

OCCUPATIONAL STRESS AND BURNOUT AMONG HEALTHCARE EMPLOYEES: EVIDENCE FROM CSI JAYARAJ ANNAPACKIAM MISSION HOSPITAL, TIRUNELVELI

Mohamed Absal S A¹, Dr. P. Brindha²

¹II MBA Student, School of Management Studies

Vels Institute of Science, Technology and Advanced Studies (VISTAS), Chennai – 600 117

²Assistant Professor, School of Management Studies

Vels Institute of Science, Technology and Advanced Studies (VISTAS), Chennai – 600 117

DOI: <https://www.doi.org/10.58257/IJPREMS53357>

ABSTRACT

Introduction: Occupational stress and burnout pose serious problems concerning the health and productivity of healthcare professionals worldwide. Constant pressure arising from excessive workload, shift work, emotional strains, and organizational support inadequacy is likely to cause burnout and deteriorate service quality. **Aim:** To determine the extent of occupational stress and burnout experienced by healthcare workers, identify the sources of stress, and measure their effect on performance and job satisfaction. **Methodology:** Descriptive design was used. Primary data collection was carried out by means of a self-administered Likert scale questionnaire distributed to 60 participants. Statistical methods included percentage, descriptive statistics, and Pearson's correlation (SPSS software). **Findings:** Most of the participants comprised young female nurses (78.3% females; 61.7% nurses); less than 25 years old. About 71.6% worked for many hours. Emotional exhaustion and physical exhaustion were felt by 60% and 56.6% of respondents, respectively. There was high correlation between stress related to job performance and emotional exhaustion ($r=0.707$; $p<0.001$). A high relationship existed between burnout related to job satisfaction and job performance ($r=0.518$; $p<0.001$). **Conclusion:** There is a serious problem of occupational stress and burnout that is statistically significant. There is need to develop a well-structured stress management program, have adequate personnel, flexible working schedules, and employee support.

Keywords: occupational stress, burnout, healthcare workers, emotional exhaustion, job performance, organisational support, hospital management.

1. INTRODUCTION

Occupational burnout has now come to be considered one of the most important issues in the realm of occupational health within the healthcare industry. Physicians, nurses, technicians, administrative personnel, and auxiliary staff members have to work in conditions of constant pressure that may be due to work overload, long hours at work, emotional strain from dealing with patients, personnel shortages, and heightened demands on services provided. Constant exposure to these conditions creates a situation in which acute stress is transformed into chronic burnout characterized by emotional detachment, physical exhaustion, decreased motivation, and poor work productivity.

As a psychological phenomenon, burnout can be described as a syndrome of emotional exhaustion, depersonalization, and decreased personal achievement resulting from constant occupational strain (Maslach & Jackson, 1981). Burnout negatively impacts not only individual employees but also patient care, organizational efficiency, and the rate of turnover within a given organization. It creates a vicious circle whereby stress and understaffing reinforce each other.

India has seen great progress in the expansion of the healthcare sector owing largely to initiatives like Ayushman Bharat and the National Health Mission. While being highly beneficial in terms of increased access to services, this progress comes with a heavy price as the burden of work placed on health professionals has grown considerably. Managing occupational stress becomes crucial for organizational effectiveness in this situation.

This study focuses on occupational stress and burnout among healthcare personnel working in the CSI Jayaraj Annapackiam Mission Hospital located in the city of Tirunelveli, which is the primary provider of health services for residents of the district of Tirunelveli and the surrounding rural areas. The focus is on identifying the main predictors of burnout, calculating the extent of their occurrence, analyzing their associations with employee productivity and satisfaction at work, and exploring the mediating role of organizational support in these effects.

1.1 Objectives of the Study

The main aim of this research study was to assess the extent of stress and burnout experienced by the employees of the health care organization. The secondary objectives include the following: (a) to determine the major sources of occupational stress, (b) to assess the effects of stress on employees' job performance, (c) to examine the relationship between burnout and motivation/job satisfaction, and (d) to analyze the importance of organizational intervention in minimizing stress and burnout.

1.2 Scope of the study

The research was conducted among the staff members of CSI Jayaraj Annapackiam Mission Hospital, Tirunelveli.

2. REVIEW OF LITERATURE

Numerous studies in the literature have examined the interconnection of occupational stress and burnout on employee outcomes in the healthcare industry. For example, Maslach & Leiter (2016) defined burnout as a state when there is an imbalance between demands on an employee and their abilities, naming workload, lack of control, reward deficiency, lack of community, unfairness, and value conflict as main organizational antecedents of burnout.

According to Sharma (2018), the implementation of biometric and structured attendance systems in hospitals greatly decreased the incidence of payroll errors and helped create greater workforce discipline; hence, stress from administrative uncertainty was mitigated. Kumar and Singh (2019) noted that high absenteeism caused by burnout led to poor productivity within teams and increased strain on remaining members; therefore, absenteeism could be considered a factor causing further burnout. Thomas (2019) noted that biometric attendance in hospitals improved the accuracy of scheduling and prevented time-related issues.

The impact of workforce management on employee outcomes was explored by Reddy (2020), who showed that such practices positively influenced service delivery quality. Similarly, Daniel (2020) found that the presence of shift management systems led to greater scheduling accuracy in hospitals and thus to lower levels of overwork. Joseph (2021) identified irregular attendance as a source of increased workload for on-duty workers, negatively affecting the quality of patient care.

According to Nair (2021), the use of transparent policies related to attendance was associated with greater worker trust, fostering a better work culture, which suggests that organizational administrative fairness reduces stress among employees. Iyer (2021) showed that the integration of payroll and attendance systems prevented payroll errors and saved HR resources to be devoted to employee-related matters. Furthermore, Patel (2022) noted that attendance tracking supported financial transparency and helped monitor employee performance accurately.

In addition, research by Gupta (2020), Varma (2019), and Rahman (2017) suggested that attendance monitoring policies aimed at mitigating shift stress and workload imbalances were associated with lower rates of absenteeism and burnout. Kavitha (2022) revealed that regular attendance and low absenteeism led to improved patient satisfaction rates. Finally, according to Fernandez (2023), automation of attendance systems in hospitals promoted the growth of organizations in the long term.

From the above analysis, it becomes evident that occupational stress and burnout in healthcare settings are systemic problems that can be mitigated through various organizational measures. Specifically, workforce management, including sufficient staffing, fair shifts, and transparency in attendance procedures, can be

3. RESEARCH METHODOLOGY

3.1 Research Design

A descriptive research approach was used in this study due to its suitability for identifying features, attitudes, and experiences of respondents concerning a particular phenomenon. Using this methodology, it was possible to describe levels of stress, burnout, and support by organisations for healthcare workers in the study setting.

3.2 Study Population and Sampling

The population of interest was the total employee pool of CSI Jayaraj Annapackiam Mission Hospital, which included the doctors, nurses, technicians, administrators, and others. The sample size was 60 participants, chosen on the basis of convenience. Although convenience sampling may not statistically represent the population well, it was justified by the situation prevailing within the study setting.

3.3 Instrument Design

Data were gathered through the use of a questionnaire that consisted of two parts. Part A involved demographic variables such as gender, age, designation, years of experience, and working shifts. Part B had 15 questions regarding

stress factors, burnout factors, and organisational support. All questions were answered using the Likert scale, ranging from Strongly Agree (1) to Strongly Disagree (5). The questions pertained to experiencing stress, long working hours, stressful work, feeling pressure, not having enough support, the health effect of work, having support, emotional exhaustion, physical fatigue, low motivation, detachment from work, frustration, stress performance effect, burnout satisfaction effect, and hospital support adequacy.

3.4 Data Collection

The primary data were gathered from the respondents using self-administered questionnaires, which were distributed at the hospital. The secondary data were taken from peer-reviewed journal articles, scholarly books, organizational documents, and government reports on health care. The use of primary and secondary data sources made the research more triangulated.

3.5 Analytical Methods

The collected data were coded, entered, and analyzed through the Statistical Package for the Social Sciences (SPSS). The analyses conducted include the following: (i) Frequency and percentage distribution of demographic data and responses to items; (ii) Descriptive statistics including means and standard deviations of all variables involved in the study; and (iii) Pearson's product-moment correlation analysis among stress, burnout, emotional exhaustion, motivation, performance, and job satisfaction.

4. DATA ANALYSIS AND INTERPRETATION

4.1 Demographic Profile of Respondents

The demographic characteristics of the 60 respondents are presented in Tables 1 through 5.

Table 1: Gender Distribution of Respondents

Gender	Frequency	Percentage (%)
Male	12	20.0
Female	47	78.3
Others	1	1.7
Total	60	100.0

The sample was predominantly female (78.3%), consistent with the nursing-heavy composition of the workforce. Male respondents constituted 20.0% and the remaining 1.7% identified under the 'Others' category.

Table 2: Age Distribution of Respondents

Age Group	Frequency	Percentage (%)
Below 25 years	28	46.7
25–35 years	25	41.7
36–45 years	6	10.0
Above 45 years	1	1.7
Total	60	100.0

Nearly half (46.7%) of respondents were under 25 years of age, indicating that the institution employs a substantially young workforce. A further 41.7% fell within the 25–35 age group, meaning that 88.4% of the sample were below 36 years old.

Table 3: Designation of Respondents

Designation	Frequency	Percentage (%)
Doctor	4	6.7
Nurse	37	61.7
Technician	6	10.0
Administrative Staff	7	11.7
Support Staff	6	10.0
Total	60	100.0

Nurses were the highest in number (61.7%), followed by administrators (11.7%), technicians, and auxiliary workers (10.0% each). Doctors comprised 6.7% of the respondents. This imbalance is due to the large numbers of nurses present in the hospital setting and also because of the higher stress level associated with patient contact.

Table 4: Years of Experience of Respondents

Experience	Frequency	Percentage (%)
Below 1 year	23	38.3
1–5 years	19	31.7
6–10 years	2	3.3
Above 10 years	16	26.7
Total	60	100.0

The experience distribution was bi-modal, with 38.3% having less than one year of experience and 26.7% more than ten years of experience, reflecting the composition of a workforce that is dominated by a sizable number of newcomers as well as a smaller number of experienced individuals..

Table 5: Working Shift Distribution

Working Shift	Frequency	Percentage (%)
Day Shift	39	65.0
Night Shift	6	10.0
Rotational Shift	15	25.0
Total	60	100.0

The majority (65.0%) worked day shifts. A quarter of respondents (25.0%) were engaged in rotational shifts, and 10.0% worked exclusively at night. Rotational and night shift workers are of particular interest given the established literature linking shift variability with accelerated burnout.

4.2 Analysis of Stress and Burnout Variables

Response distributions for the 15 Likert-scale items are summarised below. For conciseness, agreement rates represent the combined 'Strongly Agree' and 'Agree' categories; disagreement represents the combined 'Disagree' and 'Strongly Disagree' categories.

Table 6: Summary of Response Distributions – Stress and Burnout Variables

Variable	Agree (%)	Neutral (%)	Disagree (%)
I experience stress at work	55.0	43.3	1.7
Long working hours cause stress	71.6	28.3	0.0
I find my work stressful	61.7	35.0	3.3
I feel pressure at work	63.3	33.3	3.3
I experience lack of support	66.6	28.3	5.0
My work affects my health	55.0	31.7	13.3
I receive support at work	55.0	28.3	16.7
I feel emotionally exhausted	60.0	30.0	10.0
I feel physically drained after work	56.6	25.0	18.3
I feel less motivated to perform duties	50.0	36.7	13.3
I feel detached from work or patients	55.0	31.7	13.3
I feel frustrated because of my job	55.0	31.7	13.3
Stress affects my job performance	71.7	23.3	5.0
Burnout reduces my job satisfaction	51.7	40.0	8.3
Hospital provides adequate support for stress	61.6	30.0	8.3

The data reveal consistently high agreement rates across most burnout indicators. Notably, 71.7% of respondents agreed that stress affects their job performance — the highest agreement rate among all items — underscoring the direct operational consequence of occupational stress. Long working hours as a stressor received agreement from 71.6% of respondents. Emotional exhaustion was confirmed by 60.0% and physical fatigue by 56.6% of the sample. Lack of support was reported by 66.6% — a finding that highlights a critical gap in institutional welfare provision. A majority (61.6%) acknowledged that the hospital provides adequate stress management support, suggesting that existing mechanisms, while appreciated, are insufficient for the scale of need evidenced by the burnout indicators.

4.3 Descriptive Statistics

Table 7 presents the mean and standard deviation for all 15 study variables. Lower mean values (on the inverted Likert scale, where 1 = Strongly Agree) indicate higher levels of agreement.

Table 7: Descriptive Statistics of Study Variables (N = 60)

Variable	Min	Max	Mean	SD
Stress affects my job performance	1	5	2.10	0.877
Long working hours	1	3	2.15	0.633

Lack of support	1	4	2.15	0.840
I find work stressful	1	4	2.25	0.773
I experience stress	1	4	2.27	0.800
The hospital provides adequate support	1	4	2.28	0.865
I feel pressure	1	4	2.30	0.696
I feel emotionally exhausted	1	4	2.30	0.908
I feel less motivated	1	4	2.43	0.963
My work affects health	1	4	2.45	0.891
I feel detached from work or patients	1	4	2.45	0.891
I feel frustrated because of my job	1	4	2.45	0.891
Burnout reduces my job satisfaction	1	4	2.47	0.791
I feel physically drained after work	1	4	2.48	0.948
I receive support	1	4	2.48	0.930

The mean scores for all the variables varied between 2.10 and 2.48, showing that there was relatively moderate occupational stress and burnout among the subjects. 'Stress influences job performance' received the least mean score (2.10), showing that there was a strong level of consensus on the fact that stress impaired job performance. On the other hand, physical exhaustion and the availability of support were the variables with the highest mean scores, implying more disagreement among the subjects regarding them.

4.4 Correlation Analysis

Pearson's product-moment correlation coefficients were computed to examine the bivariate relationships between key study variables. Table 8 presents the most substantive correlations identified.

Table 8: Key Correlation Findings – Occupational Stress, Burnout, and Organisational Support (N = 60)

Variable Relationship	r	p-value	Sig.
Stress affecting performance ↔ Emotional exhaustion	0.707	< 0.001	***
Frustration ↔ Emotional exhaustion	0.585	< 0.001	***
Burnout reducing satisfaction ↔ Stress affecting performance	0.518	< 0.001	***
Reduced motivation ↔ Emotional exhaustion	0.508	< 0.001	***
Stress ↔ Burnout reducing satisfaction	0.443	< 0.001	***
Work pressure ↔ Health impact of work	0.544	< 0.001	***
Lack of support ↔ Work pressure	0.443	< 0.001	***
Stress ↔ Long working hours	0.355	0.005	**

Note: *** p < 0.001; ** p < 0.01

The highest correlation was identified between stress leading to poor work performance and emotional exhaustion ($r = 0.707$, $p < 0.001$), suggesting a very strong correlation according to standard criteria (Cohen, 1988). The results demonstrate that as more emotional energy is expended, the poorer the work performance becomes — an important finding from the perspective of healthcare. Another relevant correlation was observed between frustration and emotional exhaustion ($r = 0.585$, $p < 0.001$) — as would be expected, the accumulation of frustrations over time leads to exhaustion.

A strong correlation between burnout lowering job satisfaction and stress impacting work performance ($r = 0.518$, $p < 0.001$) highlights the reciprocal nature of the two phenomena. Lack of motivation was found to be significantly correlated with emotional exhaustion ($r = 0.508$, $p < 0.001$), providing evidence for the established theory of burnout and loss of motivation. There was a strong correlation between work pressure and its negative impact on physical health ($r = 0.544$, $p < 0.001$), and a moderate correlation between lack of organizational support and work pressure ($r = 0.443$, $p < 0.001$).

Thus, we have an understandable pattern — organizational support is lacking, work pressure increases as a consequence,

5. MAJOR FINDINGS

The following substantive findings emerged from the analysis:

- The sample was predominantly female (78.3%) and young (88.4% below 36 years), with nurses comprising 61.7% of respondents.
- Long working hours were experienced by 71.6% of respondents, making them the most widely endorsed stressor in the study.
- Work stressfulness (61.7%) and felt pressure (63.3%) were reported by a clear majority, confirming the pervasiveness of occupational stress.
- Lack of organisational support was reported by 66.6% of respondents, representing the highest endorsement rate among burnout antecedents.
- Emotional exhaustion (60.0%) and physical fatigue (56.6%) are prevalent burnout symptoms affecting the majority of the workforce.
- Work-related detachment (55.0%) and frustration (55.0%) reflect depersonalisation tendencies consistent with advanced burnout.
- Stress affecting job performance was agreed upon by 71.7% of respondents, the single highest agreement rate in the entire instrument.
- Burnout reducing job satisfaction was endorsed by 51.7% of respondents, indicating diminished organisational commitment.
- Descriptive statistics showed all variable means between 2.10 and 2.48, indicating moderate but consistent stress and burnout across the workforce.
- Correlation analysis confirmed large-effect relationships: stress–performance with emotional exhaustion ($r = 0.707$); frustration with emotional exhaustion ($r = 0.585$); and burnout–satisfaction with stress–performance ($r = 0.518$).
- A bimodal experience distribution (38.3% under 1 year; 26.7% above 10 years) signals a mid-career retention gap likely exacerbated by burnout.
- The correlation analysis revealed strong-effect associations between stress–performance and emotional exhaustion ($r = 0.707$), frustration and emotional exhaustion ($r = 0.585$), and burnout–satisfaction with stress–performance ($r = 0.518$).
- The bimodal distribution of the experience of the respondents (38.3% less than 1 year and 26.7% more than 10 years) indicates

DISCUSSION

This study's results are in harmony with and build upon the existing body of knowledge regarding occupational stress and burnout within the healthcare industry. The large proportion of participants experiencing prolonged working hours (71.6%) is consistent with the observations made by Kumar and Singh (2019) and Patel (2021), both of whom

found excessive working hours to be a major predictor of burnout in all healthcare sectors. The presence of a very strong correlation between stress impacting job effectiveness and emotional exhaustion ($r = 0.707$) is consistent with the demand-resources theory proposed by Maslach and Leiter (2016), wherein emotional exhaustion serves as the primary mediating factor. The large percentage of participants experiencing inadequate organisational support (66.6%), the highest among all antecedents, is highly meaningful. Literature by Reddy (2021) and Nair (2022) has repeatedly demonstrated that perceived support from supervisors and organisations provides the most powerful protection against burnout. The simultaneous observation that a similar proportion perceives sufficient organisational support (61.6%) points towards a perception gap: employees acknowledge that there is at least some form of support, but the extent of the needs unmet far surpasses what is currently available. The experience pattern, characterized by a huge influx of newcomers (less than 1 year experience) compared to the small number of experienced people (more than 10 years), with very few people in between the 6-10 years category, may be indicative of an attrition pattern caused by burnout. This is because if the employees who have been affected by work pressure leave the organization before they have become mid-career employees, the organization will always depend on employees who have less experience, thus increasing the burden of the employees left in the organization. That there exists a significant relationship between lack of support and work pressure ($r = 0.443$, $p < 0.001$) is a very strategic discovery because this puts organizational support not in the context of a supplementary facility but as a managerial approach to dealing with workload experience.

RECOMMENDATIONS

Structured Stress Management and Counselling Programmes

The organization needs to have an Employee Assistance Programme that will provide counselling, stress-management workshops, and peer support groups. Since the rate of emotional exhaustion is relatively high (60.0%), group-based therapy should be recommended, particularly the use of mindfulness-based stress reduction and cognitive behavioral techniques, and should be conducted within working hours.

Workforce Planning and Adequate Staffing

The evidence proves that excessive working hours and work-related pressure are among the most commonly cited causes of stress. A review is therefore necessary to examine staffing ratios, especially in the context of nursing where the chances of experiencing burnout are the greatest. More staffing, imposition of overtime regulations, and mandatory break periods between shifts are necessary.

Equitable and Transparent Shift Management

Employees working in shifts and at night have higher chances of developing burnout. It is recommended that the hospital adopt a shift scheduling policy based on scientific evidence, whereby challenging shifts are shared equally, advance notice of shifts is provided, and employees rotate day shifts regularly.

Strengthening Supervisory and Organisational Support

Because of the relationship between absence of support and work pressure ($r = 0.443$), the development of supervisory skills is necessary. The managers and supervisors must be trained to practice supportive leadership, listen attentively, and recognize the signs of burnout. The process of confidential reporting of stress issues at work must be put in place.

Employee Recognition and Career Development

The bimodal distribution of experiences hints at mid-career dropouts. Career development processes, mentorship programs, and rewarding the efforts of employees are some methods that can help retain and motivate workers throughout their careers. Performance-based appreciation ceremonies and informal acts of appreciation contribute to a positive organizational environment.

Health and Wellness Infrastructure

Regular screening for everyone working in the company, availability of on-site fitness facilities, and provision of breaks for relaxation need to be institutionalized. Specifically for physically demanding jobs, ergonomic arrangements in the workplace and sufficient break rooms could considerably ease physical fatigue.

Training in Emotional Resilience

These should be made part of orientation and in-service training programs. Developing the ability of workers, especially young nurses, to regulate their emotions makes them resistant to burnout during the critical period of the first five years of their careers.

6. CONCLUSION

The research clearly establishes that occupational stress and burnout are common and significant occurrences within healthcare personnel at CSI Jayaraj Annapackiam Mission Hospital, Tirunelveli. The combination of prolonged periods of employment, emotional/physical weariness, work stressors, and inadequate organisational assistance results in burnout conditions that affect work performance and decrease job satisfaction.

The correlation between variables is explicitly demonstrated: emotional exhaustion and performance impairment are significantly related ($r = 0.707$); frustration aggravates exhaustion ($r = 0.585$); and burnout negatively affects both job satisfaction and performance ($r = 0.518$). These are not just individual cases; they are organisational issues that require organisational solutions.

There can be no talk about the health status of health workers without mentioning the availability of high-quality healthcare services. If the healthcare sector does not have enough people who are well-rested, supported, and committed to their jobs, then the provision of compassionate and devoted attention by doctors to patients will become impossible. Thus, addressing occupational stress among employees becomes one of the key priorities for modern hospitals.

Hospitals that focus on enhancing their human resource potential by supporting employee well-being through dedicated programs, workload balance, managerial skills training, and career advancement will reap significant benefits in terms of organizational effectiveness. The risks associated with ignoring employee well-being will outweigh the benefits many times over.

7. REFERENCES

- [1] Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Lawrence Erlbaum Associates.
- [2] Daniel, P. (2020). Emotional exhaustion among healthcare professionals. *Journal of Healthcare Administration*, 9(2), 40–47.
- [3] Fernandez, R. (2023). Automated attendance systems in hospitals: Transparency and efficiency. *Healthcare Operations Review*, 12(1), 14–22.
- [4] Gupta, R. (2020). Occupational stress and employee performance in the healthcare sector. *International Journal of Management Studies*, 6(4), 55–63.
- [5] Iyer, S. (2021). Stress management practices in hospitals. Academic Book House.
- [6] Joseph, A. (2020). Stress and emotional exhaustion among healthcare employees. McGraw-Hill Education.
- [7] Kavitha, M. (2022). Employee burnout and organisational productivity. Emerald Publishers.
- [8] Kumar, S., & Singh, P. (2019). Employee burnout and job performance in hospitals. *International Journal of Healthcare Management*, 5(2), 45–52.
- [9] Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, 2(2), 99–113.
- [10] Maslach, C., & Leiter, M. P. (2016). Burnout. In G. Fink (Ed.), *Stress: Concepts, cognition, emotion, and behavior* (pp. 351–357). Academic Press.
- [11] Ministry of Health and Family Welfare. (2023). Healthcare workforce and employee welfare report. Government of India.
- [12] Nair, M. (2022). Healthcare employee stress and job satisfaction. Himalaya Publishing House.
- [13] Patel, R. (2021). Impact of long working hours on healthcare workers. *Journal of Organisational Behaviour*, 8(1), 33–40.
- [14] Reddy, K. (2021). Organisational support and employee well-being. Academic Press.
- [15] Robbins, S. P., & Judge, T. A. (2017). *Organisational behaviour* (17th ed.). Pearson Education.
- [16] Sharma, R. (2018). Workplace stress management in healthcare organisations. Pearson Publications.
- [17] Thomas, J. (2022). Burnout and motivation among nurses. *Healthcare Research Journal*, 10(3), 60–68.
- [18] Varma, R. (2019). Workforce discipline through attendance monitoring: Findings from a tertiary hospital. *Journal of Hospital Administration*, 4(2), 18–26.