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Issues and Challenges in achieving Work Life Balance of health workers of Government and Private hospitals in Assam, India during COVID-19 Pandemic

Article History:

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Abstract: The term work-life balance is a combination of two words, work and life which denotes how an individual combine both of them to achieve an equilibrium. Healthcare workers on the other hand includes the doctors, nurses and other health care administrators who work in hospitals. The life of a health worker includes an overwhelming level of personal and professional accomplishment, but is associated with a huge degree of anxiety and psychological stress involved in it. Relevant studies have shown that the health care workers are susceptible to mental health issues especially during COVID-19 pandemic. In the course of our study, we have found that factors like workplace stress have been responsible for physical and emotional exhaustion which reduces the enthusiasm to work and can cause anxiety and depression. Various factors inherent to the job, responsibilities related to the patients, the feeling of being overburdened, responsibilities towards the organizations and issues relating to working relationships and ambitions related to the career growth are mainly identified as occupational stressors among the healthcare professionals. It has also been found that emotional fatigue leads to the situation of burnout among the healthcare professionals. The present study tries to identify the various issues and challenges which hampers the work-life balance of the health workers in varied situations in the health care sector during COVID-19 pandemic and to undertake an empirical study on the topic.

Keywords: Work Life balance, Issues, Challenges, Health workers, Hospitals, COVID-19.

INTRODUCTION

The COVID-19 pandemic made it more difficult for the health workers to achieve work life balance, especially in Assam, India. The extraordinary burden the pandemic placed on the healthcare sector presented many challenges for the medical staff in both public and private facilities. They often had to overcome obstacles that were logical, emotional, psychological and physical. The various issues and challenges faced by the health workers of the

Government hospitals includes high patient load, workplace violence, resource constraints, administrative burden, psychological stress, financial pressures, inadequate legal protection. The various issues and challenges faced by health workers of private hospitals includes long working hours, disproportionate patient load, violence and safety concerns, administrative and bureaucratic burdens, economic pressures, balancing expectations and mental health issues. Among the main issues

concerning the healthcare industry, it was felt that the issues of health workers were unnoticed. (Wu Y., Wang J., Luo C., Hu S., Lin X., Anderson A.E, 2020). The health care centres should take numerous steps to ensure the healthcare workers jobs is fulfilling and satisfying. (Pabalkar V., Prakash S, 2020). It was also found that people in most of the professions are finding it difficult to align the work and non-work obligations due to rapid technological changes as well as imbalance in working life. (Lai J., Ma S., Wang Y., Cai Z., Hu J., Wei N., Hu S., 2020). The healthcare workers often expect collaboration, advice and assistance both from their families and also from the hospitals in order to maintain a degree of balance. (Karan A., Negandhi H., Nair R., Sharma A., Tiwari R., Zodpey S.,2019). It was seen that curing patients who have been infected by the deadly disease is a herculean job for the healthcare workers who are under immense stress due to long working hours in humid and hot conditions. (Humphries N., McDermott A.M., Creese J., Matthews A., Conway E., Byrne J.P.,2020). On the other hand, the health workers need to be concerned about the high number of deaths of the patients even though they may be drained physically and emotionally due to the deficient balance in their work life and subsequent decrease in job satisfaction. (Paffenholz P., Peine A., Hellmich M., Paffenholz S.V., Martin L., Luedde M., Loosen S.H.,2020). One also has to understand the wellbeing of the doctors and also suggest various methods for the improvement of the same. (Hyland-Wood B., Gardner J., Leask J., Ecker U.K.2021). It was also seen that the healthcare professionals especially the doctors experienced greater level of stress than others even in normal circumstances, let alone the Covid-19 pandemic. (Yadav R.K., Yadav S.S.,2014). Mental conditions such as stress, anxiety, depression and insomnia have become common among the healthcare professionals. (Tremblay D.G., Ilama I.I.,2015). The working conditions of the workforce among industries during Covid-19 exposed severe limitations in the purview of access to employment benefits. (Nayeri N.D., Salehi T., Noghabi A.A.A.,2011). Also, policies on work life balance based on the concept that flexibility and fairness can achieve the desired results for the benefit of the workers, employees and the society as well. (Hildt-Ciupińska K., Pawłowska-Cypriysiak K.,2020).

The main objective of the study is to analyse and study the issues and challenges faced by the health workers during the Covid-19 pandemic. The research design for the study is descriptive and exploratory which has been aimed at providing an in-depth understanding of the work life balance among the health workers. A combination of quantitative and qualitative approaches often referred to as a mixed-method design was used. Descriptive design is appropriate here because it describes what is happening in the field, particularly in terms of work-life stress and imbalance outcomes. Descriptive design is also suitable for examining relationships between variables, such as the association between work hours and health outcomes or the effect of organizational support on work-life balance. The research design aligns with the research objectives of the study and based on the objectives, various hypothesis is being framed and tested. To collect the required data, a structured questionnaire was administered to the healthcare workers in various hospitals which allowed for quantitative measurement of work life balance, job stress and organizational support. The target population for this study includes healthcare workers of both government and private hospitals in the state of Assam, India. These workers include both doctors and nurses all of whom are critical in managing healthcare during the Covid-19 pandemic. This makes them an ideal population for studying work-life balance in different work environments. By targeting the specific population, the research aims to provide insights into the effects of long working hours and high stress on personal and family life and also how the healthcare workers managed their responsibilities during the pandemic. The sample size for this study was calculated to ensure that the research findings would be statistically valid and consequently 510 valid responses were considered. Multistage sampling method was used as this approach allows to capture different levels of variability in the population and geographic diversity. Out of the total responses 240 respondents were from government hospitals and 270 respondents were from private hospitals. The analysis of the data was carried out using frequency distribution and percentages and Chi-square test of independence was used to examine the association between the categorical variables.

DISCUSSION & RESULTS:

1.1 Problem Associated with Health-workers during Pandemic:

The following are the quantitative analysis of the information that were collected through structured questionnaire:

Table No 1: Training on infection control

Training on infection	Doctor		Nurse		Total	
	Count	%	Count	%	Count	%
Training in Hospitals	204	57.8	114	72.6	318	62.4

Self-Knowledge on infection	149	42.2	43	27.4	192	37.6
Total	353	100	157	100	510	100

In case of the training on infection control is concerned, it was found that 57.8 percent of the doctors received training in hospitals whereas 42.2 percent of the doctors revealed that they used their self-knowledge on infection control.

Similarly, in the case of nurses, 72.6 percent of the nurses revealed that they received the required training in their respective hospitals followed by 27.4 percent of the nurses used their self-knowledge on infection control.

Table No 2: Injury while wearing PPE Kits

Injury	Doctor		Nurse		Total	
	Frequency	%	Frequency	%	Frequency	%
Device related pressure injury	75	21.20	39	24.80	114	22.4
Moist associated injury	108	30.60	52	33.10	160	31.4
Skin tear injury	82	23.20	64	40.80	146	28.6

In case of Injury caused by wearing PPE Kits are concerned, 30.60 percent of the doctors reported to have moist associated injury, followed by 23.20 percent of the doctors complained of Skin tear injury and 21.20 percent of the doctors suffered Device related pressure injury.

Similarly in the case of nurse, 40.80 percent of the nurses complained of Skin tear injury, followed by 33.10 percent of the nurses complained of Moist associated injury and 24.80 percent of the nurses revealed that they had Device related pressure injury.

Table No 3: Problem faced by health workers during pandemic

Main Issues of Health workers during pandemic	Doctor		Nurse		Total	
	Frequency	%	Frequency	%	Frequency	%
Lack of amenities	117	33.1	33	21	150	29.4
Inadequate training regarding COVID	105	29.7	32	20.4	137	26.9
Less untrained paramedical staff	93	26.3	34	21.7	127	24.9
Risk of acquiring infection	179	50.7	83	52.9	262	51.4

In case of the issues faced by the doctor during pandemic, 50.70 percent of the doctors felt that there has been a Risk of acquiring the infection, 33.1 percent of the doctors felt there was lack of amenities, 29.7 percent of the doctors felt there was Inadequate training regarding COVID and 26.3 percent of the doctors felt there was Less untrained paramedical staff.

Similarly in the problems faced by the nurses during pandemic, 52.90 percent of the nurses felt that there is a Risk of acquiring infection, 21.70 percent of the nurses felt there was Less untrained paramedical staff, 21 percent of the nurses felt there was Lack of amenities and 20.40 percent of the nurses felt there was Inadequate training regarding COVID.

Table No 4: Problem faced by health workers at personal level

Problem faced at personal Level during pandemic	Doctor		Nurse		Total	
	Frequency	%	Frequency	%	Frequency	%
Fear of being isolated by society	70	19.8	63	40.1	133	26.1

Fear of risk of infection to family	184	52.1	85	54.1	269	52.7
Family pressure not to work in Covid duty	71	20.1	38	24.2	109	21.4

In case of the problems faced by the health workers at the personal level, 52.1 percent of the doctors revealed that they faced the Fear of risk of infection to family, 20.1 percent of the doctors felt there was Family pressure not to work in Covid duty, and 19.8 percent of the doctors had the Fear of being isolated by the society.

Similarly in the case of the nurses, 54.1 percent of the nurses felt there was Fear of risk of infection to family, followed by 40.1 percent of the nurses felt there was Fear of being isolated by society and finally 24.2 percent of the nurses felt there was Family pressure not to work in Covid duty.

Table No 5: Training on Infection of health workers of Government and Private Hospitals

	Govt Hospitals			Private Hospitals		
		Frequency	Percent		Frequency	Percent
Training in Hospitals	Yes	156	65	Yes	162	60
	No	84	35	No	108	40

Table No 6: Chi-Square Tests on training in Infection control

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.353 ^a	1	0.245		
Continuity Correction ^b	1.149	1	0.284		
Likelihood Ratio	1.355	1	0.244		
Fisher's Exact Test				0.272	0.142
Linear-by-Linear Association	1.351	1	0.245		
N of Valid Cases	510				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 90.35.

b. Computed only for a 2x2 table

From the table above it was felt that 65% of the health workers of government hospitals received training in hospitals and 35% of the health workers revealed that they had no training in the hospitals. Similarly in the case of private hospitals, it was found that 60% of the health workers received training in the hospitals itself and 40% of the doctors revealed that they did not receive any kind of training. As per the Chi-square table, the P-Value is 0.245 which is more than 0.05 and therefore we conclude there has been no significant difference between the health workers of government and private hospitals in having training on infection control during COVID-19 pandemic.

Table No 7: Self-knowledge of health workers of Government and Private Hospitals

	Govt Hospitals			Private Hospitals		
		Frequency	Percent		Frequency	Percent
Self-Knowledge	Yes	93	38.8	Yes	149	55.2
	No	147	61.3	No	121	44.8

Table No 8: Chi-Square Tests regarding having self-knowledge

Chi-Square Tests					
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)

Pearson Chi-Square	13.764 ^a	1	0.000		
Continuity Correction ^b	13.113	1	0.000		
Likelihood Ratio	13.838	1	0.000		
Fisher's Exact Test				0.000	0.000
Linear-by-Linear Association	13.737	1	0.000		
N of Valid Cases	510				
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 113.88.					
b. Computed only for a 2x2 table					

In case of the health workers working in the government hospitals, it was found that 38.8% of the health workers used self-knowledge in their work compared to 55.2% of the health workers in the private hospitals used self-knowledge in their work. As per the Chi-square table, the P-Value is 0.00 which is less than 0.05 and therefore we conclude there is a significant difference between the health workers of government and private hospitals in having self-knowledge during COVID-19 pandemic. Therefore we find that in case of private hospitals, the health workers deal with COVID-19 pandemic on their Self-Knowledge as compared to the health workers of government hospitals. It may be due to more autonomy in the private hospitals which allows them to use their own knowledge in dealing with the COVID-19 pandemic. While in case of government hospitals the health workers need to follow procedures rather than their self knowledge.

Table No 9: Injury related to wearing PPE Kits of health workers of Government and Private Hospitals:

	Govt Hospitals			Private Hospitals		
		Frequency	Percent		Frequency	Percent
Device related pressure Injury	Yes	69	28.7	Yes	45	16.7
	No	171	71.3	No	225	83.3
Moist associated Injury	Yes	95	39.6	Yes	65	24.1
	No	145	60.4	No	205	75.9
Skin Tear Injury	Yes	70	29.2	Yes	76	28.1
	No	170	70.8	No	194	71.9

Table No 10: Chi-Square Tests regarding Device related pressure Injury

Chi-Square Tests					
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	10.689 ^a	1	0.001		
Continuity Correction ^b	10.004	1	0.002		
Likelihood Ratio	10.712	1	0.001		
Fisher's Exact Test				0.001	0.001
Linear-by-Linear Association	10.668	1	0.001		
N of Valid Cases	510				
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 53.65.					
b. Computed only for a 2x2 table					

As per the Chi-square table, the P-Value is 0.01 which is less than 0.05 and therefore we conclude there is a significant difference between the health workers of government and private hospitals in having device related pressure injury during COVID-19 pandemic. It is because of the health workers of government hospitals need to handle more cases and need to wear PPE kit for longer hours as compared to the health workers of private hospitals which leads to device related pressure injury during the COVID-19 pandemic.

i. **Moist associated Injury:**

Table No 11: Chi-Square Tests regarding Moist associated Injury

Chi-Square Tests					
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	14.195 ^a	1	0.000		
Continuity Correction ^b	13.484	1	0.000		
Likelihood Ratio	14.229	1	0.000		
Fisher's Exact Test				0.000	0.000
Linear-by-Linear Association	14.167	1	0.000		
N of Valid Cases	510				
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 75.29.					
b. Computed only for a 2x2 table					

As per the Chi-square table, the P-Value is 0.00 which is less than 0.05 and therefore we conclude there is a significant difference between the health workers of government and private hospitals in having moist associated injury during COVID-19 pandemic. It is because of the health workers of government hospitals need to handle more cases and need to wear PPE kit for longer hours as compared to the health workers of private hospitals which leads to device related pressure injury during the COVID-19 pandemic.

ii. **Skin tear Injury:**

Table No 12: Chi-Square Tests regarding Skin tear injury

Chi-Square Tests					
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.065 ^a	1	0.800		
Continuity Correction ^b	0.024	1	0.876		
Likelihood Ratio	0.064	1	0.800		
Fisher's Exact Test				0.845	0.438
Linear-by-Linear Association	0.064	1	0.800		
N of Valid Cases	510				
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 68.71.					
b. Computed only for a 2x2 table					

As per the Chi-square table, the P-Value is 0.80 which is more than 0.05 and therefore we conclude there is no significant difference between the health workers of government and private hospitals in having skin tear injury during COVID-19 pandemic.

4.6 Problems faced by the health workers in Hospital:

Table No 13: Lack of Amenities

	Govt Hospitals			Private Hospitals		
		Frequency	Percent		Frequency	Percent
Lack of Amenities	Yes	83	34.6	Yes	67	24.8
	No	157	65.4	No	203	75.2

Table No 14: Chi-Square Tests having required amenities

Chi-Square Tests					
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.840 ^a	1	0.016		
Continuity Correction ^b	5.379	1	0.020		
Likelihood Ratio	5.838	1	0.016		
Fisher's Exact Test				0.019	0.010
Linear-by-Linear Association	5.828	1	0.016		
N of Valid Cases	510				
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 70.59.					
b. Computed only for a 2x2 table					

As per the Chi-square table, the P-Value is 0.01 which is less than 0.05 and therefore we conclude there is a significant difference between the health workers of government and private hospitals in having lack of amenities during COVID-19 pandemic. It is because the government hospitals were lacking of proper amenities to handle the huge number of COVID affected people compared to the private hospitals. The number of COVID cases that need to be handled by health workers of private hospitals were relatively much lower as compared to the government hospitals. The affordability of the patients to pay for private hospitals was another issue for lower number of patients in private hospitals compared to the government hospitals.

4.7 Inadequate training regarding COVID:

Table No 15: Inadequate training regarding COVID

	Govt Hospitals			Private Hospitals		
		Frequency	Percent		Frequency	Percent
Inadequate training regarding COVID	Yes	70	29.2	Yes	67	24.8
	No	170	70.8	No	203	75.2

Table No 16: Chi-Square Tests having Inadequate training regarding COVID

Chi-Square Tests					
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.225 ^a	1	0.268		
Continuity Correction ^b	1.013	1	0.314		
Likelihood Ratio	1.223	1	0.269		
Fisher's Exact Test				0.273	0.157
Linear-by-Linear Association	1.222	1	0.269		
N of Valid Cases	510				
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 64.47.					
b. Computed only for a 2x2 table					

As per the Chi-square table, the P-Value is 0.26 which is more than 0.05 and therefore we conclude there is no significant difference between the health workers of government and private hospitals in having Inadequate training regarding COVID-19 pandemic and therefore we reject Hypothesis 5 that there is a significant difference between the health workers of government and private hospitals in having Inadequate training regarding COVID-19 pandemic

4.8 Less Untrained Paramedical Staff:

Table No 17: Less Untrained Paramedical Staff

	Govt Hospitals	Private Hospitals
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		Frequency	Percent		Frequency	Percent
Less Untrained Paramedical Staff	Yes	76	31.7	Yes	51	18.9
	No	164	68.3	No	219	81.1

Table No 18: Chi-Square Tests having Less Untrained Paramedical Staff

Chi-Square Tests					
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	11.093 ^a	1	0.001		
Continuity Correction ^b	10.420	1	0.001		
Likelihood Ratio	11.113	1	0.001		
Fisher's Exact Test				0.001	0.001
Linear-by-Linear Association	11.071	1	0.001		
N of Valid Cases	510				
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 59.76.					
b. Computed only for a 2x2 table					

As per the Chi-square table, the P-Value is 0.01 which is less than 0.05 and we conclude there is a significant difference between the health workers of government and private hospitals in having Less Untrained Paramedical Staff during COVID-19 pandemic. In case of private hospitals, the paramedical staffs were well trained to handle the pandemic situation compared to the government hospitals. It may be due to the recruitment process which has a bureaucratic red tape in case of government hospitals which make them less efficient as compared to the private hospitals.

4.9 Risk of Acquiring Infection:

Table No 19: Risk of Acquiring Infection

	Govt Hospitals			Private Hospitals		
		Frequency	Percent		Frequency	Percent
Risk of Acquiring Infection	Yes	160	66.7	Yes	102	37.8
	No	80	33.3	No	168	62.2

Table No 20: Chi-Square Tests having Risk of Acquiring Infection

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	44.297 ^a	2	0.000
Likelihood Ratio	45.369	2	0.000
Linear-by-Linear Association	40.507	1	0.000
N of Valid Cases	510		
a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is .47.			

As per the Chi-square table, the P-Value is 0.00 which is less than 0.05 and we conclude there is a significant difference between the health workers of government and private hospitals in having Risk of Acquiring Infection during COVID-19 pandemic. This risk of acquiring infection is higher in the government hospitals as compared to the private hospitals because the health workers of the government hospitals handled more number of COVID cases during pandemic which make them more susceptible to acquire the infection as compared to the health workers of the private hospitals.

4.10 Problems faced at Personal Level:

Table No 21: Problems faced at Personal Level

	Govt Hospitals			Private Hospitals		
		Frequency	Percent		Frequency	Percent
Fear of being Isolated by Society	Yes	70	29.2	Yes	63	23.3
	No	170	70.8	No	207	76.7
Fear of Risk of Infection to family	Yes	161	67.1	Yes	108	40
	No	79	32.9	No	162	60
Family Pressure not to work in COVID Duty	Yes	58	24.2	Yes	51	18.9
	No	182	75.8	No	219	81.1

4.10.1. Fear of being Isolated by Society:

Table No 21.1: Fear of being Isolated by Society

	Govt Hospitals			Private Hospitals		
		Frequency	Percent		Frequency	Percent
Fear of being Isolated by Society	Yes	70	29.2	Yes	63	23.3
	No	170	70.8	No	207	76.7

Table No 21.2: Chi-Square Tests having Fear of being Isolated by Society

Chi-Square Tests					
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.243 ^a	1	0.134		
Continuity Correction ^b	1.950	1	0.163		
Likelihood Ratio	2.240	1	0.134		
Fisher's Exact Test				0.157	0.081
Linear-by-Linear Association	2.238	1	0.135		
N of Valid Cases	510				
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 62.59.					
b. Computed only for a 2x2 table					

As per the Chi-square table, the P-Value is 0.13 which is more than 0.05 and therefore we conclude there is no significant difference between the health workers of government and private hospitals in having Fear of being Isolated by Society during COVID-19 pandemic. This may be because COVID-19 virus spread among the public and the fear was irrespective of government or private hospital employees. All employees had similar feeling of being isolated from society irrespective of where they work.

(i) Fear of Risk of infection to family

Table No 22: Fear of Risk of Infection to family

	Govt Hospitals			Private Hospitals		
		Frequency	Percent		Frequency	Percent
Fear of Risk of Infection to family	Yes	161	67.1	Yes	108	40
	No	79	32.9	No	162	60

Table No 23: Chi-Square Tests having Fear of Risk of Infection to family

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	37.392 ^a	1	0.000		
Continuity Correction ^b	36.313	1	0.000		
Likelihood Ratio	37.924	1	0.000		
Fisher's Exact Test				0.000	0.000
Linear-by-Linear Association	37.319	1	0.000		
N of Valid Cases	510				
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 113.41.					
b. Computed only for a 2x2 table					

As per the Chi-square table, the P-Value is 0.00 which is less than 0.01 and therefore we conclude there is a significant difference between the health workers of government and private hospitals in having Fear of Risk of infection to family during COVID-19 pandemic at 99% level of confidence. This is mainly because the health workers of government hospitals could not take proper care and proper sanitization, adequate precautions, equipment were not sufficient in government hospitals compared to any private hospitals due to the high patient rate and unavailability of all required COVID-19 materials.

(ii) Family pressure not to work in COVID duty

Table No 24: Family Pressure not to work in COVID Duty

	Govt Hospitals			Private Hospitals		
		Frequency	Percent		Frequency	Percent
Family Pressure not to work in COVID Duty	Yes	58	24.2	Yes	51	18.9
	No	182	75.8	No	219	81.1

From the table no. 4.24, we found that 24% of the health workers of Government hospitals were pressurized by the family members not to work in COVID duty and in case of Private hospitals 19% of the health workers were pressurized by the family members not to work in COVID duty.

Table No 25: Chi-Square Tests having Family Pressure not to work in COVID Duty

Chi-Square Tests					
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.106 ^a	1	0.147		
Continuity Correction ^b	1.804	1	0.179		
Likelihood Ratio	2.103	1	0.147		
Fisher's Exact Test				0.160	0.090
Linear-by-Linear Association	2.102	1	0.147		
N of Valid Cases	510				
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 51.29.					
b. Computed only for a 2x2 table					

As per the Chi-square table 4.25, the P-Value is 0.14 which is more than 0.05 and therefore we conclude there is no significant difference between the health workers of government and private hospitals in having Family pressure not to work in COVID duty during COVID-19 pandemic. From the table no 4.24 we can see that only 24.2% and

18.9% in case of government and private hospitals employees had pressure from family not to work in COVID duty. Otherwise, it was a general consensus among health workers in India to work for society irrespective of where they work but to save public life at any cost.

Table No 26: Psychological Issues faced by Health Workers in Government and Private Hospitals

Psychological Issues	Government Hospitals			Private Hospitals		
	N	Mean	Std. Deviation	N	Mean	Std. Deviation
Fear of getting infection	240	4.2458	0.85446	270	4.1630	0.87261
Stressed	240	4.0125	0.95278	270	3.9815	0.93845
Anxious	240	3.0958	1.04460	270	3.3667	1.06429
Temper Outburst	240	3.0167	1.12025	270	3.2148	1.00100
Insomnia	240	2.9000	1.00125	270	3.0556	0.95272
Optimistic	240	2.7667	1.14792	270	3.0481	1.09472

Table No 27: ANOVA Table of Psychological Issues faced by health workers

		Sum of Squares	df	Mean Square	F	Sig.
Optimistic	Between Groups	10.067	1	10.067	8.025	0.005
	Within Groups	637.307	508	1.255		
	Total	647.375	509			
Anxious	Between Groups	9.32	1	9.32	8.372	0.004
	Within Groups	565.496	508	1.113		
	Total	574.816	509			
Temper Outburst	Between Groups	4.989	1	4.989	4.45	0.035
	Within Groups	569.474	508	1.121		
	Total	574.463	509			
Stressed	Between Groups	0.122	1	0.122	0.137	0.712
	Within Groups	453.87	508	0.893		
	Total	453.992	509			
Fear of getting infection	Between Groups	0.873	1	0.873	1.169	0.28
	Within Groups	379.325	508	0.747		
	Total	380.198	509			
Insomnia	Between Groups	3.075	1	3.075	3.229	0.073
	Within Groups	483.767	508	0.952		
	Total	486.841	509			

As per the ANOVA table 27, we find that the P-Value of F-test for Optimism, Anxiousness and Temper Outburst among the health workers of government and private hospitals is 0.005, 0.004 and 0.035 which are less than 0.05. Therefore we reject the null hypothesis and can conclude that there is a significant difference in Optimism, Anxiousness and Temper Outburst among the health workers of government and private hospitals during the COVID-19 pandemic.

But the P-Value of F-test for Stressed, Fear and Insomnia is 0.712, 0.28 and 0.073 which are more than 0.05 and therefore we accept the null hypothesis that there is no significant difference between health workers of government and private hospitals in case of stress, fear and insomnia during the pandemic.

Table No 28: Does Health worker's Job become more Challenging during Pandemic:

Health workers job more challenging	N	Minimum	Maximum	Mean	Std. Deviation
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Doctor	353	1.00	5.00	4.3569	0.83432
Nurses	157	2.00	5.00	4.4968	0.76480

From the table no 4.28 we can state that during pandemic health workers job was more challenging as compared to normal situation. Out of 5-point scale where 1 means Least challenging and 5 means Most challenging, the mean value of doctors is 4.36 and for nurses is 4.50. It simply means the health workers job during pandemic was more challenging.

Table No 29: Health workers job challenging

Group Statistics					
Where do you work		N	Mean	Std. Deviation	Std. Error Mean
Health workers job challenging	Govt. Hospital	240	4.3917	0.80579	0.05201
	Private Hospital	270	4.4074	0.82522	0.05022

The job of health workers was very challenging during COVID-19 pandemic. It could be understood from the fact that the mean value of challenging job out of 5 point rating scale where 1 was least challenging and 5 was most challenging for the health workers of government and private hospitals was 4.39 and 4.40 out of 5. It shows the challenges they face in rendering their services in hospitals.

Table No 30: T-test for Health workers job challenging

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Health workers job challenging	Equal variances assumed	0.033	0.857	-0.217	508	0.828	-0.01574	0.07240
	Equal variances not assumed			-0.218	503.525	0.828	-0.01574	0.07230

From the table no 30 the P-Value of t-test is 0.828 which is higher than 0.05, hence we reject the alternate hypothesis that health workers of government hospital's job was more challenging compared to the health workers of private hospitals during COVID-19 pandemic. So we can conclude that there is no significant difference between government and private hospital employees in job challenges during COVID-19 pandemic.

4.11 Psychological mindset of Health workers:

4.11.1 Positive Feelings:

The following table 31 depicts the psychological mindset of health workers before and during pandemic. 19 positive feelings were studied among the health workers. Wilcoxon Signed Rank Test has been calculated along with Mean and Standard Deviation for each positive feeling to check whether there was any significant difference in the positive feelings of health workers before and during pandemic. The P-Value indicates the level of significance of the Z-Value.

Table No 31: Positive feelings of health workers

Variables		Mean	SD	Mean Rank	Z	P-value
Alert	Before	4.92	1.09	210.29	-4.497	0.000
	During	4.62	1.23	189.54		
Attentive	Before	4.99	1.06	199.31	-4.805	0.000
	During	4.68	1.17	164.11		
Determined	Before	4.51	1.1	192.7	-0.36	0.719
	During	4.52	1.17	187.48		
Concentrating	Before	5.02	1.02	200.69	-7.125	0.000

	During	4.58	1.18	165.98		
Active	Before	5.09	1.03	186.14	-0.4	0.689
	During	5.1	1.17	167.31		
Excited	Before	3.65	1.17	184.16	-4.653	0.000
	During	3.99	1.25	202.74		
Inspired	Before	4.56	1.12	191.75	-0.761	0.447
	During	4.5	1.2	188.12		
Interested	Before	4.91	1.04	176.31	-4.141	0.000
	During	4.65	1.13	164.03		
Proud	Before	3.18	1.13	171.89	-2.711	0.007
	During	3.37	1.25	196.82		
Confident	Before	4.85	1.01	199.84	-7.56	0.000
	During	4.38	1.11	167.53		
Daring	Before	3.9	1.22	179.89	-3.839	0.000
	During	4.17	1.29	202.42		
Energetic	Before	4.94	1.08	232.42	-14.839	0.000
	During	3.67	1.16	142.22		
Happy	Before	4.66	1.02	204.33	-14.777	0.000
	During	3.47	0.99	152.71		
Joyful	Before	4.31	0.97	209.68	-14.912	0.000
	During	3.19	0.97	160.57		
Delighted	Before	4.25	1.02	212.56	-14.994	0.000
	During	3.08	0.96	152.68		
Enthusiastic	Before	4.66	1.11	201.79	-11.162	0.000
	During	3.86	1.09	149.21		
Calm	Before	4.49	1.11	209.5	-12.743	0.000
	During	3.5	1.09	144.74		
Relaxed	Before	4.6	1.08	222.51	-14.683	0.000
	During	3.35	1.09	145.88		
At Ease	Before	4.37	1.11	221.99	-14.1	0.000
	During	3.28	1.05	159.12		

It can be observed that the positive feelings like Alert, Attentive, Concentrating, Excited, Interested, Proud, Confident, Daring, Energetic, Happy, Joyful, Delighted, Enthusiastic, Calm, Relaxed and At Ease have significant difference among health workers during and before pandemic.

On the other hand, the psychological variable like Determined, Active and Inspired didn't have any difference during and before pandemic because as a health worker they need to be determined, active and inspired all the time irrespective of pandemic or normal situation. It can be validated by the P-Value which are 0.719, 0.689 and 0.447. Hence the hypothesis no.13 as Positive feelings of health workers has significantly decreased during the COVID-19 pandemic is accepted as 16 out of 19 positive feelings of health workers has significantly decreased during the pandemic. But the null hypothesis is acceptable to determination, activeness and inspiration because these feelings didn't have any significant difference during and before the pandemic.

4.11.2 Negative Feelings of health workers:

The following table depicts the psychological mindset of health workers before and during pandemic. 18 negative feelings were studied among the health workers. Z-Test has been calculated along with Mean and Standard Deviation for each negative feelings to check whether there were any significant difference in the negative feelings of health workers before and during pandemic. The P-Value indicates the level of significance of the Z-Value.

Table No 32: Negative feelings of health workers

Variables		Mean	SD	Mean Rank	Z	P-value
Angry	Before	3.20	1.11	150.68	-13.141	0.000
	During	4.28	1.25	224.58		
Frightened	Before	2.84	1.1	163.06	-13.373	0.000
	During	3.99	1.3	224.68		

Distressed	Before	3.13	1.02	155.21	-12.45	0.000
	During	4.10	1.19	213.23		
Irritable	Before	3.09	1.06	143.29	-12.768	0.000
	During	4.10	1.25	214.93		
Upset	Before	3.10	0.99	144.92	-12.918	0.000
	During	4.10	1.17	215.27		
Angry at self	Before	2.68	1.02	155.36	-7.858	0.000
	During	3.15	1.12	181.87		
Nervous	Before	3.12	1.14	181.95	-11.238	0.000
	During	4.03	1.26	218.51		
Lonely	Before	3.14	1.15	175.45	-6.509	0.000
	During	3.62	1.22	204.67		
Sad	Before	2.89	1.01	165.65	-12.302	0.000
	During	3.90	1.34	220.53		
Blameworthy	Before	2.91	1.04	140.58	-9.483	0.000
	During	3.53	1.25	207.56		
Drowsy	Before	3.44	1.12	176.03	-9.832	0.000
	During	4.19	1.29	204.51		
Alone	Before	3.27	1.14	177.29	-4.987	0.000
	During	3.62	1.23	187.08		
Sleepy	Before	3.43	1.15	175.18	-9.992	0.000
	During	4.21	1.29	209.58		
Downhearted	Before	3.04	1.08	156.08	-9.968	0.000
	During	3.74	1.26	204.06		
Disgusted with Self	Before	2.74	1.09	161.16	-7.176	0.000
	During	3.18	1.17	185.86		
Tired	Before	4.21	1.11	171.95	-11.413	0.000
	During	5.09	1.21	214.06		
Sluggish	Before	3.33	1.17	156.01	-11.146	0.000
	During	4.15	1.25	202.11		
Dissatisfied with self	Before	2.96	1.06	153.37	-8.344	0.000
	During	3.48	1.18	193.62		

It can be observed that all the negative feelings that we have studied like Angry, Frightened, Distressed, Irritable, Upset, Angry at self, Nervous, Lonely, Sad, Blameworthy, Drowsy, Alone, Sleepy, Downhearted, Disgusted with Self, Tired, Sluggish and Dissatisfied with self have significant difference among health workers during and before pandemic.

Hence we reject the null hypothesis that there is no significant difference in negative feelings at 99% level of confidence and comparing the mean values of different negative feelings during and before pandemic we can state that the negative feelings have been increased among health workers during the pandemic as compared to the normal situation (before pandemic).

4.12 Work Life balance of Health Workers:

Table No 33: Paired Sample Statistics of WLB General & during pandemic

Paired Samples Statistics				
	Mean	N	Std. Deviation	Std. Error Mean
AVG_WLBG	4.7871	510	0.79564	0.03523
AVG_WLBD	3.5778	510	0.76659	0.03395

Table No 34: Paired Samples Correlations of WLB General & during pandemic

Paired Samples Correlations			
	N	Correlation	Sig.
AVG_WLBG & AVG_WLBD	510	0.124	0.005

Table No 35: Paired Samples Test of WLB General & during pandemic

Paired Samples Test								
	Paired Differences							
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
AVG_WLBG - AVG_WLBD	1.20929	1.03437	0.04580	1.11931	1.29928	26.402	509	0.000

The following table shows the Paired t-test value of work life balance of health workers in general and during pandemic. The result shows the p-value is 0.00 which is less than 0.01. It means that at 99% confidence level we can state that there is a significant difference in the WLB of health workers before and during pandemic.

4.13 Health workers opinion on their profession during COVID-19 pandemic:

During the pandemic whether the health worker has chosen the wrong profession.

Table No 36: Health workers of hospitals and their profession

	Have you chosen the wrong profession		Total
	Yes	No	
Govt. Hospital	59 (24.58%)	181 (75.42%)	240 (100%)
Private Hospital	68 (25.19%)	202 (74.81%)	270 (100%)
Total	127 (24.90%)	383 (75.10%)	510 (100%)

From the Table No. 4.39, we find that 25% of the health workers felt that they have chosen the wrong profession during the COVID-19 pandemic. In case of health workers of both Government and Private hospitals, 25% of the health workers of each feels that they have chosen the wrong profession during the COVID-19 pandemic. From this number, we can visualize the impact of COVID-19 on the mindset of the health workers. The reason for this one-fourth of the health workers had this type of feelings are:

Table No. 37: Reason for choosing the wrong profession in Government and Private Hospital during pandemic

	Govt Hospital		Private Hospital	
	Frequency	Percent	Frequency	Percent
Our life is at risk	12	20.3	14	20.6
Can be an easy victim of public anger	11	18.6	12	17.6
Job is too demanding and stressful	16	27.1	17	25.0
Unable to enjoy family and social life	14	23.7	12	17.6
Did not get expected rewards and recognition	6	10.2	11	16.2
Total	59	100.0	2	2.9

From the Table No. 37, we can state that during pandemic the health profession job was too demanding and stressful because of which they feel that they were in a wrong profession by health workers of both government and private hospitals. It was followed by 'Unable to enjoy family and social life' by health workers of government hospitals which accounts for 24% of respondents, and 21% of the private hospital health workers felt that there life was at risk during the pandemic.

4.14 Total hours of working of the health workers:

Table No 38: Paired Sample Statistics of duty during COVID-19

Paired Samples Statistics				
	Mean	N	Std. Deviation	Std. Error Mean
Duty before COVID-19	8.8451	510	2.31369	0.10245
Duty after COVID-19	11.3275	510	2.99519	0.13263

Table No 39: Paired Samples Correlations of duty during COVID-19

Paired Samples Correlations			
	N	Correlation	Sig.
Duty before COVID-19 & Duty after COVID-19	510	0.693	0.000

Table No 40: Paired Samples Test of duty during COVID-19

Paired Samples Test								
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Duty before COVID-19 - Duty after COVID-19	-2.48235	2.17204	0.09618	-2.67131	-2.29340	-25.810	509	0.000

From the Paired t-test, we can state at 99 % confidence level that the work hours of doctors have significantly increased during the Covid-19 pandemic compared to the normal situation (Before pandemic). The mean working hours of health workers has increased to 11.3 hours from 8.8 hours during the pandemic.

Similarly, for the nurses also the mean working hour has been increased to 9.58 hours from 7.24 hours. The Chi-square table indicated that the difference is significant at 99% level of confidence.

CONCLUSION:

The health workers in hospitals faces multiple issues and challenges which prominently impact their ability to provide quality care. To name a few of the challenges which include in the case of the government hospitals- higher patient load, violence in the workplace, resource constraints, administrative burdens, psychological stress, financial pressures and also inadequate legal protection. In the case of the private hospitals, we find that the issues pertaining to disproportionate patient load, longer working hours, various economic pressures, bureaucratic and administrative burden, balancing expectations, issues related to mental health are found to be significant factors faced by the healthcare workers. Violence in workplace with the addition pressure to perform in adverse environments, increases the emotional as well as the mental strain which often leads to burnout, depression and anxiety.

In the case of issues related to pandemic, it was found that issues such as shortage of medical equipment's like PPE kits, deficient infrastructure, disruptions in supply chain, insufficient testing, vaccination challenges and ethical dilemmas and fear of carrying the disease to home were some notable issues faced by the health workers. Moreover, the health workers were observed to have PPE kit related injuries like skin tear injury, moist associated injuries, device related injury, etc. They also had to face serious

psychological challenges as many of their family members did not support them to work during pandemic.

At the end of the day, improving the safety and the working conditions of the health workers is the need of the hour not only for the wellbeing of the health workers, but also for ensuring that the health workers provide considerable and effective care to the patients. In the absence of such reforms, the healthcare systems would be at a risk of losing talented professionals to dissatisfaction, burnout and increased turnover.

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