



## Working Environment Enhanced Mental Stress in the Nurses

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**ABSTRACT:** *Inefficient job performance is associated with various environmental factors. These factors are also reason to low satisfaction levels which leads to poor performance in the workers. The working environment factors can be a reason for the anxiety in employees and poor performance in the workers. A cross-sectional study was conducted and 200 nurses were selected from Services Hospital Lahore. Demographic characteristics and different working variables such as environmental hazards, workplace layout, infection control measures, and proper availability of resources were considered. Pearson correlation and regression were carried out for the environmental factors and job performance and a strong positive relationship with the  $p$ -value  $<.001$  was recorded. This study revealed that the better environmental conditions plays an important role in job performance and lessens the mental stress. It is suggested that performance may be improved by addressing safety, infection control measures, and by providing appropriate resources.*

**Key words:** *Burnout, Poor performance, Mental stress, Variables, Environment, Employees*

### INTRODUCTION

Stress in employees is gaining attention because it has great effects on the mental and physical health of the workers (Cooper, 1998). Stress in nurses is a useful criteria to monitor the health of organizational performance in hospitals (Oaklander and Fleishman, 1964). Its

major deleterious effects are reduction of job satisfaction, found to be an indirect cause of absenteeism among the nursing staff, and poor attendance of patients (Gray-Toft and Anderson, 1985). The overall prevalence of Job stress in Iranian nurses working in hospitals was found 60% (Mohammadi, 2020). Generally, sustaining mental health is one of the

main issues for public health (Steel et al., 2014), according to previous literature 17.6% of the population facing a common mental disorder, 29.2% having experienced lifetime mental disorder (Bonasksen et al., 2019).

Career routine is an extremely important aspect of an organization and it has a great impact on the behaviour of workers. Disorganized career routine is associated with lesser efficiency which leads to less cost-effectiveness and weakening of general managerial effectiveness (Cooke 2001, Okoye and Ezejiofor, 2013). Healthier job routine is the fundamental concept of today's workplace for patient-centered care (Viswesvaran and Ones, 2000) and business success and employee satisfaction (Muchhal, 2014).

Nurses are the significant possessions of health structures so better enactment is expected from them as they have to be mentally strong to deal with patients. The performance of nurses is closely linked to the output and worth of concern condition surrounded by wellbeing concern organizations for this motive, it was significant on the way to identify factors influencing the in sort to get better the excellence of healthiness think about delivery from nurses (Al-Mailam, 2005).

The head nurse can change the effects of a demanding work environment by maintaining a leadership style that is supportive of the needs of the staff nurses. It is the best way by which a head nurse

can help to reduce work stress. (Duxbury et al., 1984; Bakker et al., 2000)

Although there are many factors which affect the performance, such as a superior profitable location, stiff employment promote and an aged personnel, and enlarge return rate among nurses, also the incentives and the other facilities provided. However, in many studies, it is hypothesized that good environmental factors function as a buffer against conditions favoring low satisfaction levels leading to poor performance and it has better impact on mental health (Bakker et al., 2004). Moreover, environmental factors also cushion alongside extra unconstructive influences in the place of work, such as professional pressure which is the leading cause of burnout and poor performance hence, more attention has to be given to the conducive environment for the high productivity by the employee so that they can work with a free mind, patient satisfaction, and low turnout and can even increase the revenues of the organization (Janssen et al., 1999; Schroeder and Worrall-Carter, 2002; Christmas, 2008). Also identifies that the corporeal situation the stage the vital position in the maintenance of the staff, also the places like restrooms. An imperative factor in the substantial location to be the accessibility of the equipment and peer relations to the staff. Thus it's the employer responsibility to give proper working environment so that the routine of workers meets the preferred values and

they can work in tension free environment (Garrett and McDaniel, 2001).

This study will help nurses to know about a contact of job green factors on nurses' employment routine. Secondly, this study will help the organization to aware of the study result, which will help to overcome weaknesses. The objective of the study was to assess the effect of environmental factors on job performance among nurses of the tertiary health care sector

## **METHODOLOGY**

A cross-sectional quantitative study was designed to investigate the working environment and its impact on the nurses in the Services hospital, Lahore Pakistan. It is one of the busiest public hospitals in the heart of Lahore with the departments of medical, surgical, emergency, cardiology, and neurology. The inclusion criteria were the staff nurses of all departments in the services hospital who showed willingness and interest to participate in the study. In the exclusion criteria, students Nurses, and head nurses or nurses in the administration of the department was not considered.

The sample size was obtained by using the Slovin's (or sometimes Sloven's) formula.

$$n = \frac{N}{1 + (N)(E)^2}$$

Where, n was the sample size, N the population size and E was the margin of error (Almeda et al., 2010; The Philippine Statistician, 2012)

A sample size of the study was 200. The convenient sampling strategy

included a questionnaire of the dependent variable was chosen. Moreover in the independent variable data was collected against age, gender, mother tongue, level of education, years of experience. The instrument of the workplace environment was adopted from AWASES, (2006) which contains 8 items as independent variables. The instrument was about the physical environment and the availability of the supplies in the workplace environment e.g., safe environment, necessary instruments were available, equipment's are working condition, contamination control plan procedures were accessible and that sterilized solution for the security of employees and patients are available

Data entry was done in SPSS Version 21.00. Forms that have more than 30 percent discrepancies were discarded. A normality test was applied and it was noticed data was normal and in a range between +1 to -1 of skewness and kurtosis. Mean and standard deviation were also computed and considered to present the results.

## **RESULTS**

### **Demographic Characteristics**

Table 1 summarized the uniqueness of respondents (n=200) on the base of their sex (male, female), age (18-25 years, 25-35 years, 35-50 years and above 50 years), working experience (Less than 1 year, 1-5 years, 6-10 years, and above 10 years), married category (married, single), and requirement

(Nursing diploma, specialization, Post RN and others).

**Table 1: Demographic Characteristics of the Nurses**

<b>Demographic variables</b>	<b>Frequency</b>	<b>Percent</b>
<b>Gender</b>		
Female	200	100.0
<b>Age</b>		
18-25	60	30
25-35	60	30
35-50	60	30
Above 50	20	10
<b>Stay in organization</b>		
Less than 1Year	60	30
1-5Years	60	30
6-10Years	60	30
Above 10Years	20	10
<b>Marital Status</b>		
Married	60	30
Single	140	70
<b>Qualification</b>		
Nursing diploma	120	60
Specialization	49	24.5
Post RN	20	10
Other	11	5.5

Out of 200 considered nursing staff around 70% (n= 140) of the respondents were single and the rest of them were married. The age of the participants was considered and the percentage in each age group i.e., 18-25 years, 25-35 years, and 35-50 years were recorded as 30 (n=60). Only 10.3% (n=21) of the participants were found in an age group above 50.

Only 12.3 percent of the participants (n=21) were working for more than 10 years. Other categories of work experience in the present organization have a similar percentage (%=30, n=60) of participants. The majority of the participants (%= 60, n=120) have a diploma in nursing and very few participants (%= 5.5, n=11) of them have the other qualification then specialization and Post RN.

**Table 2: Work Environment-related variables**

Variables	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My work environment is safe and Free from hazards	3(1.5)	4 (2)	15 (7.5)	70(35)	108 (54)
Workplace layout	1(.5)	27 (13.5)	70 (35)	102 (51)	0 (0)
My work place has Comfortable temperature	12 (6)	2 (1)	18 (9)	47 (23.5)	121 (60.5)
Necessary instruments are available at my workplace	9 (4.5)	6 (3)	22 (11)	67 (33.5)	96 (48)
Instruments available at my workplace in working conditions	13 (6.5)	7 (3.5)	20 (10)	74 (37)	86 (43)
Antiseptic hand solution for the safety of team and patients is obtainable at my workplace	15 (7.5)	7 (3.5)	21 (10.5)	67 (33.5)	90 (45)
Infection control strategy guidelines are Available at my workplace	5 (2.5)	17 (8.5)	16 (8)	115 (57.5)	47 (23.5)

For the work environment, Likert scale tool was used with 7 items, and each of them has five values for the participants to score on. Around 89 percent of the participants were agreed that their workplace is a safe place. While 3.5 percent of participants felt that their workplace is not secured. Regarding the layout of the workplace around 51% were agreed that the workplace layout was good while 14 % were not agreed (Table 2). Pakistan has a warm climate and as a result of global warming and its consequences temperature is increasing day by day and a big hazard for the working environment. Around 84% percent of the participants agreed that they have comfortable temperatures at workplace, besides this another half of the individuals were either neutral or disagreed with this statement (Table 2).

Instrument availability was necessary to carry out the routine checkup of the patients. Approximately 81.5% of the participants were satisfied with the availability of equipment while the rest were either neutral or not satisfied (Table 2).

Surprisingly 11 percent of the nurses revealed that they are not even privileged to have an antiseptic solution at their workplace while the rest were satisfied with the availability and use of the antiseptics. Moreover, for infection control strategies only 11% were dissatisfied and the rest were satisfied (Table 2).

**Pearson Correlation Test between Job performance and Workplace Environment**

A strong positive relationship was noticed between job performance and

workplace environment with a p-value of 0.987.

### **Multiple Regression Analysis**

Multiple regression analysis was carried out and it was noticed workers showed better performance with a better workplace environment. A significant  $p < .001$  ( $\beta$  is positive 0.48) value was recorded showed job performance was associated with the workplace environment variables.

### **Discussion**

This was the first study regarding nurses' mental health with reference to their working environment. 100 percent of females were considered in this study and different questions such as environmental hazards, workplace layout, temperature, infection control measures, and proper availability of resources were considered. It was noticed in the study most of the workers were satisfied with their working environment and job performance. Cooke (2001) states the working environment and its satisfaction level are very important factors for the occupational health of an organization. This study revealed that good working condition pursues the nurses to be dedicated towards customer needs, and coherent to other studies which say that better job recital is the core build of today's labor rest for patient-centered care as described by Muchhal (2014) and Viswesvaran (2000). The direct and positive relationship between conducive

environment and high productivity by the employees in this study was also coherent to other studies which further relate it with more patient satisfaction, and low turnout and can even increases the revenues of the organization (Bakker et al., 2004; Christmas, 2008). The present study presents that safety among all the working conditions was necessary which was also discussed extensively in other studies (Laschinger et al., 2009; Applebaum et al., 2010). These studies revealed that the physical environment plays an important role in job performance and was already cited in various literature studies about the retention of the staff is highly related to its better working environment with reference to Christmas (2008) and Duffield et al. (2010).

Nurse staff supposes nurse administrators' support when nurses agonize any hostile experiences with healthcare professionals or with the patients, otherwise, nurses could consider this like organizational disloyalty, which increases stress, job frustration, and even their work could be disturbed (Brewer et al., 2019).

The nurse leader's sympathy and humane treatment provide the nursing staff a way to improve their formation about emotions, stress management, and self-esteem. It could also help in organizational behaviors and healthy work environments in clinical settings, mental stress management, and even can improve the quality of care (Wilkinson et al., 2017; Feather et al., 2018). The

significant factors in the bodily setting were the accessibility of the equipments and the peer family to the staff. It is consequently imperative for the employer to supply an inappropriate working environment to make sure that the performance of staff meets the much-loved values. Moreover, the majority of the nurses provide this information that they do not have the availability of the hand wash solution whereas. Pittet et al. (2000) also shared that compliance to hand washing can only increase if recourses like soap and water are available. Proper temperature of the workplace is as important as food and water as reported by Applebaum et al. (2010), which is quite evident in the present study also, nurses who are satisfied with the indoor temperature were more perceptive to patient need than others.

### **CONCLUSION**

The physical environment of the health-care facility affects tremendously the performance of the workers. This study helped in a better understanding of the environment and suggested that performance may be improved by addressing safety, infection control measures, environmental temperatures, and supplies availability.

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