

# IMPACT OF FINANCIAL BURDEN ON THE MENTAL HEALTH OF THE WORKERS IN AN AUTOMOBILE INDUSTRY DUE TO COVID-19 LOCKDOWN AT TIRUVALLUR DISTRICT, TAMIL NADU

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## Abstract

**Background:** The COVID -19 pandemic had a notable impression on public mental health. So, monitoring and oversight of public mental health during crises are important. The study aims to assess and associate the current mental health status with the financial loss experienced during the lockdown. **Materials and methods:** A cross-sectional study was conducted in an automobile industry located in the field practice area of a tertiary care hospital in the Tiruvallur district. A total of 264 subjects were studied by simple random sampling technique. A pre-tested, pre-validated structured questionnaire and depression, anxiety, and stress scale-21 items (DASS-21) questionnaire was given and the desired information was elicited. A Chi-square test was used to test the significance ( $p < 0.05$ ). **Results:** Out of 264 participants, 105(39.8%) had disturbed mental health, 203(76.9%) had unsatisfied lifestyle owing to problems in work life, 123(46.6%) had financial burden and 115(43.6%) had constant job insecurity. It was seen that 33.3% perceived moderate anxiety, 29.9% perceived mild depression and 9.1% perceived mild stress. It is observed that work related issues and financial problems had greatest impact on mental health and are statistically significant. **Conclusion:** A greater part of the population had symptoms of early depression, anxiety, and stress. Therefore, it is highly essential to spread awareness, recognize and address them early before they worsen.

**Keywords:** COVID -19, Lockdown, Daily life, Depression, Anxiety, Stress.

## INTRODUCTION

The outbreak of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus which caused COVID-19 has emerged more rapidly and affected all people across the world <sup>[1]</sup>. It is now a global health threat that not only caused physical but also a psychological impact on all population levels <sup>[2]</sup>. To control the spread of the disease nationwide measures like lockdown, quarantine, and physical distancing were set in motion. The lockdown, in turn, affected people's lives, economy, and employment across the globe. The results of COVID-19 lockdown on mental health could be different between population groups, some are more vulnerable such as people with pre-existing psychiatric conditions or economically unstable <sup>[3]</sup>. WHO has expressed its concern over the pandemic's mental health and psycho-social consequences, it speculates that new measures such as self-isolation and quarantine have affected usual activities, routines, and livelihoods of people that may lead to an increase in loneliness, anxiety, depression, insomnia, and self-harm or suicidal behaviour <sup>[4]</sup>. It estimates that about 7.5% of Indians suffer from some mental illness pre-COVID and predicts that it's likely to worsen by 20% post-COVID <sup>[5]</sup>. Many across the world have also expressed concerns about the increasing toll of mental health problems due to economic loss and other additional factors <sup>[1]</sup>. Early recognition of this helps intervention strategies to be more effective. In the article cited it is reported that individuals showed several symptoms of mental trauma, one or the other <sup>[3]</sup>. Yet, in the current situation, it is challenging to accurately predict the psychological

consequences of the COVID-19 lockdown. Considering several reported psychological consequences of COVID-19 lockdown, and the lack of general statistics on this topic in India, an assessment was done to estimate the current mental health status and the difficulties faced due to sudden economic loss during the lockdown and their association.

#### **Aims and objectives:**

- To assess the current mental health status and to evaluate the difficulties faced due to sudden economic loss.
- To associate the current mental status with the financial loss experienced during the lockdown.

#### **METHODOLOGY**

A cross-sectional study was conducted in an automobile industry which is located in the field practice area of a tertiary care hospital in the Tiruvallur district. The study was conducted for 4 months among the production workers employed in an industry irrespective of sex with age above 18 years. Based on the previously conducted study in India, it was observed that nearly 83.1% of people suffered from not finding a job due to the COVID lockdown [6]. Using the formula  $4pq/d^2$ , allowable error as 5% and non-respondent rate as 10%, the sample size arrived to be 250. There were 850 workers employed in that industry, of which 264 participants were selected using a simple random sampling technique (Random numbers method) based on the eligibility criteria. All those who were willing to participate and age above 18 were included and mentally unstable subjects were excluded from the study. A pre-tested and pre-validated structured questionnaire was prepared to assess socio-demographic status, COVID-19 related worries, and financial burden due to lock down and depression, anxiety, and stress scale – 21 items (DASS – 21) questionnaire to analyse the current emotional and mental health status. Written informed consent was obtained from all the participants and the study had obtained ethical clearance approval from IEC. The data was entered and analyzed with SPSS version 22. The frequencies and percentages were calculated. The Chi square test was used and p value less than 0.05 was considered significant.

#### **RESULTS**

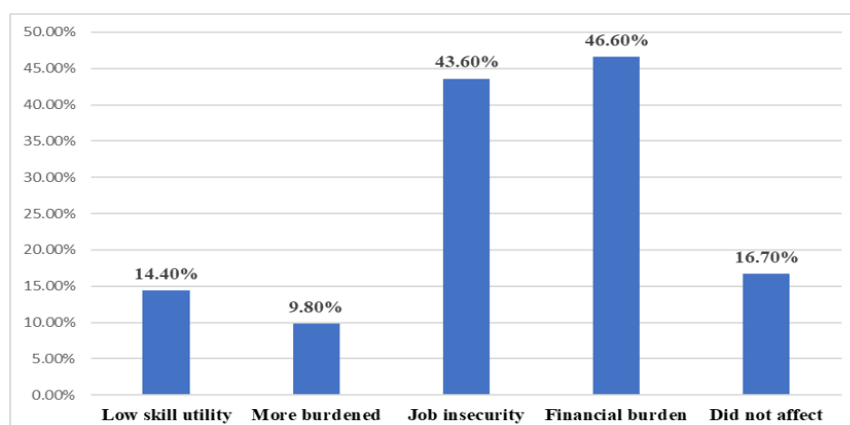
A total of 264 subjects were studied of which 96(36.4%) were females and 168(63.6%) were males. Majority of the females belonged to the age group 18-27 years (48.4%), while males belonged to the age group 28-37 years (69.4%). Most of the females (34.4%) and males (65.6%) belonged to upper middle class according to modified Kuppaswamy scale.

Majority of females were degree holders (39.3%), while males were professional degree holders (77.9%). Most of the females (37.3%) and males (62.7%) live in nuclear families.

**Table 1: Gender based assessment on impact of COVID -19 lockdown**

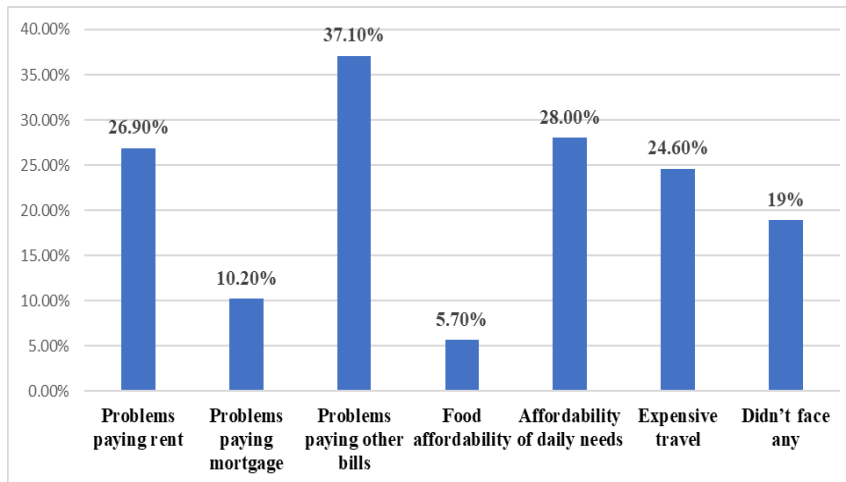
Variables	Gender		Total N (%)
	Female N (%)	Male N (%)	
<b>Concerned about COVID -19</b>			
Yes	63(23.9%)	106(40.2%)	169(64.0%)
No	2(0.8%)	13(4.9%)	15(5.7%)
Maybe	30(11.4%)	50(18.9%)	80(30.3%)
<b>Fears due to COVID 19</b>			
Fear of getting COVID -19	52(19.7%)	70(26.5%)	122(46.2%)
Fear of family getting COVID -19	42(15.9%)	97(36.7%)	139(52.7%)
Fear of Social isolation	21(8.0%)	50(18.9%)	71(26.9%)
Fear of infecting others	3(1.1%)	9(3.4%)	12(4.5%)
I don't know	11(4.2%)	17(6.4%)	28(10.6%)
<b>Reasons for unsatisfied life</b>			
Disturbed mental health	29(11.0%)	76(28.8%)	105(39.8%)
Problems in social life	7(2.7%)	15(5.7%)	22(8.3%)
Problems in work life	80(30.3%)	124(47.0%)	204(77.3%)
Arguments with Family members	3 (1.1%)	20 (7.6%)	23 (8.7%)
Existing Medical conditions	2 (0.8%)	11 (4.2%)	13 (4.9%)
Having a new life experience	50 (18.9%)	96 (36.4%)	146 (55.3%)
I don't Know	10 (3.8%)	4 (1.5%)	14 (5.3%)
<b>Experience of Staying at home</b>			
Getting Bored	47(17.8%)	54(20.5%)	101(38.3%)
Feeling of Loneliness	3(1.1%)	7(2.7%)	10(3.8%)
Having low self esteem	35 (13.3%)	53 (20.1%)	88 (33.3%)
Discouraged life	12 (4.5%)	34 (12.9%)	46 (17.4%)
Anxious about future	77 (29.2%)	130 (49.2%)	207 (78.4%)
Worried about life	4 (1.5%)	13 (4.9%)	17 (6.5%)
Feeling Relaxed	38 (14.4%)	73 (27.8%)	111 (42.2%)
Relieved from work stress	10 (3.8%)	22 (8.3%)	32 (12.1%)
Feeling Happy	4 (1.5%)	25 (9.5%)	29 (11%)
Spent more time with Family	25 (9.5%)	75 (28.4%)	100 (37.9%)

**Table 1** shows the impact of the Lockdown on the workers and it was seen that majority of the females (19.7%) had fear of getting COVID -19 and males (36.7%) feared about the family getting COVID -19. Majority of both females (30.3%) and males (47.0%) had unsatisfied life due to problems in work life and majority of females (29.2%) and males (49.2%) were anxious about the future. It was also seen that nearly 24% of females and 40% of males were distressed by COVID-19 lockdown.



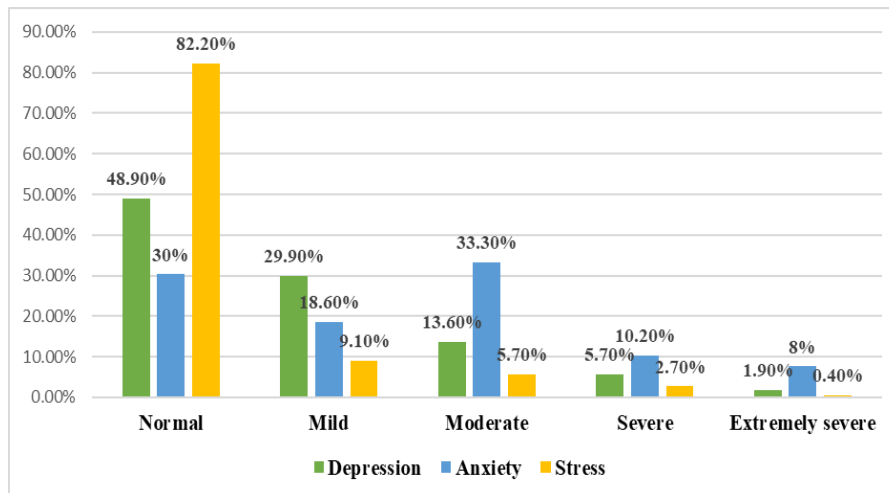
**Fig 1: Various Work issues faced by the study participants**

**Fig 1** shows the various issues faced by the workers in their job and it was seen that majority of 46.6% suffered financial burden followed by 43.6% having constant job insecurities.



**Fig 2: Various Economic problems faced by the study participants**

**Fig 2** shows that the major economic burden faced by them was in paying other bills (37.1%) like electricity bills, telephone bills, hospital bills and miscellaneous bills on children and family members followed by 28% on daily needs.



**Fig 3: Prevalence of depression, anxiety and stress among the study participants**

On assessing the levels of Depression, Anxiety and Stress among the study subjects it was seen in **Fig 3** that majority of 29.9% suffered mild depression and only 1.9% suffered extremely severe depression. Majority of 33.3% suffered moderate anxiety and only 8% suffered extremely severe anxiety. Lastly, majority of 9.1% suffered mild stress and only 0.4% suffered extreme stress during the lockdown.

## Depression Vs Work life

**Table 2: Association between depression and work life during COVID -19 lockdown**

Variables	Depression					p value (<0.05)
	Normal N (%)	Mild N (%)	Moderate N (%)	Severe N (%)	Extremely severe N (%)	
<b>Impact on Job</b>						
Lost Job	2(8.7%)	6(26.1%)	3(13.0%)	11(47.8%)	1(4.3%)	0
Job Secured	35(87.5%)	3(7.5%)	2(5.0%)	0(0.0%)	0(0.0%)	
Increased working hours	7(58.3%)	0(0.0%)	0(0.0%)	2(16.7%)	3(25.0%)	
Decreased working hours	27(67.5%)	13(32.5%)	0(0.0%)	0(0.0%)	0(0.0%)	
Reduced pay	29(36.3%)	33(41.3%)	16(20.0%)	1(1.3%)	1(1.3%)	
Late pay	25(52.1%)	16(33.3%)	7(14.6%)	0(0.0%)	0(0.0%)	
No pay at all	3(15.8%)	7(36.8%)	8(42.1%)	1(5.3%)	0(0.0%)	
Prefer not to say	1(50.0%)	1(50.0%)	0(0.0%)	0(0.0%)	0(0.0%)	
<b>Impact on Performance</b>						
Affected	55(40.7%)	41(30.4%)	23(17.0%)	12(8.9%)	4(3.0%)	0.033
Not affected	10(76.9%)	2(15.4%)	0(0.0%)	1(7.7%)	0(0.0%)	
Sometimes affected	64(55.2%)	36(31.0%)	13(11.2%)	2(1.7%)	1(0.9%)	
<b>Mental stress due to financial pressure</b>						
Yes	24(24.7%)	34(35.1%)	25(25.8%)	10(10.3%)	4(4.1%)	0
No	20(87.0%)	0(0.0%)	1(4.3%)	2(8.7%)	0(0.0%)	
Maybe	85(59.0%)	45(31.3%)	10(6.9%)	3(2.1%)	1(0.7%)	
<b>Reasons for poor Job performance</b>						
<b>Low skill utility</b>						
Yes	29(76.3%)	9(23.7%)	0(0.0%)	0(0.0%)	0(0.0%)	0.002
No	100(44.2%)	70(31.0%)	36(15.9%)	15(6.6%)	5(2.2%)	
<b>More burdened</b>						
Yes	14(53.8%)	3(11.5%)	3(11.5%)	3(11.5%)	3(11.5%)	0.001
No	115(48.3%)	76(31.9%)	33(13.9%)	12(5.0%)	2(0.8%)	
<b>Constant Job insecurity</b>						
Yes	35(30.4%)	48(41.7%)	19(16.5%)	10(8.7%)	3(2.6%)	0
No	94(63.1%)	31(20.8%)	17(11.4%)	5(3.4%)	2(1.3%)	
<b>Financial burden</b>						
Yes	33(26.8%)	48(39.0%)	32(26.0%)	8(6.5%)	2(1.6%)	0
No	96(68.1%)	31(22.0%)	4(2.8%)	7(5.0%)	3(2.1%)	
<b>Other reasons</b>						
Yes	40(90.9%)	4(9.1%)	0(0.0%)	0(0.0%)	0(0.0%)	0
No	89(40.5%)	75(34.1%)	36(16.4%)	15(6.8%)	5(2.3%)	
<b>Various Economic problems faced</b>						
<b>Problems paying rent</b>						
Yes	15(21.1%)	32(45.1%)	17(23.9%)	5(7.0%)	2(2.8%)	0
No	114(59.1%)	47(24.4%)	19(9.8%)	10(5.2%)	3(1.6%)	
<b>Problems paying mortgage</b>						
Yes	12(44.4%)	9(33.3%)	4(14.8%)	0(0.0%)	2(7.4%)	0.147
No	117(49.4%)	70(29.5%)	32(13.5%)	15(6.3%)	3(1.3%)	
<b>Problems paying bills</b>						
Yes	26(26.5%)	39(39.8%)	21(21.4%)	10(10.2%)	2(2.0%)	0
No	103(62.0%)	40(24.1%)	15(9.0%)	5(3.0%)	3(1.8%)	
<b>Food unaffordability</b>						

Yes						
No	1(6.7%)	4(26.7%)	7(46.7%)	2(13.3%)	1(6.7%)	0
	128(51.4%)	75(30.1%)	29(11.6%)	13(5.2%)	4(1.6%)	
<b>Daily needs unaffordability</b>						
Yes	28(37.8%)	18(24.3%)	17(23.0%)	10(13.5%)	1(1.4%)	0
No	101(53.2%)	61(32.1%)	19(10.0%)	5(2.6%)	4(2.1%)	
<b>Expensive travel</b>						
Yes	28(43.1%)	22(33.8%)	8(12.3%)	6(9.2%)	1(1.5%)	0.539
No	101(50.8%)	57(28.6%)	28(14.1%)	9(4.5%)	4(2.0%)	
<b>Other needs</b>						
Yes	46(92.0%)	3(6.0%)	0(0.0%)	1(2.0%)	0(0.0%)	0
No	83(38.8%)	76(35.5%)	36(16.8%)	14(6.5%)	5(2.3%)	

**\*Chi square test done (p value <0.05 considered significant)**

Based on **Table 2**, it was seen that 47.8% who lost their jobs suffered severe depression whereas 87.5% who were normal, had their jobs secured. Similarly, 25% of those who suffered extremely severe depression had increased working hours, but 67.5% of those who were normal, had decreased working hours. These findings were statistically significant. It was also observed that 17% who reported that their job performance was affected suffered with moderate depression than 11.2% who were sometimes affected and this was statistically significant. It was seen that 10.3% who had mental stress due to financial pressure had extreme depression but 87% who did not have financial pressure was normal and this was also significant. Participants who reported reasons like high burden in job performance (11.5%), constant job insecurities (8.7%) and financial pressure (6.5%) suffered with moderate depression than participants who were normal respectively and these findings were statistically significant. Similarly, participants who had problems like paying bills (10.2%), unable to afford food (13.3%) and unmet daily needs (13.5%) suffered moderate depression than those who were normal respectively and these findings were statistically significant.

**Anxiety Vs Work life**

**Table 3: Association between anxiety and work life during COVID -19 lockdown**

Variables	Anxiety					*p value (<0.05)
	Normal N (%)	Mild N (%)	Moderate N (%)	Severe N (%)	Extremely Severe N (%)	
<b>Impact on Job</b>						
Lost Job	0(0.0%)	2(8.7%)	8(34.8%)	1(4.3%)	12(52.2%)	0
Job Secured	31(77.5%)	4(10.0%)	3(7.5%)	2(5.0%)	0(0.0%)	
Increased working hours	5(41.7%)	2(16.7%)	0(0.0%)	0(0.0%)	5(41.7%)	
Decreased working hours	21(52.5%)	6(15.0%)	13(32.5%)	0(0.0%)	0(0.0%)	
Reduced pay	12(15.0%)	17(21.3%)	34(42.5%)	15(18.8%)	2(2.5%)	
Late pay	10(20.8%)	15(31.3%)	19(39.6%)	4(8.3%)	0(0.0%)	
No pay at all	0(0.0%)	3(15.8%)	10(52.6%)	5(26.3%)	1(5.3%)	
Prefer not to say	1(50.0%)	0(0.0%)	1(50.0%)	0(0.0%)	0(0.0%)	
<b>Impact on Performance</b>						
Affected	32(23.7%)	23(17.0%)	47(34.8%)	17(12.6%)	16(11.9%)	0.007
Not affected	9(69.2%)	1(7.7%)	2(15.4%)	0(0.0%)	1(7.7%)	
Sometimes affected	39(33.6%)	25(21.6%)	39(33.6%)	10(8.6%)	3(2.6%)	
<b>Mental stress due to financial burden</b>						



Yes	10(10.3%)	14(14.4%)	41(42.3%)	18(18.6%)	14(14.4%)	0
No	19(82.6%)	1(4.3%)	0(0.0%)	1(4.3%)	2(8.7%)	
Maybe	51(35.4%)	34(23.6%)	47(32.6%)	8(5.6%)	4(2.8%)	
<b>Reasons for poor Job performance</b>						
<b>Loss skill utility</b>						
Yes	23(60.5%)	6(15.8%)	9(23.7%)	0(0.0%)	0(0.0%)	0
No	57(25.2%)	43(19.0%)	79(35.0%)	27(11.9%)	20(8.8%)	
<b>More burdened</b>						
Yes	12(46.2%)	2(7.7%)	4(15.4%)	2(7.7%)	6(23.1%)	0.003
No	68(28.6%)	47(19.7%)	84(35.3%)	25(10.5%)	14(5.9%)	
<b>Constant Job insecurity</b>						
Yes	12(10.4%)	23(20.0%)	52(45.2%)	15(13.0%)	13(11.3%)	0
No	68(45.6%)	26(17.4%)	36(24.2%)	12(8.1%)	7(4.7%)	
<b>Financial burden</b>						
Yes	14(11.4%)	19(15.4%)	57(46.3%)	23(18.7%)	10(8.1%)	0
No	66(46.8%)	30(21.3%)	31(22.0%)	4(2.5%)	10(7.1%)	
<b>Other reasons</b>						
Yes	33(75.0%)	7(15.9%)	4(9.1%)	0(0.0%)	0(0.0%)	0
No	47(21.4%)	42(19.1%)	84(38.2%)	27(12.3%)	20(9.1%)	
<b>Various Economic problems faced</b>						
<b>Problems paying rent</b>						
Yes	4(5.6%)	11(15.5%)	36(50.7%)	13(18.3%)	7(9.9%)	0
No	76(39.4%)	38(19.7%)	52(26.9%)	14(7.3%)	13(6.7%)	
<b>Problems paying mortgage</b>						
Yes	7(25.9%)	5(18.5%)	9(33.3%)	4(14.8%)	2(7.4%)	0.937
No	73(30.8%)	44(18.6%)	79(33.3%)	23(9.7%)	18(7.6%)	
<b>Problems paying bills</b>						
Yes	10(10.2%)	16(16.3%)	44(44.9%)	16(16.3%)	12(12.2%)	0
No	70(42.2%)	33(19.9%)	44(26.5%)	11(6.6%)	8(4.8%)	
<b>Food unaffordability</b>						
Yes	0(0.0%)	1(6.7%)	8(53.3%)	3(20.0%)	3(20.0%)	0.013
No	80(32.1%)	48(19.3%)	80(32.1%)	24(9.6%)	17(6.8%)	
<b>Daily needs unaffordability</b>						
Yes	10(13.5%)	18(24.3%)	26(35.1%)	9(12.2%)	11(14.9%)	0.001
No	70(36.8%)	31(16.3%)	62(32.6%)	18(9.5%)	9(4.7%)	
<b>Expensive travel</b>						
Yes	21(32.3%)	7(10.8%)	23(35.4%)	7(10.8%)	7(10.8%)	0.376
No	59(29.6%)	42(21.1%)	65(32.7%)	20(10.1%)	13(6.5%)	
<b>Other needs</b>						
Yes	37(74.0%)	9(18.0%)	3(6.0%)	0(0.0%)	1(2.0%)	0
No	43(20.1%)	40(18.7%)	85(39.7%)	27(12.6%)	19(8.9%)	

**\*Chi square test done (p value <0.05 considered significant)**

Based on **Table 3**, it was seen that 52.2% who lost their jobs suffered extremely severe anxiety whereas 77.5% who were normal, had their jobs secured. Similarly, 41.7% of those who suffered extremely severe anxiety had increased working hours, but 52.5% of those who were normal, had decreased working hours. These findings were statistically significant. It was also observed that 12.6% who reported that their job performance was affected suffered with severe anxiety than 8.6% who were sometimes affected and this was statistically significant. It was seen that 42.3% who had mental stress due to financial pressure had moderate anxiety but 82.6% who did not have financial pressure was normal and this was also significant. Participants who reported reasons like high burden in job performance (15.4%), constant job insecurities (45.2%) and financial pressure (46.3%) suffered with moderate anxiety than participants who were normal respectively and these findings were statistically

significant. Similarly, participants who had problems like paying rent (50.7%), paying bills (44.9%), unable to afford food (53.3%) and unmet daily needs (35.1%) suffered moderate anxiety than those who were normal respectively and these findings were statistically significant.

### Stress Vs Work life

**Table 4: Association between stress and work life during COVID -19 flockdown**

Variables	Stress					*p value (<0.05)
	Normal N (%)	Mild N (%)	Moderate N (%)	Severe N (%)	Extremely severe N (%)	
<b>Impact on Job</b>						
Lost Job	10(43.5%)	0(0.0%)	9(39.1%)	4(17.4%)	0(0.0%)	0
Job Secured	38(95.0%)	2(5.0%)	0(0.0%)	0(0.0%)	0(0.0%)	
Increased working hours	7(58.3%)	0(0.0%)	2(16.7%)	2(16.7%)	1(8.3%)	
Decreased working hours	40(100.0%)	0(0.0%)	0(0.0%)	0(0.0%)	0(0.0%)	
Reduced pay	63(78.8%)	14(17.5%)	2(2.5%)	1(1.3%)	0(0.0%)	
Late pay	44(91.7%)	4(8.3%)	0(0.0%)	0(0.0%)	0(0.0%)	
No pay at all	13(68.4%)	4(21.1%)	2(10.5%)	0(0.0%)	0(0.0%)	
Prefer not to say	2(100.0%)	0(0.0%)	0(0.0%)	0(0.0%)	0(0.0%)	
<b>Impact on Performance</b>						
Affected	102(75.6%)	15(11.1%)	11(8.1%)	6(4.4%)	1(0.7%)	0.183
Not affected	12(92.3%)	0(0.0%)	1(7.7%)	0(0.0%)	0(0.0%)	
Sometimes affected	103(88.8%)	9(7.8%)	3(2.6%)	1(0.9%)	0(0.0%)	
<b>Mental stress due to financial burden</b>						
Yes	65(67.0%)	16(16.5%)	9(9.3%)	6(6.2%)	1(1.0%)	0.001
No	20(87.0%)	1(4.3%)	2(8.7%)	0(0.0%)	0(0.0%)	
Maybe	132(91.7%)	7(4.9%)	4(2.8%)	1(0.7%)	0(0.0%)	
<b>Reasons for poor Job performance</b>						
<b>Low skill utility</b>						
Yes	38(100.0%)	0(0.0%)	0(0.0%)	0(0.0%)	0(0.0%)	0.047
No	179(79.2%)	24(10.6%)	15(6.6%)	7(3.1%)	1(0.4%)	
<b>More burdened</b>						
Yes	18(69.2%)	1(3.8%)	4(15.4%)	2(7.7%)	1(3.8%)	0.001
No	199(83.6%)	23(9.7%)	11(4.6%)	5(2.1%)	0(0.0%)	
<b>Constant Job Insecurity</b>						
Yes	87(75.7%)	13(11.3%)	11(9.6%)	4(3.5%)	0(0.0%)	0.065
No	130(87.2%)	11(7.4%)	4(2.7%)	3(2.0%)	1(0.7%)	
<b>Financial burden</b>						
Yes	90(73.2%)	21(17.1%)	7(5.7%)	5(4.1%)	0(0.0%)	0
No	127(90.1%)	3(2.1%)	8(5.7%)	2(1.4%)	1(0.7%)	
<b>Other reasons</b>						
Yes	44(100.0%)	0(0.0%)	0(0.0%)	0(0.0%)	0(0.0%)	0.022
No	173(78.6%)	24(10.9%)	15(6.8%)	7(3.2%)	1(0.5%)	
<b>Various Economic problems faced</b>						
<b>Problems paying rent</b>						
Yes	51(71.8%)	12(16.9%)	5(7.0%)	3(4.2%)	0(0.0%)	0.052
No	166(86.0%)	12(6.2%)	10(5.2%)	4(2.1%)	1(0.5%)	
<b>Problems paying mortgage</b>						
Yes	21(77.8%)	4(14.8%)	0(0.0%)	2(7.4%)	0(0.0%)	0.236
No	196(82.7%)	20(8.4%)	15(6.3%)	5(2.1%)	1(0.4%)	
<b>Problems paying bills</b>						



Yes	70(71.4%)	15(15.3%)	8(8.2%)	5(5.1%)	0(0.0%)	0.006
No	147(88.6%)	9(5.4%)	7(4.2%)	2(1.2%)	1(0.6%)	
<b>Food unaffordability</b>						
Yes	9(60.0%)	1(6.7%)	4(26.7%)	0(0.0%)	1(6.7%)	0
No	208(83.5%)	23(9.2%)	11(4.4%)	7(2.8%)	0(0.0%)	
<b>Daily needs unaffordability</b>						
Yes	54(73.0%)	8(10.8%)	9(12.2%)	2(2.7%)	1(1.4%)	0.021
No	163(85.8%)	16(8.4%)	6(3.2%)	5(2.6%)	0(0.0%)	
<b>Expensive travel</b>						
Yes	51(78.5%)	7(10.8%)	3(4.6%)	4(6.2%)	0(0.0%)	0.298
No	166(83.4%)	17(8.5%)	12(6.0%)	3(1.5%)	1(0.5%)	
<b>Other needs</b>						
Yes	49(98.0%)	0(0.0%)	1(2.0%)	0(0.0%)	0(0.0%)	0.029
No	168(78.5%)	24(11.2%)	14(6.5%)	7(3.3%)	1(0.5%)	

**\*Chi square test done (p value <0.05 considered significant)**

Based on **Table 4**, it was seen that 39.1% who lost their jobs suffered moderate stress whereas 95% who were normal, had their jobs secured. Similarly, 16.7% of those who suffered severe stress had increased working hours, but 100% of those who were normal, had decreased working hours. These findings were statistically significant. It was seen that 6.2% who had mental stress due to financial pressure had severe stress but 87% who did not have financial pressure was normal and this was also significant. Participants who reported reasons like high burden in job performance (15.4%) and financial pressure (5.7%) suffered with moderate stress than participants who were normal respectively and these findings were statistically significant. Similarly, participants who had problems like paying rent (7%), paying bills (8.2%), unable to afford food (26.7%) and unmet daily needs (12.2%) suffered moderate stress than those who were normal respectively and these findings were statistically significant.

## DISCUSSION

In a study conducted by Pedrosa AL et al <sup>[7]</sup>, financial loss has been linked to psychological distress as seen in our study. In our study, participants faced financial loss due to lost jobs, low skill utility and pay cuts. A study conducted in India by Roy A et al <sup>[9]</sup>, the major mental health issues reported were stress, anxiety and depression which in our study are related to factors like concerns and fears about COVID-19, unsatisfied life, staying at home, work issues and economic issues and are predominantly due economic instability. Their study also reported insomnia, denial, anger and fear. In a similar study done by Wilson JM et al <sup>[8]</sup>, it was observed that greater financial concern is related to greater anxiety symptoms which is similar to the results in our study and job insecurity was associated with depressive symptoms, but were related to greater anxiety symptoms in our study. Job insecurity causing uncertain future might be the cause of anxiety symptoms in the participants under this study. In a study conducted in U.S <sup>[10]</sup>, it was observed that depression was specifically observed in those with lower income and greater exposure to stressors like losing job and financial problems which are associated with depression and anxiety in our study. Unreliability being the cause of anxiety symptoms in the study participants. A study conducted in Nepal by Poudel K <sup>[11]</sup>, it was found that economic recession, unemployment and economic distress contemplate to suicides which were the prime issues faced by the participants in our study alarming the need to address them early. In our it was also found that social isolation caused disturbed mental health in the participants which can lead to suicidal tendencies if neglected. From our study, we find

that participants with low skill utility showed significant association with depression, anxiety and stress, similar results were reported in a study conducted by Rossi R et al [12] along with stress associated with increased working hours.

In our study, participants with increased working hours showed greater symptoms of depression and anxiety than those with decreased working hours. In a similar study conducted in Thailand [13] participants who lost their job perceived greater stress compared to those who had their job secured, while participants in our study showed greater symptoms of anxiety. In their study participants with financial problems showed greater symptoms of stress whereas participants in our study showed more symptoms of anxiety. Some financial problems faced by our study participants are problems paying rent, mortgage, bills, unaffordability of food, unmet daily needs, expensive travel and other needs.

Majority of participants faced symptoms of depression and anxiety and were found to be more among participants who belonged to lower socioeconomic classes, as they are more prone to stressors like paying rents, bills, food unaffordability, unmet daily needs and expensive travel. It was seen that 46.6% suffered financial burden and 43.6% had constant job insecurity, these were strongly associated with the psychological disturbance of the participants. Study participants showed considerable symptoms of depression, anxiety and stress. It was seen that most of the participants showed greater anxiety symptoms and were mainly correlated to losing job (52.2%), increased working hours (41.7%) and financial pressure (42.3%).

The entire population have not participated in the study and only a small number of participants were sampled which is a limitation. The results from our study cannot be generalised to the populations dissimilar from ours. Awareness about these psychological effects and how to cope up should be created among the population. Taking time-out, practicing yoga, regular exercises, well balanced meals, listening to music, meditation, learning relaxation techniques and life style modifications helps cope up with physiological distress. Counselling sessions can be arranged in all the workplaces to overcome such problems.

## CONCLUSION

A greater proportion of the participants already show symptoms of depression, anxiety and stress and were at the risk of developing major mental health issues if left untreated. Majority of the participants developed mental health issues due to the COVID-19 lockdown and are primarily concerned about their economic status and work life.

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