



Assessment of the Level of Depression among Group D Workers during COVID-19 Outbreak in Selected Hospitals: A Descriptive Study

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Abstract

Objectives: To assess the level of depression among group D workers during COVID-19 outbreak from selected hospitals. 2) To find out the association between the level of depression among Group D workers during COVID-19 outbreak with selected demographic variables.

Methodology: The study was undertaken using a non-experimental descriptive research design. It was conducted over 100 Group D workers by using non probability convenient sampling technique.

Results: Assessment was done by using Rating Scale to assess Level of Depression. Analysis showed that 11% of group D workers had no depression, 39% of them had mild depression, 43% of them had moderate depression and 7% of group D workers had severe depression. Mean depression score was 41.78 ± 11.88 and mean percentage of depression score was 55.70 ± 15.84 . The item wise distribution was of each item and divides into never, sometimes, always.

Conclusion: Analysis reveals that in overall association there is association of level of depression with age, family income, working hours and job title among group D workers and none of the other demographic variables were associated with the level of depression score.

Keywords level of depression, covid-19 outbreak, group D workers, assessment, descriptive study.

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INTRODUCTION

In several facets, the 2019 Corona virus Disease (COVID-19) pandemic has drastically altered social and professional contexts. In addition to the cessation of productive activity, monetary loss and fear

of the future, social distancing rules, lockdowns, isolation periods, and concern about getting sick all have a detrimental effect on people's mental health. Job characteristics may significantly influence or deteriorate the mental health of those



affected by this outbreak. (Giorgi *et al.*, 2020, p. 19). Daily life, interpersonal connections, and physical health are all impacted by mental health (“Mental health: Definition, common disorders, early signs, and more,” n.d.). In psychology, depression is a mental or emotional state accompanied by feelings of poor self-worth or guilt and a diminished capacity to enjoy life (“depression summary | Britannica,” n.d.). Depression attributes as one of the most prevalent psychiatric illnesses today, affecting 340 million individuals worldwide. Everyone is susceptible to depression since it affects people of various socioeconomic groups, geographical locations, and cultural backgrounds (Kessler *et al.*, 2003). India makes a significant contribution to the worldwide burden of mental ailments. Given that Class-IV workers frequently have low socioeconomic status, little formal education, and lengthy, irregular work schedules, it was determined that evaluating their mental health should be a top concern (Garg, n.d.).

According to a research done in Bangalore by the National Crime Record Bureau, 35 individuals per 100,000 in the city commit suicide as a result of depression which adds up to 264 million individuals worldwide experiencing disturbed mental health. It has been established beyond reasonable doubt that those who work under unfavourable conditions with a heavy workload and no assistance experience more severe mental health issues. (“The Global Crisis of Depression Summary Report,” 2015). Depression and other mental disorders have been in fact discovered to affect more than one-fourth of individuals who are employed (“A comparative study of stress, anxiety and depression among private and government sector employee » The International Journal of Indian Psychology,” n.d.). The psychological effects of the COVID-19 pandemic on the general population, patients, doctors, youngsters,

along with elderly persons have been documented on a global scale (Chen *et al.*, 2020). According to preliminary data, depressive symptoms will affect 16–28% of people worldwide in 2020 during the COVID-19 pandemic (“COVID-19 and mental health: A review of the existing literature - PMC,” n.d., p. 19).

Around the world, 350 million people now suffer from depression, which is a noteworthy benefactor to the burden of disease. The World Mental Health Survey, which was carried out in 17 nations, discovered that, on average, one in twenty persons had experienced a depressive episode the preceding year (World Health Organization, 2008). Depression prevalence rates ranged from 7.45% to 48.30% throughout the 12 studies that were considered. The overall incidence of depression between trials was 25%. The COVID-19 outbreak's high rate of depression, which seems to be lofty than the internationally estimated prevalence in 2017, is an example of the pandemic's profound effects on people's mental health (Bueno-Notivol *et al.*, 2021). India is one among the nations dealing with depression, particularly during the Covid-19 pandemic. Hence the investigator felt that need to assess the level of depression in group D workers in selected Hospitals. The study's primary objective was to gauge the extent of depression among group D employees during the Covid-19 outbreak at certain hospitals. Whereas, the secondary objective was to find out the association between the level of depression among the group D workers with selected demographic variables. The study hypothesized that Group D workers may have faced challenges during Covid-19 and may have depression.

METHODOLOGY

A Quantitative research approach consisting of non-experimental descriptive research design was carried out in selected hospitals in the city. The study received permission



from the institutional ethics committee, and the central ethical commission for human research offered ethical code for its execution. The ethical consideration for the study was to check that the study is applicable for the group D workers and assessed the subject is protected from any physical, psychological and emotional harm. The main variable of the study was level of depression whereas, the demographic variables involved were age, gender, area of residence, marital status, monthly family income, job title, working hours. The population involved all the Group D workers consisting of 100 workers fulfilling the inclusion criteria during Covid-19 outbreak in selected hospitals and who were available while collecting the data. The inclusion criteria involved Group D workers who were available at the time of study and were consenting to partake in the study although, the exclusion criteria involved Group D workers who were suffering from mental illness or not worked during Covid-19 outbreak.

To evaluate the depression levels in group D employees during the course of pandemic in chosen hospitals of the city. The tools that were involved were demographic variables and self-Structured rating scale for depression. The validity of the description tool was established for its content and structure by a faction of 16 professionals that comprised experts from nursing psychiatry, clinical psychology, psychiatry, and social worker psychiatry (mental health) nursing specialty-13. The professionals made several insightful recommendations. Before collecting the data, any necessary adjustments were performed. The tool was valid for the study. In this study, the reliability of the tool was examined by administering rating scales to 10 samples. In order to rate these samples for establishing the reliability of the description tool, a Guttman split half

method (parallel method) was implemented.

The data for the study was procured between December 23, 2021 and January 15, 2022. Permission was sought from the hospital's highest authorities in order to acquire the data for the study. The selection of samples for the process of data collection was carried out by a non-probability convenient sampling technique from the chosen hospitals. The investigator approached the chosen samples in small groups each day, before administering the rating scales, and informed consent was acquired from them. After giving out the rating scales to the samples, they were collected again after 30 minutes.

RESULTS

Allocation of group D workers in relation to their demographic characteristics is described in Table 1.

Evaluation of depression levels in group D workers during the course of pandemic in selected hospitals is described in Table 2.

Distribution of group D workers' scores on an item-by-item evaluation of their level of depression during the Covid-19 outbreak at chosen hospitals is described in Table 3.

Association between group D workers' level of depression scores and the designated demographics is described in Table 4.

DISCUSSION

A cross-sectional study was carried out at the medical college of Delhi with the purpose of evaluating the levels of depression among group D workers in India from the healthcare and non-healthcare sectors. Interviews with Group D workers were conducted utilizing the psychometric tool and sociodemographic questionnaires. In this study, 200 participants were examined for their views and opinions using a questionnaire survey, of which 120 were healthcare professionals and 80 were from the non-healthcare sector. Abiding to the instructions of the patient health



questionnaire, depression was recorded as a score. The Chi-square test was used for statistical analysis, and Cronbach's alpha ($r = 0.90$) was used to evaluate the questionnaire's reliability.

As an outcome of the study, the prevalence of depression among the group D workers added up to 17% which indicates that it was improbable for the workers from the upper middle socioeconomic class to encounter depression when compared to the lower middle socioeconomic class group D workers. The results of the study also reflected the lower chances of encountering depression among group D workers who travelled greater home to workplace distance everyday. However, the association of these findings with the socio demographic variables particularly with this part of the population is yet to be established (Garg, n.d.).

The result indicated a higher prevalence ratio of depression and psychological disturbances among the non-health care workers as compared to health-care professionals. Nonetheless, it is vitally imperative to seek psychological counselling to address the stress levels and psychological disturbances in healthcare and non-healthcare workers ("Prevalence of anxiety, stress, and depression among health care and nonhealth-care professionals in India Singh KK, Jyotirmay, Kumar A, Goel A, Gulati S, Nayak BB - J Edu Health Promot," n.d.). The limitations of the study included that only Group D workers who works in the selected hospitals of the city during Covid-19 and were available while collecting the data were included in the study. Another limitation involved that the study was carried out only in selected hospitals of the city.

CONCLUSION

Majority of the group D workers from both the healthcare and non-healthcare sectors encountered depression from mild to moderate forms. Although, there is an

association of the level of depression score with age, family income, working hours and job title among group D workers, none of the supplementary demographic characteristics depicted a relationship with the level of depression score.

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TABLES

Table 1 - Table displaying the allocation of group D workers by frequency and percentage based on the designated characteristics. (n=100)

| Designated characteristics | Frequency (f) | Percentage (%) |
|----------------------------------|---------------|----------------|
| Age (yrs) | | |
| 20-30 yrs | 32 | 32 |
| 31-40 yrs | 43 | 43 |
| 41-50yrs | 20 | 20 |
| 51-60yrs | 5 | 5 |
| Gender | | |
| Male | 52 | 52 |
| Female | 48 | 48 |
| Transgender | 0 | 0 |
| Area of residence | | |
| Rural | 32 | 32 |
| Urban | 55 | 55 |
| Semi urban | 13 | 13 |
| Marital status | | |
| Married | 62 | 62 |
| Unmarried | 26 | 26 |
| Separated | 70 | 70 |
| Divorced | 0 | 0 |
| Widow/Widower | 5 | 5 |
| Monthly family income(Rs) | | |
| 5000-100000 Rs | 74 | 74 |
| 10001-15000 Rs | 21 | 21 |
| 150001-20000 Rs | 5 | 5 |
| >20001 Rs | 0 | 0 |
| Working hours | | |
| Less than 8 hours | 29 | 29 |
| 9-10 hours | 38 | 38 |



| | | |
|------------------|----|----|
| >10 hours | 33 | 33 |
| Job Title | | |
| Security guard | 27 | 27 |
| Cleaners | 28 | 28 |
| Peon | 2 | 2 |
| pmjhd23 Bearer | 4 | 4 |
| ard attendant | 30 | 30 |
| Drivers | 9 | 9 |

Table 2: Assessment with the level of depression score (n=100)

| Level of depression | Score Range | Level of Depression Score | |
|-----------------------|-------------|---------------------------|------------|
| | | No of group D workers | Percentage |
| No Depression | 1-25 | 11 | 11 |
| Mild Depression | 26-42 | 39 | 39 |
| Moderate Depression | 43-59 | 43 | 43 |
| Severe Depression | 60-75 | 7 | 7 |
| Minimum score | | 25 | |
| Maximum score | | 75 | |
| Mean depression score | | 41.78 ± 11.88 | |
| Mean depression score | | 55.70±15.84. | |

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Table 3: Table exhibiting group D workers' scores on an item-by-item evaluation of their level of depression during the Covid-19 outbreak at chosen hospitals. (n=100)

| Item | Never | Sometimes | Always |
|---|---------|-----------|---------|
| I feel sad because of my job during Covid-19. | 61(61%) | 17(17%) | 22(22%) |
| I feel anger, that I could not enjoy the things than I usually like doing before the Covid-19 situations. | 53(53%) | 21(21%) | 26(26%) |
| I had difficulties in falling asleep during Covid 19. | 70(70%) | 8(8%) | 22(22%) |
| I feel exhausted because of my work during Covid-19. | 60(60%) | 30(30%) | 10(10%) |
| I feel fear of getting infected due to Covid-19. | 48(48%) | 29(29%) | 23(23%) |
| I get irritated to follow numerous precautions measures like repeated hand washing, sanitizing, wearing mask. | 71(71%) | 17(17%) | 12(12%) |
| I have changes in my appetite. | 72(72%) | 15(15%) | 13(13%) |
| I worried for my family during Covid-19, getting infected because of work with Covid patient. | 67(67%) | 9(9%) | 24(24%) |
| I experience decreased concentration at work. | 55(55%) | 40(40%) | 5(5%) |
| I have fear of dying due to work during this pandemic. | 58(58%) | 23(23%) | 19(19%) |
| I feel helpless while going through pandemic situation. | 59(59%) | 17(17%) | 24(24%) |
| I feel emotionally weak in my workplace. | 59(59%) | 20(20%) | 21(21%) |
| I feel like crying, seeing the patients deceased during Covid-19. | 28(28%) | 11(11%) | 61(61%) |
| I get afraid of meeting people due to Covid-19. | 52(52%) | 15(15%) | 33(33%) |



| | | | |
|--|---------|---------|---------|
| I get a thought in your mind that things are getting worst day by day. | 46(46%) | 29(29%) | 25(25%) |
| I feel sad due to Covid-19 situation. | 44(44%) | 6(6%) | 50(50%) |
| I feel worried about my financial situation due to Covid. | 28(28%) | 24(24%) | 48(48%) |
| I feel exhausted by doing extra shifts in hospital during Covid-19. | 41(41%) | 35(35%) | 24(24%) |
| I lost my confidence while working in Covid-19. | 74(74%) | 15(15%) | 11(11%) |
| I feel worthless as compared to my earlier performance. | 53(53%) | 33(33%) | 14(14%) |
| I feel alone in Covid-19 situation. | 71(71%) | 14(14%) | 15(15%) |
| I feel anxious when I think, listened or read about Covid-19. | 44(44%) | 25(25%) | 31(31%) |
| I feel worried about my job security. | 47(47%) | 8(8%) | 45(45%) |
| I feel that I am being punished. | 74(74%) | 21(21%) | 5(5%) |
| I have a thought of ending my life. | 78(78%) | 14(14%) | 8(8%) |

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Table 4: Table exhibiting the level of depression and its association with the designated demographics.

| Sr.no | Demographic determinants (depression) | Calculated value | | | Df | Table value | Degree of relevance | Significance |
|-------|---------------------------------------|------------------|---------|---------|------|-------------|---------------------|--------------|
| | | T value | F value | P value | | | | |
| 1 | Age | | 5.27 | <0.002 | 3,96 | 2.68 | 0.05 | S |
| 2 | Gender | 0.06 | | >0.95 | 98 | 1.98 | 0.05 | NS |
| 3 | Area of Residence | | 1.77 | >0.17 | 2,97 | 3.07 | 0.05 | NS |
| 4 | Marital status | | 0.42 | >0.73 | 3,96 | 2.68 | 0.05 | NS |
| 5 | Monthly family income(Rs) | | 9.24 | <0.001 | 2,97 | 3.07 | 0.05 | S |
| 6 | Working hours | | 9.10 | <0.001 | 2,97 | 3.07 | 0.05 | S |
| 7 | Job title | | 3.87 | <0.003 | 5,94 | 2.29 | 0.05 | S |

S= SIGNIFICANT NS= NON-SIGNIFICANT

