		
Strongly Disagree	30	26.78		
Total	112	100		

4(3.57%) doctors strongly agreed and 22 (19.64%) doctors agreed that they were feeling bad about their profession while treating new patient. 56 (50%) doctors disagreed and 30 (26.78%) doctors strongly disagreed that they were not feeling bad about their profession while treating new patients.

Table No. 7

Table 140.	,				
Respon se	Doctors feeling comfortable while treating new patient		Doctors loosing confidence on them self		
	Frequen	Percenta	Frequen	Percenta	
Strongl	8	7.14	4	3.57	
y Agree					
Agree	60	53.57	20	17.85	
Disagre	40	35.71	56	50	

Strongl	4	3.57	32	28.57
Total	112	100	112	100

60(53.57%) doctors agreed and8(7.14%) doctors strongly agreed that they were feeling comfortable while treating new patient.40(35.71%) doctors disagreed and4(3.57%) doctors strongly disagreed that they were not comfortable while treating new patients. 4(3.57%) doctors strongly agreed and 20(17.85%) doctors agreed that they were loosing their confident while treating new patient. 56(50%) doctors disagreed and 32(28.57%) doctors strongly disagreed that they were not losing their confident while treating new patient.

Table No. 8

	Affect of	f Covid-19 pandemic	in The following way.						
	Gender		The present Covid-I following way?	ne present Covid-19 pandemic environment affected you in which of the llowing way?					
			Frequent Headache	Physical Stress	Depression	Palpitation	Not affected	Total	
Gender	Male	Respondents	04	81	08	07	0	100	
		% Within Male	40%	81%	8%	7%	0	100%	
		% Within Gender	100%	88.04%	100%	87.50%	0	89.28%	
	Female	Respondents	0	11	0	01	0	12	
		% Within Female	0	91.66%	0	8.33%	0	100%	
		% Within Gender	0	11.95%	0	1.25%	0	10.71%	
Total		Respondents	04	92	08	08	0	112	
		% Within Gender	100%	100%	100%	100%	0	100%	
		% Within Gender	100%	100%	100%	100%	0	100%	

Chi- Square Tests						
	Value	df	Asymp.Sig. (2- sided )			
Pearson Chi- Square	1.766a	3	.622			
Likelihood Ratio	3.145	3	.370			
Linear –by-Linear Association	.000	1	.986			
N of Valid Cases 112						
a.4 cells (50%) have expected count less than 5. The minimum expected count is 0.54.						

H0- Male and female doctors differ significantly on their psychological pressure level (no association).

H1- Male and female doctors do not differ significantly on their psychological pressure level. (There is association).

The above table speaks about the association tests between Gender and psychological pressure level among the responded doctors. Here the Pearson Chi square is .622 which is significant at 5% level of significance. It means there is no statistical significant association between Gender and psychological pressure level of the doctors. The table shows that cross tabulation between doctors and level of

psychological pressure. The above table explains Gender and covid-19 environment affect on 112 doctors. Among 100 male respondent doctors, 04(40%) Male respondent Doctors were affected by Frequent Headache. 81 (81%) doctors were affected by physical stress. 08(8%) doctor were affected by depression and 07 (7%) doctor was affected by Palpitation.

Out of 12 female respondent doctors, 11 (91.66%) doctors were affected by physical stress. and 1 (8.33%) doctor was affected by Palpitation. Ho accepted and H1 is rejected.

Table No. 9

	Affect of Covid-19 pandemic in The following way.							
	Marital		The present	t Covid panden	nic environmer	t affected you	in which of	
	Status		the following	ng way?				
			Frequent	Physical	Depression	Palpitation	Not	Total
			Headache	Stress			affected	
Marital	Married	Respondents	4	77	8	5	0	94
Status		% Within Married	4.25%	81.91%	8.51%	5.31%	0	100%
		% Within Marital Status	100%	83.69%	100%	62.50%	0	83.92%
	Unmarried	Respondents	0	15	0	3	0	18
		% Within Unmarried	0	83.33%	0	16.66%	0	100%
		% Within Marital Status	0	16.30%	0	37.50%	0	16.07%
Total		Respondents	4	92	8	8	0	112
		% Within Marital Status	3.57%	82.14%	7.14%	7.14%	0	100%
		% Within Marital Status	100%	100%	100%	100%	0	100%

Chi- Square Tests						
	Value	df	Asymp.Sig. (2- sided)			
Pearson Chi- Square	5.224ª	3	.156			
Likelihood Ratio	6.702	3	.082			
Linear -by-Linear Association	1.527	1	.217			
N of Valid Cases	112					
a.4 cells (50%) have expected count less than 5. The minimum expected count is 0.80.						

H0- Married and unmarried doctors differ significantly on their psychological pressure level. (no association)

H1- Married and unmarried doctors do not differ significantly on their psychological pressure level. (there is association)

The above table speaks about the association tests between Marital Status and stress level among doctors. Here the Pearson Chi square sig is 0.156 which is significant at 5% level of significance. It means there is no significant association between Marital Status and psychological pressure level of the doctors. The table shows that cross tabulation between doctors and Table No. 10

level of psychological pressure. The above table explains Marital Status and covid-19 environment affect on 112 doctors. Among 94(83.92%) Married responded Doctors, 4 (4.25%) Married Doctors were affected by Frequent Headache. 77 (81.91%) Doctors were affected by physical stress. 8 (8.51%) doctors were affected by depression and 05 (5.31%) doctor was affected by Palpitation.

In Unmarried responded doctors 18 (16.07%) doctors, 15 (83.33%) responded doctors were affected by physical stress and 03 (16.66%) doctors were affected by Palpitation. Ho accepted and H1 is rejected.

Affect of Covid-19 pandemic in the following way.								
		Work Experience	The present Covid-19 pandemic environment affected you in which of the following way?					
			Frequent Headache	Physical Stress	Depression	Palpitation	Not affected	Total
Work	1-5	Respondents	0	13	0	2	0	15
Experience	Years	% Within Work Experience (1-5 Years)	0	86.66%	0	13.33%	0	100%
		% Within Work Experience	0	14.13%	0	25%	0	13.39%
	5-10	Respondents	0	30	3	1	0	34
	Years	% Within Work (5-10 Years) Experience	0	88.23%	8.82%	2.94%	0	100%
		% Within Work Experience	0	32.60%	37.50%	12.50%	0	30.35%

1	10-20	Respondents	4	22	4	3	0	33
	Years	% Within Work Experience (10- 20 Years)	12.12%	66.66%	12.12%	9.09%	0	100%
		% Within Work Experience	100%	23.91%	50%	37.50%	0	29.46%
	20	Respondents	0	27	1	2	0	30
	Years Above	% Within Work Experience (20 Years Above)	0	90.0%	3.33%	6.66%	0	100%
		% Within Work Experience	0	29.34%	12.50%	25%	0	26.78%
Total		Respondents	4	92	8	8	0	112
		% Within Work Experience	3.57%	82.14%	7.14%	7.14%	0	100%
		% Within Work Experience	100%	100%	100%	100%	0	100%

Chi- Square Tests					
	Value	df	Asymp.Sig. (2- sided )		
Pearson Chi- Square	19.620a	9	.020		
Likelihood Ratio	20.707	9	.014		
Linear –by-Linear Association	.119	1	.731		
N of Valid Cases	112				
a.12 cells (75.0%) have expected count less than 5. The minimum expected count is 0.63					

H0- Less experience and more experience doctors differ significantly on their psychological pressure level.(no association)

H1- Less experience and more experience doctors do not differ significantly on their psychological pressure level.(there is association)

The above table speaks about the association tests between work experience and stress level among doctors. Here the Pearson Chi square sig is 0.020 which has association at 5% level of significance. It means there is significant association between work experience and Psychological pressure level of the doctors. The table shows that cross tabulation between doctors and level of Psychological pressure. The above table explains Work experience and covid-19 environment affect on 112 doctors. For the experience of 1-5 years 15 responded doctors, 13 Doctors (86.66%) were having physical stress and 3 (13.33%) doctors were affected by Palpitation.

In 5-10 Years of experience 34 responded doctors, 30(88.23%) doctors were affected by physical stress .3 (8.82%) doctor were affected by depression and 1 (2.94%) doctor was affected by Palpitation.

In 10-20 years of experience 33 responded doctors, 4(12.12%) doctor were affected by frequent headache,

22(66.66%) doctors were affected by physical stress, 4 (12.12%) Depression and remaining 3(9.09%) doctors were affected by Palpitation.

20 years and above experienced 30 responded doctors, 27(90.0%) were affected by physical stress, 1(3.33%) doctor affected by depression and remaining 2(6.66%) doctors affected by Palpitation.

Overall out of 112 doctors 92(82.14%) doctors got affected from physical stress. 8(7.14%) doctors were affected by Depression. and another 8(7.14%) doctor were affected by palpitation. And 4(3.57%) doctors were affected by frequent headache.

As per above table it has been understood that, All the doctors were affected by covid-19 in one way or the other, irrespective of experience. Ho rejected and H1 is accepted.

### Results and Discussion:

In this research it has observed that 96.42% Doctors were not comfortable with PPE kit and it has caused tension among them. Only 3.57% were comfortable.

Doctors were thinking that they are the reason for spreading infection among other Doctors and also to their family members, this created tension among them. Affect on personal life: 91 % of Doctors responded that the pandemic covid-19 has affected on their personal life. And 9% of doctors have revealed the Covid -19 has not affected their personal life.

Doctors life at risk: 41.08% Doctors felt treating Corona patients risk to their life and they were avoiding the patients and other doctor colleagues during this pandemic. And 58.92% doctors felt life was not at risk and they were not avoiding the patients and other doctor colleagues.

Job satisfaction of doctors during Covid -19 pandemic:71.42% doctors were getting job satisfaction. Remaining 28.57% were not getting job satisfaction.

Anger and feeling of being upset (frustration): 60.71% doctors agreed that they were showing anger and frustration on the people who are nearest to them. And 39.28% doctors disagreed.

67.85% Doctors have given some alternatives and suggestions. And 32.14% Doctors have not given any suggestions. Given Suggestions: Polythene screen in between Doctors and patients. More number of ventilators has to be Kept ready at hospital.

85.7% Doctors agreed that they are the reason for spreading Corona virus among their family members. 14.3% doctors disagreed for the reason of spreading Corona.

82.14% doctors got affected from physical stress. 7.14% doctors were affected by Depression. And another 7.14% doctor were affected by palpitation. And 3.57% doctors were affected by frequent headache.

35.71% doctors were agreed that there were feeling bad about their profession. Whereas and 64.28% disagreed that their profession is not Bad.

21.42% doctors agreed that they were losing their confident while treating new patient. 78.57% doctors disagreed that they were not losing their confident while treating new patient.

As per the Pearson chi-square test,

- 1. Tests between Gender and psychological pressure level among doctors. Here the Pearson Chi square sig is 0.622 which is more than 0.05. So, there is no association. H0 accepted and H1 rejected. It means there is association between Gender and Psychological pressure level of the doctors.
- 2. Tests between Marital status and psychological pressure level among doctors. Here the Pearson

- Chi square sig is 0.156 which is more than 0.05 so there is no significant association. So H0 accepted and H1 rejected. It means there is no association between marital statuses and Psychological pressure level of the doctors.
- 3. Tests between work experience and psychological pressure level among doctors. Here the Pearson Chi square sig is .020 which is less than .05 so there is significant association. H0 rejected and H1 accepted. It means there is association between work experience and Psychological pressure level of the doctors.

#### **CONCLUSION**

Most of the doctors fear for their life and they are the reason for spreading of disease to their family members and majority of doctors stopped meeting of their family members after the work hours. Treating covid-19 patients was burden to maximum doctors. This disease has affected most of responded doctor's personal life and professional life in big way. Many Doctors have ignored their physical limitations also. The maximum responded doctors were thinking too much about infection rather than treating the patients. While wearing PPE kit also made doctors more tensed and were un-comfortable Maximum responded doctors suffered from physical stress, depression, palpitation and frequent headache. Very few responded doctors said that the covid-19 has not affected their personal and professional life. This indicates maximum doctors were under psychological

But the majority of doctors never felt bad about their profession. Almost all responded doctors they faced this covid-19 pandemic situation as challenging and were getting job satisfaction too, still with the copeupping of psychological pressure.

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