

# A Study on Workplace Ergonomics And Its Impact on Employee Performance in A.K.G Memorial Co-Operative Hospital, Kannur

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**ABSTRACT** - Employees performance is based on various financial and non-financial factors out of which, Workplace convenience and facilities are important particularly for Healthcare workers. Ergonomics is the science of fitting workplace conditions and job demands to the capability of the working population. Effective and Successful fits assure higher productivity, avoidance of illness and injury risks, and increased satisfaction among the workforce. Without proper ergonomics, there is increased absenteeism and sick leaves which ends up reducing the productivity of the employees and eventually affecting the profitability of the Organization. This research article attempts to provide the vital information regarding the work environment factors which have an influence on employee performance. The research was conducted among 150 employees selected using Stratified random sampling method to identify the factors of ergonomics that support the employees to work efficiently and effectively in the hospital.

**Key words:** Ergonomics, Employees, Healthcare, work environment

## I. INTRODUCTION

Workplace ergonomics is the science of designing the workplace, keeping in mind the capabilities and limitations of the worker. Poor worksite design leads to fatigued, frustrated and hurting workers. Health care facilities are prone, due to the nature of the work, to have ergonomic stressors impacting their staff. Employee injuries lead to increased costs, higher turnover rate, increased sick days, and short staffing.

Employees in nursing and personal care facilities suffer over 200,000 work-related injuries and illnesses a year. Many of these are serious injuries. More than half require time away from work. Worker's compensation costs for the industry now amount to nearly \$1 billion per year. Workers in nursing homes are as likely as other workers to be injured on the job.

(Back Injuries among Healthcare workers: Causes, Solutions and Impacts by William Charney Anne Hudson, 2003)

*-United States Department of Labor – Occupational Safety & Health Administration (OSHA)*

The application of ergonomic principles in the workplace can result in the following:

- Increased productivity
- Improved health and safety of workers
- Lower workers' compensation claims

- Compliance with government regulations such as Occupational Safety and Health Administration (OSHA) standards
- Improved job satisfaction
- Increased work quality
- Lower worker turnover
- Lower lost time at work
- Improved morale of workers
- Decreased absenteeism rate.

## FACTORS AFFECTING EMPLOYEE PERFORMANCE

Key factors that affect employee productivity and performance fall into two categories:

Management driven factors and;

Factors that arise from premises, offices or factory design.

Some of the management driven factors that tends to affect employee's productivity and performance are:

- Organization plans such as the allocation of responsibilities at all levels of the organization, definition of job descriptions and the degree of access to the management and administrative support needed to complete their tasks;
- Working patterns, shift-working, break times, absence or holiday cover; and

- Health and safety policies, including the provision of training, development of safe working practices and the adequate supply of protective clothing and equipment.

Factors that arise from premises, offices or factory design tends to affect employee productivity and performance:

- Furniture
- Workspace availability
- Light intensity
- Weather/temperature
- Ventilation/humidity
- Noise/vibration
- Premises hygiene/welfare facilities

## II. REVIEW OF LITERATURE

Leblebici, 2012.[3] Says that Many business executives are under the mistaken impression that the level of employee performance on the job is proportional to the size of the employee’s compensation package. Although compensation package is one of the extrinsic motivation tools, it has a limited short term effect on employees’ performance. A widely accepted assumption is that better workplace environment motivates employees and produces better results.

An article entitled Workplace environment and its impact on employee performance Al-Anzi, N.M. (2009).[6] The author of this paper focuses on functional workplace environment often culminates in improved employee efficiency and productivity. In recognition of this fact, most offices are now designed and furnished with the employee in mind to ensure that his workplace environment including furniture and equipment adequately supports and induces high performance. The quest to equip employees and workers with most suitable workplace environment, furniture, equipment, tools and techniques to discharge their duties efficiently and effectively is the fundamental philosophy behind the development and growth of ergonomics. The performance of an employee is measured actually by the output that the individual produces and it is related to productivity. At corporate level, productivity is affected by many factors such as employees, technology and objectives of the organization. It is also dependent on the physical environment and its effect on health and employees’ performance.

Taiwo (2009).[5] claims that about 86% of productivity problems reside in the work environment of organizations and he observed that work systems do not only affect commitment, competence and cost effectiveness but also have long term effects on physical health, mental health and longevity of life of employees.

Hameed and Amjah (2009)[7] investigated the impact of office design on employee productivity as a case of banking organisations of Abbottabad. The study used 31 bank branches of 13 banks to ascertain the relationship between

office design and productivity. The results from the study exhibited that office design is a very important in terms of rising employee productivity.

Haynes (2008),[8] attempted to investigate the impact that office comfort has on office occupants’ productivity. The study claimed that there is a linkage between the physical comfort of the office environment and the effect on the productivity of the office occupants. The author from his review literature established that there is enough evidence to buttress the claim that office comfort can affect productivity. However, it was revealed that there is no generally accepted definition of office comfort, and there is a clear lack of agreement as to how office comfort should be measured.

## III. AIM OF THE STUDY

- ❖ To determine the impact of work environment on employee’s productivity.
- ❖ To analyze workplace physical design.
- ❖ To study the level of employee satisfaction with work environment.

## IV. RESEARCH FRAMEWORK

The study aims at to identify the factors of ergonomics that support the employees to work efficiently and effectively in the hospital. Hence, the Research Design used for the study is Descriptive Research Design. The primary data has been collected with a Questionnaire prepared by the researcher. The Sampling Unit of the Research is the Employees working in the Hospital. The key area where the study was carried out is A.K.G Memorial Co-Operative Hospital, Kannur in the year 2019. The population for the study is 272. Stratified Random sampling has been used for the study and the sample size includes 150. Simple Percentage analysis has been used for the study. The researcher has used a five point scale ranging from Strongly Agree to Strongly disagree.

## V. RESULTS AND DISCUSSION

### 1.1 Table showing the distribution of respondents based on their Age, Gender, Designation, Education and Experience:

1)	Age	20-30	31-40	Above 40
		90	43	17
2)	Gender	Male	Female	
		38	112	
3)	Designation	Nurses	Administrative Staff	Department Staff
		103	26	21
4)	Education	Diploma	UG	PG
		43	74	33
5)	Experience	Below 5 years	5-10 years	Above 10 years
		46	68	36

**1.2 Table showing the respondents opinion towards the Impact of Work Environment on Employee performance:**

S. No	PARTICULARS	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
		Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%
1)	Management has created an open and comfortable work environment	28	18.7	29	19.3	62	41.3	31	20.7	-	-
2)	Work environment allows me to balance personal and professional life	22	14.7	76	50.6	18	12	23	15.4	11	7.3
3)	Employee performance level will be directly proportional to adequate and comfortable furniture in workplace	23	15.3	38	25.3	67	44.7	22	14.7	-	-
4)	Work area is sufficiently equipped with all typical needs	87	58	11	7.3	10	6.7	20	13.3	22	14.7
5)	Employee performance level will be related to calm and noise free environment	31	20.7	53	35.3	44	29.3	9	6	13	8.7
6)	Recreational activities for employees are arranged by the hospital	22	14.7	87	58	20	13.3	11	7.3	10	6.7
7)	Satisfied with the amount of sick leave policy	9	6	26	17.3	10	6.7	51	34	54	36
8)	Policies regarding health and safety of the employees are considered	23	15.3	48	32	37	24.7	30	20	12	8
9)	Employee upgradation and technology upgradation goes hand in hand	-	-	43	28.7	58	38.7	22	14.6	27	18
10)	Due to overall work environment, daily tasks are completed efficiently	17	11.3	57	38	76	50.7	-	-	-	-

The respondents were asked to express their opinion on a 5 point rating scale. The scale consisted of 5 point with opinions given as 5-Strongly Agree; 4- Agree; 3- Neutral; 2- Disagree; 1- Strongly Disagree. The respondents were asked to give ratings for the items which are closer to their opinion towards Impact of Work Environment on Employee performance.

The overall rating for the training and development programme organized by the hospital is considered Very Good by 19%, Good by 73%, Bad by 5% and Very bad by 3%. Moreover 72% of the respondents have said yes and 28% of the respondents said no to the statement Without training they face difficulty in performing the job.

When we discuss about the Organizational Effectiveness of the hospital, we can understand that 83% of the employees have responded positively that all the employees coordinate to achieve their goals, 75% have responded favorably that the resources and the facilities are utilized to the maximum, 80% said that the Colonial relationship between the management and workers has created conducive work climate, 78.4% said that the Organization is quiet dyn When we discuss about the Organizational Effectiveness of the hospital, we can understand that 83% of the employees have responded positively that all the employees coordinate to achieve their goals, 75% have responded favorably that the resources and the facilities are utilized to the maximum, 80% said that the Colonial relationship between the management and workers has created

conducive work climate, 78.4% said that the Organization is quiet dyn The study population include 80% of employees between 20-30 age group, 13% between 30-40 age and 7% of the age above 40. Out of the 100 respondents 27% are men and 73% are women The study population include 80% of employees between 20-30 age group, 13% between 30-40 age and 7% of the age above 40. Out of the 100 respondents 27% are men and 73% are women.

The study population include 90 employees are between 20-30 age group, 43 between 31-40 age and 14 employees are above 40. Out of the 150 respondents 38 are men and 112 are women. When we discuss about the Work Environment of the hospital, we can understand that 38% of the employees have responded favorably that Management has created an open and comfortable work environment, 40.6% said that Employee performance level will be directly proportional to adequate and comfortable furniture in workplace, 65.3% said that Work environment allows me to balance personal and professional life, 65.3% said that Work area is sufficiently equipped with all typical needs, 56% said that Employee performance level will be related to calm and noise free environment, 47.3% said that Policies regarding health and safety of the employees are considered and 49% of the employees have responded positively that Due to overall work environment, daily tasks are completed efficiently.

## VI. SUGGESTION

Research suggests that unfavorable work situations can directly impact employee performance regardless of personality predispositions, whereas the development of supportive work environments can have a direct and positive effect on employees. The following suggestions can be adopted for the improvement of the work environment and helps to increase the employees performance.

- Proper Workplace layout, Ventilation, Lighting, Establishment of equipments and Thermal comfort for improve the better Performance.
- Health and safety policies, including the provision of training, development of safe working practices and the adequate supply of Personal protective equipment.
- Communicate positively and openly.
- Welfare Facilities
- Provide training and equipping.
- Provide constant feedback.
- Provide employees with flexibility and choice.

## VII. CONCLUSION

This study has assessed the impact of Workplace ergonomics on the performance of employees in the Multispecialty Hospital. The results from the study confirm that Workplace ergonomics deficiencies are impacting negatively on the performance of the employee. Recent developments in the regulatory arena clearly shows that understanding of ergonomics and applying good ergonomic practices is key to successful management of human resources. The effect of neglecting ergonomics principle in the equipment design, work posture, work environment, task and mental demand, work organization will decrease in employee's performance and Production. This study examined that making ergonomic changes before major problems occur is more cost effective than simply responding to work-related injuries.

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