

# Impact of Workplace Environment on Health Workers

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#### Abstract

Employee morale can be impacted in both positive and negative ways by the workplace environment. Workplace environment plays a major role in the performance and productivity of an employee. Most industries have an unsafe workplace environment and are most time unhealthy too. This study is focused on the workplace environment in a health facility and how it affects the health worker. An unsafe health facility environment such as unsuitable furniture, poorly designed workstations, lack of ventilation, excessive noise, inappropriate lighting, poor supervisor support, poor work space, poor communication, poor fire safety measures for emergencies, and lack of personal protective equipment, can adversely affect the productivity of the employee. Health workers in such environment are exposed to occupational diseases such as heat stress, deafness, ergonomic disorders and suffocation. Health worker's productivity and performance can decrease due to poorly planned workplace environment as this adversely affects their morale and may give rise to poor motivation and no job satisfaction as a result, it becomes a challenge for the management to provide a safe work environment for the workers to ensure health, efficiency, productivity and good performance. The relationship between the health worker, work and the workplace environment is very crucial and hence it becomes an integral part of work itself. Management effort in ensuring an active workforce should be focused on employee personal motivation and the infrastructure of the work environment.

**Keywords:** Workplace; Productivity; Performance; Ergonomic; Workforce

#### Introduction

The environment can be termed as a man's closest surrounding which he can manipulate for his survival or existence. If this surrounding is wrongly manipulated, it may lead to unsafe situations rising and making it difficult for man's survival. Hazards as a result of the poorly managed surrounding can hinder employees productivity rate and lead to a low morale. This makes the workplace environment a very crucial determinant of the employee performance, morale, and productivity. The workplace entails an environment in which the worker performs his work [1] while an effective workplace is an environment where results can be achieved as expected by management [2,3]. Task performed in the workplace can be directly affected by the physical environment where the task is being performed.

The physical environment as an aspect of the workplace environment has direct impact on the human sense and can slow change interpersonal interactions and thus productivity. This is so because the characteristics of a room or a place of meeting for a group have consequences regarding productivity and satisfaction level. A large number of work environment studies have shown that workers/ users are satisfied with reference to specific workspace features. These features preference by users are highly significant to their productivity and workspace satisfaction, they are lighting, ventilation rates, access to natural light and acoustic environment [4-8].

Lighting and other factors like ergomic furniture has also been found to have positive influence on employees health [9-11] and

consequently on productivity. Ambient features in office environments, such as lighting, temperature, existence of windows, free air movement etc, suggest that these elements of the physical environment influence employee's attitudes, behaviours, satisfaction, performance and productivity [12,13].

When the employees physically and emotionally have the desire to work, then their performance outcomes shall be increased [14]. Absenteeism can be reduced by having a proper workplace environment; which can in turn increase employee performance and productivity. Chandrasekhar stated that the connection or relationship between the work, workplace, and tools of work had become the most important aspect in their work itself [15]. The management has a challenge to establish an environment that will affect, effect, attract, retain and motivate its employees toward increased productivity.

#### Today's workplace

The physical environment at work plays a vital role in employees' productivity. Management must take an active part in defining the physical environment in which the health workers carry out their daily task to make it conducive. Management style can also influence worker's commitment and this should be monitored, these styles can be altered to suit the workers. This refers to changing aspects like ethics, behavior, commitment, drive, interpersonal relations and professionalism.

Today's management has to change the style of functioning in order to bring about effective changes in these aspects. Management has to spend more time on controlling these factors of the work environment rather than micromanage. This can be achieved by improving on the physical workplace and facilities, delegating responsibilities, increasing

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accountability, and encouraging team work. This will promote trust and loyalty among the workers and encourages better teamwork among them. Besides, they develop a sense of ownership and belonging towards the organization. Maximizing health worker's productivity is centered on personal motivation and the infrastructure at the work environment.

Effective workplace communication is a key to cultivation of success and professionalism [16]. A company that communicates throughout the workplace in an effective manner is more likely to avoid problems with completing the daily procedures, and less likely to have a problem with improper occurrence and will generate a stronger morale and a more positive attitude towards work. When employees communicate effectively with each other, productivity will increase because effective communication means less complains and more work getting done [17].

It removes confusion and frees up wasted time that would have been otherwise spent on explanation or argument [18]. It makes workplace more enjoyable, less anxiety among co-workers which in turn means positive attitude towards work and increased productivity [19,20].

Furthermore, another aspect of communication that affects productivity is noise level. Noise has negative influence on communication, frustration levels increase while productivity decreases in relation to persistence and loudness of noise. A reason adduced for this is that spoken communication becomes progressively more difficult as noise levels increase.

The ability of a health worker to effectively work in a crowd of many uncontrolled patients is limited. In a survey in a survey reported that nine out of ten workers believed that a workspace quality affects the attitude of employees and increases their productivity [21]. Chandraseker also confirm that unsafe and unhealthy workplace environment in terms of poor ventilation, inappropriate lighting, excessive noise etc. affect workers' productivity and health [15].

# Workplace environment factors

Health worker' performance can be influenced by salary increase and bonuses, but this is short lived and have a limited effect compared to the impact workplace environment has on the performance of the employee. It is the quality of the employee's workplace environment that most impacts on their level of motivation and subsequent performance. How well they engage with the organization, especially with their immediate environment, influences to a great extent their error rate, level of innovation and collaboration with other employees, absenteeism and ultimately, how long they stay in the job.

Many studies have revealed that most employees leave their organization because of the relationship with their immediate supervisor or manager, or because the physical environment is no longer conducive. The most important workplace factors that can affect health workers' performance include; job aids, goal-setting, supervisor support, workplace incentive, performance feedback, defined processes, and other physical, social and environmental factors.

**Job aids**: Providing templates, guides, soft training, checklists etc. to the health worker to assist in improving their performance. This is to make their work easier and minimize error rate and improve patients' satisfaction.

**Goal-setting**: When health workers are being involved in setting meaningful goals and key performance indicators (KPI) for their work. This can be done informally between the health worker and their

immediate supervisor or as part of an organization's formal performance management process.

**Supervisor support:** Immediate supervisors act as advocates for employees, gathering and distributing the resources needed by the employees for them to be able to do a good job and providing positive encouragement for a job well done.

**Workplace incentives**: The organization determines what motivates its employees and sets up formal and informal structures for rewarding employees behaving in the way required.

**Performance feedback:** A feedback process where the health worker's performance assessment is fed back to them. This consists of both positive feedback on what the health worker is doing right as well as feedback on what requires improvement.

**Defined processes:** The organization constrains the variability of how work is actually performed through documenting processes and communicating such expectations to employees.

**Physical factors**: Physical factors in the workplace such as poor layout or overcrowding can lead to common types of accident such as tripping or striking against objects.

**Social factors**: Here the relationship between the health worker and the employers and the patient is considered. Poor inter-personal skill and attitude among the colleagues can affects performance.

**Environmental factors**: Environmental factors such as temperature, lighting and ventilation can have a direct impact on health-for example very high temperatures can lead to heat stress and heat exhaustion. This in-turn affects the performance of the health worker.

# **Research Method**

The study was conducted in Abuja metropolis. Data analyzed was collected through the use of Questionnaires. 40 health workers in Zenith Medical and Kidney Centre were given the questionnaires and there was a 100% return rate.

The survey was conducted using a questionnaire with 3 sections administered to a total of 40 health workers in a private owned secondary health facility in FCT, Abuja. The survey included a 15 questions questionnaire addressing aspects of the work environment, human resources, and infrastructure, asking health workers to state their agreement on a 5-point scale.

An additional three questions related to overall job satisfaction were asked, namely, how satisfied they were with their own job, how satisfied other people are in similar jobs, and, finally, how much they would like to continue to work for this facility. Based on the analysis, a range of factors that impact on health workers' performance at work was determined. These included job factors that motivate health workers' performance, physical factors that affect and influence performance, and factors that affect health workers' attitudes at work.

# Workplace factors analysis

Work space and facilities required for the job: The physical work space and work facilities in the health center are extremely important in maximizing health worker productivity. Table 1 shows the response of the workers to questions regarding factors of physical work environment.

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On average, 74.7% of respondents showed satisfaction towards work space and facilities provided. Majority of the health workers are given the required space and facilities to do their job.

S/ N	Responses	Percentage
1	Highly Satisfied	3.4
2	Satisfied	74.7
3	Partially Satisfied	15.9
4	Dissatisfied	4.1
5	Highly dissatisfied	1.9
	Total	100

 Table 1: Satisfaction of health workers towards the work space and facilities provided

**Environmental factors**: Effects of lighting, ventilation, temperature, and noise level on health workers performance was considered. Most of the workers (65%) agreed that poor workplace environmental factors such as lighting, ventilation, temperature, and noise level in the work area can have negative impact on their performance and productivity (Table 2).

S/ N	Responses	Percentage
1	Strongly Agree	7.6
2	Agree	65.5
3	Partially Agree	20.4
4	Disagree	4.1
5	Strongly Disagree	2.4
	Total	100

 Table 2: Effects of workplace environmental factors on health workers' productivity

**Relationship with supervisors at the workplace**: Health workers supervisors act as advocates for the junior colleagues, gathering and distributing the resources needed in order to do a good job and providing positive encouragement for a job well done. From Table 3, it can be inferred that 49.4% respondents maintain a strong relationship with their superior at the workplace. Therefor it can be concluded that there is a strong supervisor support for the health workers.

S/ N	Responses	Percentage
1	Very Strong	12.6
2	Strong	49.4
3	Partially Strong	25.8
4	Not Very Strong	8
5	Not Strong	4.2
	Total	100

Table 3: Relationship level with supervisors at the workplace

**Quality of work aid and equipment standard**: Enhancing performance through provision of work aids such as templates, guides, checklist and soft-trainings were assessed and 51.8% of the respondents agreed that work aids has a positive impact on their performance(Table 4).

S/ N	Responses	Percentage
1	Strongly Agree	29.4
2	Agree	51.8
3	Partially Agree	15.2
4	Disagree	2.4
5	Strongly Disagree	1.2
	Total	100

 Table 4: Effect of work aids on health workers' performance

**Communication system at the workplace**: A formal communication system at the workplace promotes trust and loyalty among the workers and encourages better team work. 56.9% respondents feel that there is a formal communication system at the workplace and this is vital in maintaining the social life among the health workers, also in ensuring that task are properly communicated from one level to another for better performance (Table 5).

S/ N	Responses	Percentage
1	Very Good	20.4
2	Good	56.9
3	Fairly Good	10.5
4	Not Good	6.7
5	Bad	5.5
	Total	100

Table 5: Communication system at workplace

**Procedures for goal setting:** For health workers to achieve organizational goals there is a need to involve them while creating the goals. This procedure was assessed and it was found out that 66.4% of the respondents were satisfied with the procedure of goal setting in the facility as their opinions were always considered. This further motivated them to work better (Table 6).

S/ N	Responses	Percentage
1	Highly Satisfied	7.5
2	Satisfied	66.4
3	Partially Satisfied	20.8
4	Dissatisfied	3.5
5	Highly dissatisfied	1.8
	Total	100

 Table 6: Goal setting process

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**Workplace incentives:** The management understands that incentives can be used as a reward system to motivate health workers. In this facility, 61.5.2% of respondents were highly dissatisfied with the incentives/reward system practiced, this can adversely affect the performance of the worker (Table 7).

S/ N	Responses	Percentage
1	Highly Satisfied	1.6
2	Satisfied	5.2
3	Partially Satisfied	10.9
4	Dissatisfied	20.8
5	Highly dissatisfied	61.5
	Total	100

 Table 7: Workplace incentives and workers performance

# **Results and Analysis**

# Physical environment on health worker performance

Physical environment, which consists of office design, ventilation, lighting and other basic amenities have a great impact on the performance of workers in the health facility. Analysis revealed that a large number of employees (74.7%) felt satisfied about their location and office space where they stay half of the day, and were also satisfied with the other amenities like lightings, toilets, furniture, colour of the office wall and roof structure. 65% of the respo the workplace is gentle and quiet. 64% felt that work place has noise distraction when there is large crowd of patients; also room temperature seem to affect 60% of the respondents and it does not have any effect for very few respondents (30%). With all these results gathered, it can be said that physical environment of the workplace has an impact on health workers productivity.

#### Social environment on health worker performance

The social life and environment in any health facility has an important role to play in the workers' performance and productivity. A cheerful and happy health worker will encourage and guide the patients, and make them comfortable around the facility. It was indicated that 89% employees felt the team spirit will make large impact on performance. Majority (84%) said it is important to get encouragement from immediate supervisors to perform better, but only 49.9% of the respondents were having strong relationship with each other and their supervisors and claimed it helps in ndents agreed that these factors can affect their performance negatively, 25% were of the opinion that the discharge of their daily duties. 88% of respondents were of the opinion that flexible, easily accessible and approachable supervisors and co-workers would have a positive effect on the job and it can be transferred to the patients as well. Interpersonal relationship among the workers also plays a vital role in workers performance.

# Impact of overall work environment on health worker performance

Attempt was made to analyze the direct impact of the entire workplace environmental conditions have on the health workers in this facility. Areas such as personal goal achievement, job stress, and job position were considered. It was found that job stress (74%) will make drastic impact on productivity, 64% were satisfied with current job position. Most of them (70%) have accomplished their personal goal which led them to be more productive. When opinion was asked about the overall work condition, it was found that 74% were absolute happy, less (22%) were some extent happy and 4% were not happy at all with the job they were doing.

### **Recommendations to Improve Workplace Environment**

The following recommendations may be taken as the strategic initiatives to take the health facility forward in achieving more productivity and workers performance.

- Workers' incentive and reward system should be reviewed upwards. This will greatly motivate the workers and thereby improve their productivity.
- Supervisor support should be improved.
- Brightening up the wall colors, office space and the work area can greatly can create a lively impression on the workers.
- Communication lines should be open with workers to find out what kind of programs would motivate them.
- A feedback mechanism should be initiated where workers' performance can be communicated to them and create room for improvement.
- Strong communication between management and workers should be developed.
- Revision of goals and objectives and involving workers in decision making that concerns them would make them feel as though they are an integral part of the organization.
- Adding some materials of nature such as plants to the workplace will make the workers enjoy the environment much more.
- Recognition and award system should be encouraged.
- Renovation of office space, new furniture, and colors will have a positive effect on workers' performance.
- Improved work aids and more exposure to soft skills training should be initiated.
- Flexible work time schedule for workers.

#### Conclusion

Health worker's job satisfaction should be the target for health system improvements. Health worker satisfaction is associated with intent to stay, and health worker retention is necessary for the provision of high quality health care. The results from this study have shown the effect of workplace environmental factor on health workers performance and productivity and suggest that efforts should be geared towards improving the physical environment, social environment, and work system associated with the workplace. Effort should focus on providing healthcare workers with the infrastructure and tools they need to do their jobs.

This includes sufficient job aids, supervisor support, proper ventilation, lighting, incentives, recognition and reward system, and general infrastructure. In addition to being necessary for health workers to deliver high quality care, this could foster health worker satisfaction, increasing the benefits of the investment. This is important to consider in the context of the many ongoing experiments with pay for performance, which are unlikely to boost satisfaction if weak infrastructure prevents health workers from successfully fulfilling their tasks.

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#### References

- 1. Chapins A (1995) Workplace and the performance of workers. Reston: USA.
- 2. Mike A (2010) Visual workplace: How you see performance in the planet and in the office. International Journal of Financial Trade 11: 250-260.
- 3. Shikdar AA (2002) Identification of ergonomic issues that affect workers in oilrigs in desert environment. Inter JOSE 10: 169-177.
- 4. Becker F (2002) Improving organizational performance by exploiting workplace flexibility. J Faculty Manage 1: 154-162.
- 5. Becker FO (1981) Workspace creating environments in organization. New York: Praeger.
- 6. Humphries M (2005) Quantifying occupant comfort: Are combined indices of the indoor environment practicable? Building Research and Information. 33: 317-325.
- 7. Karasek R, Theorell T (1990) Health work: Stress, productivity and the reconstruction of working life.
- Veitch JA, Charles KE, Newsham GR, Marquardt CJG, Geerts J (2004) Workstation characteristics and environmental satisfaction in open-plan offices. COPE Field Findings (NRCC-47629): National Research Council.
- 9. Dilani A (2004) Design and health III: Health promotion through environmental design. IADH.
- 10. Milton DK, Glencross PM, Walters MD (2000) Risk of sick leave associated with outdoor air supply rate, humidification and occupant complaints. Indoor Air 10: 212-221.
- 11. Veitch JA, Newsham GR (2000) Exercised control, lighting choices and energy use: An office simulation experiment. J Envir Psych 20: 219-237.

- 12. Veitch J, Gifford R (1996) Choice, perceived control and performance decrement in the physical environment. J Envir Psych 16: 269-276.
- 13. Larsen L, Adams J, Deal B, Kweon B, Tyler E (1998) Plants in the workplace: The effect of plant density on productivity, attitude and perceptions. Environment and Behavior 30: 261-281.
- 14. Boles M, Pelletier B, Lynch W (2004) The relationship between health risks and work productivity. J Occup Environ Med 46: 737-745.
- Chandrasekar K (2011) Workplace environment and its impact on organizational performance in public sector organizations. IJECBS 1: 1-20.
- Quilan M (2001) Precarious employment: Work re-organization and the factoring of OHS management. International Journal of Systematic Occupational Health and Safety Management 24: 175-178.
- 17. Canadian Centre for Communication (2003) Effectiveness of participative communication. J of Human Development 40: 422-423.
- Fleming M, Larder R (1999) When is a risk not a risk? Professional Safety 69: 30-38.
- 19. Makin AM (2006) A new conceptual framework to improve the application of occupational health and safety management system. In proceeding of the European safety and reliability conference.
- Tayler B (2012) Creating a psychologically healthy workplace: The role of communication. Retrieved February 27, 2010 from http://www.phwa.org/ resources/creating a healthy workplace.
- 21. Huges J (2007) Office design in pivotal to employee productivity. Sandiego Source, The Daily Transcript.