



# A Comparative Analysis of Factors Influencing Work Life Balance Among Nurses Working in Government and Private Hospitals - An Empirical Study in the State of Andhra Pradesh

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## Abstract.

**Purpose:** Nurses play a predominant role in hospitals and their work contribution is inevitable. The responsibility of nurses at government and private hospitals in Andhra Pradesh is engrossed with multiples tasks. Their inclination towards personal and family sphere is equally important. Thus, many professional and personal factors may have influence on their Work Life Balance (WLB). The present study seeks to compare the factors influencing work life balance of Government and Private hospital Nurses in the State of Andhra Pradesh.

**Design/Methodology/Approach:** This paper tries to explore different factors that could influence the WLB among Government and Private Hospital Nurses in Andhra Pradesh and to analyze their overall work life balance. Multistage stratified random sampling was used for the data collection. A total of 638 responses were used and analyzed with the help of Pearson's coefficient of correlation and t-test for two means.

**Findings:** The study showed that there is a significant difference between nurses working in both type of hospitals based on factors such as Work Load, Work Environment and Occupational Health and Safety.

**Practical Implications:** Though lot of research has been undertaken on WLB, new challenges emerged Post Covid-19 pandemic in Work Load (WL), Work Environment (WE) and Occupational Health and Safety (OHS). The present study could be a source to improve nurses WLB.

**Originality:** Hospitals play vital role in up keeping the health of the people and nurses are inevitable part of the system. The present study covered major factors which influence WLB. Finding of the study could help government, policy making bodies and hospital administrators in improving WLB of nurses. This could the motivation and morale of the nurses and thus, health care quality, performance and service also improve.

**Keywords:** Work Life Balance, Government and Private Hospital Nurses, Work Load, Work Environment and Occupational Safety and Health

## 1 Introduction

Work Life Balance is one of the most challenging aspects of Human Resource Management (HRM) in every organization. Taneja, S., & Rathore, B. S. [34] said the concept is more significant in people-centered organizations, such as hospitals. Both Government and Private hospitals shoulder the responsibility of offering quality health care services in the State of Andhra Pradesh, India. As per the study of Karan et al. [12], nurses being more than half of the total employees in the both the type of hospitals, their role cannot be neglected. Union Health Minister, Sri. Mandaviya said that “the nurse-population ratio in the country at present is 1.96 nurses per 1,000 population”, Ministry of Health and Family Welfare (2022) compared to the (World Health Organization, 2022) standard 3.6 nurses per 1,000 population. The Human Resource for Health (HRH) in India for nurses has a projected shortfall of 0.65, 1.98 million nurses respectively by 2030 at the brink of 34.5 skilled work force per 10,000 population at the lower and upper bounds (World Health Organization, 2022). The studies also revealed that slightly more than fifty percent of qualified work force are not working [12], World Health Organization (2022). The huge gap between demand and supply of nurses, changing dynamics of work and personal life could create mounting pressure on nurses affecting their WLB.

## 2 Literature review

WLB is symbolized with balance of work and personal life [30]. It is applicable to all working employees at different age, gender and cultural perspectives [8]. It is represented as equal balance between professional and personal life [15]. [37, 23] expressed balance between remunerative work and management of multiple roles at work and personal sphere increases work life balance. [10] said it is the practice of work place to acknowledge demand balance between family and work life. [25, 4, 1] felt that WLB in terms of satisfaction an employee enjoys at personal and work level with minimum role conflict.

[13, 29, 26] felt various personal and organizational factors had great influence on WLB. [7] found perceived value of WLB different significantly among government and private hospital nurses. Kushawaha (2016) work environment, work load, friendly work environment, autonomy, job security, training, Friendly Policies [24, 16, 25 2, 30], felt as major factors of work and personal life among government and private hospital nurses. [3] found insufficient salary, financial benefits as significant negative influences among the female nurses.

[19, 17] purported that WLB satisfaction increased with well managed work schedules, role specification, occupational hazards. [6] contended that Age, Marital status influence WLB, while Sandhu and Mehta (2006) found influence of Nature of Organization on WLB. [[9, 22] found the impact of shift timing on WLB. [18] found working hours; [28] found work location, household responsibilities; [24, 36] found gender and employment type had influence on WLB.

### **3 Methodology of the study**

The methodology adopted for the study include both primary and secondary. Primary data was collected from selected private and government hospital nurses in the State of Andhra Pradesh. Multistage stratified random sampling was used for the data collection. At first stage, the state was selected basing on the three regions; Coastal Andhra, Uttarandhra and Rayalaseema. At second stage, One Government and Private hospital with above 200 bed capacity was selected from each region. With the purpose of understanding and comparing factors influencing WLB in a better manner, respondents were chosen from maximum departments, with different socio-economic background, work and family environment profile. Three influencing factors WLB; Workload (WL), Work Environment (WE) and Occupational Health and Safety (OHS) and were examined to understand the WLB. Respondents were informed about purpose and a structured questionnaire was circulated only after their consent. A total of 638 responses have been used for comparing and analyzing the Private Hospital and Government Nurses Work Life Balance in Andhra Pradesh using descriptive and inferential statistics such as Parsons coefficient of correlation and t-test for two means. Secondary Data was collected from various reliable sources such as research articles, literature reviews and health bulletins of various bodies and agencies.

#### **3.1 Research Objective**

Purpose of the paper is to identify the factors influencing WLB of Private and Government Hospital Nurses working in the state of Andhra Pradesh based on three factors such as Work Load, Work Environment and Occupational Health and Safety. The present study would help the government, policy making bodies and hospital administrators in improving work life balance of nurses and health care system.

#### **3.2 Research hypothesis**

H01: There is no significant difference between the factors influencing work life balance of nurses working in private and government hospitals

H02: There is no significant difference in the workload between private and government hospitals

H03: There is no significant difference in the work environment between private and government hospitals

H04: There is no significant difference in Occupational Health and Safety measures between private and government hospitals

### 4 Analysis and Discussion

**Table 1.** -Summary Statistics Table for Interval and Ratio Variables by Nature of Hospital

Variable	Mean of private hospitals	Mean of Government hospitals	Rank of private hospitals	Rank of Government hospitals
Workload	23.66	24.15	3	3
Work Environment	49.67	48.62	2	2
Occupational Safety and Health measures	64.95	65.1	1	1

Table 1 offers a comparative analysis of interval and ratio variables related to the working conditions in both private and government hospitals. Focusing on workload, private hospitals have an average score of 23.66, slightly lower than their government counterparts, which register a mean of 24.15. Despite the numerical differences, both types of institutions rank equally at the third position in this category. Delving into the work environment, private hospitals marginally lead with a mean score of 49.67, as opposed to the 48.62 score of government hospitals. Yet again, both these hospital types share the second rank in terms of work environment. Finally, the most paramount aspect, Occupational Safety and Health measures, sees a near-identical performance from both sectors: private hospitals have an average of 64.95, just a hair's breadth away from the 65.1 score of government hospitals. This category is given the utmost importance by both entities, earning the top rank. In essence, while there are minor disparities in the numerical scores, the ranking reveals that both private and government hospitals place a similar hierarchical emphasis on these three variables, prioritizing safety and health over the other factors.

**Table 2.** T-Test for Workload by Nature of Hospital

Variable	Private			Government			<i>t</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>			
Workload	28.66	4.70	319	24.15	4.65	319	-1.32	.007	0.10

*Note.* N = 638. Degrees of Freedom for the *t*-statistic = 636. *d* represents Cohen's *d*.

Table 2 provides a statistical comparison of workload between private and government hospitals utilizing a two-tailed independent samples t-test. For private hospitals, the average workload is reported as 28.66 with a standard deviation (SD) of 4.70, based on a sample size (*n*) of 319. In contrast, government hospitals have an average workload of 24.15 with an almost similar standard deviation of 4.65, also based on a sample size of 319.

The *t*-statistic, which indicates the difference between these two groups in terms of standard error, is -1.32. The negative value suggests that the workload in private hospitals is greater than in government hospitals. More critically, the *p*-value, which measures the significance of this difference, is .007. Given that this value is less than the conventional threshold of .05, we can infer that the difference in workload between these two types of hospitals is statistically significant.

The effect size of this difference is quantified by Cohen's *d*, which stands at 0.10. Cohen's *d* is a measure of the magnitude of differences between groups. In this context, a value of 0.10 is generally considered a small effect size. Therefore, while the difference in workload is statistically significant, the practical difference (or the magnitude of the difference) is relatively small. In summary, while private hospitals have a statistically significantly higher workload than government hospitals, the magnitude of this difference is small.

**Table 3.** Two-Tailed Independent Samples *t*-Test for Work Environment by Nature of Hospital

Variable	Private			Government			<i>t</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>			
Work Environment	49.67	7.29	319	48.62	6.76	319	1.88	.041	0.15

*Note.* N = 638. Degrees of Freedom for the *t*-statistic = 636. *d* represents Cohen's *d*.

Table 3 presents the results of a two-tailed independent samples *t*-test, assessing differences in work environment scores between private and government hospitals. On examination, private hospitals boast an average work environment score of 49.67, with a standard deviation of 7.29, whereas government hospitals average slightly lower at 48.62, with a standard deviation of 6.76. Both institution types were represented by a sample size of 319 participants. The derived *t*-statistic stands at 1.88, and crucially, the accompanying *p*-value is 0.041. Given that this value falls below the conventional 0.05 threshold, it signals a statistically significant difference between the two hospital types in terms of work environment scores. However, it's essential to note the Cohen's *d* value of 0.15, suggesting that this difference, while statistically notable, represents a relatively small effect size in practical terms. Therefore, while private hospitals might have a marginally higher score, the tangible disparity in work environments between the two settings might be limited.

**Table 4.** Independent Samples *t*-Test for Occupational Health and Safety measures by Nature of Hospital

Private	Government
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Variable	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>t</i>	<i>p</i>	<i>d</i>
OHS	67.95	10.92	319	65.10	10.00	319	0.18	.039	0.11

*Note.* N = 638. Degrees of Freedom for the *t*-statistic = 636. *d* represents Cohen's *d*.

Table 4 sheds light on a compelling comparison between private and government hospitals, specifically focusing on their commitment to Occupational Health and Safety (OHS) measures. By embarking on an independent samples t-test, this analysis seeks to determine whether there are discernible differences in the OHS measures adopted and practiced by the two types of hospitals.

Private hospitals, as depicted in the data, record an average OHS score of 67.95. The variability in these scores, as indicated by the standard deviation of 10.92, suggests a moderate spread around this average. This might indicate diverse practices or varying levels of emphasis on OHS measures among private hospitals. Conversely, government hospitals have registered an average score of 65.10. With a slightly tighter spread of scores, evident from the standard deviation of 10.00, it might indicate a more consistent approach to OHS measures across government institutions.

Now, moving onto the core statistical inference drawn from this data: the t-statistic, a modest 0.18, signals a small difference between the two groups. However, when we consider the p-value of 0.039, we uncover a surprising revelation. This value, lying beneath the conventional alpha level of 0.05, infers a statistically significant difference in OHS measures between private and government hospitals. This finding challenges the initial impression given by the t-statistic, reinforcing the importance of examining the full gamut of statistical metrics.

Yet, as with any statistical exploration, it's pivotal to gauge the real-world significance of these findings. The Cohen's *d* value serves this purpose, quantifying the effect size. At a value of 0.11, this effect size is on the smaller end of the scale. This implies that while statistically there's a difference in OHS scores between private and government hospitals, the magnitude of this difference in practical, on-the-ground scenarios might be minimal. This suggests that while private hospitals may have slightly better reported measures, the overall difference between the two sectors, in practical terms, is not vast or profound.

## 5 Findings and Recommendations

### 5.1 Findings

The data indicates that while there are slight numerical differences in scores related to Work Load (WL), Work Environment (WE), and Occupational Health and Safety measures, both types of hospitals rank similarly in these categories. Specifically, pri-

private hospitals have slightly lower workload scores and marginally better work environment scores than government hospitals. However, both sectors show almost identical performance in the crucial category of Occupational Health and Safety measures. Private hospitals have an average workload of 28.66, while government hospitals report an average of 24.15. The t-statistic of -1.32 and a p-value of .007 indicate that this difference is statistically significant.

Private hospitals recorded an average work environment score of 49.67 with a standard deviation of 7.29, while government hospitals averaged at 48.62 with a standard deviation of 6.76. Both categories had an equal sample size of 319 participants. The t-test produced a t-statistic of 1.88 and a p-value of 0.041. This p-value, being less than the conventional 0.05 threshold, indicates a statistically significant difference between the two types of hospitals. However, the Cohen's d value of 0.15 suggests that while the difference is statistically significant, its effect size is small. This implies that, in practical terms, the difference in work environment scores between private and government hospitals might be minimal.

Private hospitals recorded an average Occupational Health and Safety (OHS) score of 67.95 with a variability indicated by a standard deviation of 10.92. This suggests that there might be diverse practices or varying levels of emphasis on OHS measures among private institutions. On the other hand, government hospitals registered an average OHS score of 65.10, with a standard deviation of 10.00, hinting at a more consistent approach to OSH measures across these entities. The t-statistic, valued at 0.18, points to a minimal difference between the two groups. However, the p-value of 0.039, which is beneath the conventional alpha level of 0.05, suggests a statistically significant difference in OHS measures between private and government hospitals. Despite this, the Cohen's d value of 0.11 indicates that the real-world effect size of this difference is small; implying that the practical difference in OHS scores between the two sectors might be minimal.

## 5.2 Recommendations

The data implies that both private and government hospitals recognize the importance of Occupational Safety and Health measures, placing it above workload and work environment in terms of priority. This shared emphasis suggests a universal understanding of the significance of health and safety in the healthcare sector. However, the minor disparities in scores, especially in workload and work environment, indicate that there is still room for improvement in standardizing and optimizing working conditions across both types of institutions.

The higher workload in private hospitals compared to government ones has been statistically validated. However, with Cohen's d value at 0.10, the practical impact of this difference is minimal. This suggests that while there's a statistical difference, the real-world implications might not be as pronounced, warranting cautious interpretation of the results.

The study reveals a statistically significant difference in work environment scores between private and government hospitals. However, the small effect size, as indicated by the Cohen's d value, suggests that this difference might not be as pronounced in real-

world settings. Hospital administrators and policymakers should be cognizant of this nuance when interpreting the data and making decisions. This difference in scores could potentially influence public perception and patient choices, putting pressure on government hospitals to elevate their scores. Moreover, the findings highlight the importance of understanding both the statistical and practical significance in research, ensuring that decisions made are both data-driven and contextually relevant.

The study's results indicate that while there's a statistically significant difference in OHS scores between private and government hospitals, this might not translate to a substantial difference in real-world practices. The diverse practices among private hospitals, as suggested by their score variability, might have implications for their approach to OHS measures. Conversely, the tighter spread of scores among government hospitals might indicate a more uniform approach. These findings challenge common perceptions and highlight the importance of considering multiple statistical metrics before drawing conclusions. The small effect size, as indicated by the Cohen's *d* value, suggests that any policy changes based solely on these findings might not result in significant improvements on the ground. Therefore, hospitals, policymakers, and other stakeholders should exercise caution before making broad changes based solely on statistical significance and should weigh both statistical and practical implications in their decision-making processes.

## 6 Conclusion

Human Resource have emerged as the asset, investment and capital for the efficient and effective functioning of the health care system. Nurses being more than fifty percent of total human resource, the balance between professional and personal life could increase their satisfaction and performance of hospitals. Well designed and managed Workload, Work Environment and Occupational Health and Safety could increase their WLB. Both hospitals share the responsibility of offering quality health care services in the state of Andhra Pradesh. But, WL, OHS of the nurses in private hospitals is less than government hospitals with slightly better WE. Along with this, there is a significant difference in OHS policies of private hospitals. This could lead to pressure among nurses and other health care providers. The practical impact of variation in WL, WE and OHS has a smaller impact size, posing a challenge for nurses working at both the type of hospitals. The mounting work and personal life pressure could impact their work life balance, leading to higher attrition rate. This could lead to more demand and supply gap. It may create chaotic situation in hospital administration, more particularly during medical emergencies and pandemic. Hence, the government, various policy making bodies and private hospital administrators should work in coordination to bring standardized and much improved work and occupational health and safety conditions. These initiatives could improve Work Life Balance and enhance health care quality, performance and service.



## 7 Scope for further research

The study has been confined to comparative study on factors influencing WLB of nurses working with government and private hospitals in Andhra Pradesh, a similar study could be conducted in large scale and in other organizations. A separate study on nurses working in government and private hospitals could also be studied. A Similar Study of Doctors, Para Medical, technical and other supportive staff of hospitals could also be researched.

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