Working Environment And Job Performance Of Nurses In Cox's Bazar Medical College Hospital

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Abstract— **Job performance is a multidimensional response to working environment and work. The working environment influences on nurses' Job performance both positively and negatively. A cross-sectional study was conducted in Cox's Bazar Medical College, Hospital, Cox's Bazar from 1st January to 31st December 2019 with the aim to assess the working environment and job performance of nurses. Total respondents in this study were 210 nurses. Samples were selected by purposive sampling technique. After taking written consent from the respondents, data collection was done by face to face interview using a semi-structured questionnaire with the help of Copenhagen Psychosocial Questionnaire II and Performance Evaluation Rating Scale. Data were analyzed using SPSS. The study findings revealed that 33.8% had good, 51.4% average and 14.8% poor state of physical environment and 2.8% had good, 64.4% average and 32.8% poor state of psychosocial environment. Therefore 81.5% respondents' job performance needed some improvement. The results revealed that there was a significant relationship between educational qualification and job performance of nurses (p< 0.001; pulled from χ2 text) and psychosocial environment and job performance of nurses (p<0.015; pulled from χ2 text). So, a conducive working environment is very crucial in every hospital to improve nurses' job performance and provide quality care.**

Keywords—Working environment, Physical environment, Psychosocial environment, Job performance, Nurse.

1. INTRODUCTION

Job performance defined as the effectiveness of a person in carrying out his or her roles and responsibilities related to direct patient care; others define it as fulfilling the assigned roles and responsibilities effectively (Scotter J, Motowidlo S, 1996) [1]. Job performance is a multidimensional response to workplace environment and work. It depends on various factors, and influences the behavior of employees that, in turn, affects organizational achievements. The working environment influences on nurses' job performance both positively and negatively.

Nurses are one of the most diverse and largest workforces in the health care system. The word "nurse" originated from Latin word "Nutricius" which means someone who nourishes, fosters and protects. The role of nurses in the health care system is expanding and changing. Their role is not just limited to institutional care but also involves delivery of services at various levels of the health care system. The nurses are one of the strongest pillars of the health care delivery system in providing safe, affordable and quality services to the people. Mortality, morbidity and disability reduction, health promotion through healthy lifestyles are positive health outcomes in which nurses have a pivotal role (WHO, 2013) [2].

Job performance depends on many factors, and a person may be satisfied with one or more dimension of his/her career, but at the same time, may be unhappy with other elements. As per the motivator-hygiene theory by Herzberg, job satisfaction and dissatisfaction are not two opposite ends of the same spectrum but instead are two separate concepts (Herzberg F, 1974) [3]. It typically involves other factors relating to the place of employment such as the quality of the air, noise level and benefits of employment such as cafeteria (Awan and Tahir, 2015) [4]. Lighting and other factors like ergomic furniture has also been found to have positive influence on employees health 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, behaviors, satisfaction, performance and productivity (Pepple *et al.,* 2017) [5].

An effective working environment management entails making work environment attractive, comfortable, satisfactory and motivating to employees so as to give employees a sense of pride and purpose in what they do (Samson *et al.,* 2015) [6]. Factors of working environment have a great impact on nurses' job performance. These factors enjoys a key role in the performance of nurses either high or low performance outcome.

The performance of the nurses is related to the commitment of the nurses towards job. Nurses when feel satisfied they work hard and perform better. In health system, high level nurses performance leads to patient safety, security, proper treatment, attachment or affiliation with hospitals and peers (Khoso *et al.,* 2016) [7].

Nurses are working in health care organizations that are wrestling with staff shortage; increasing patient loads, shrinking reimbursement and growing regulating pressure (Bhaga, 2011) [8]. They are carrying out their responsibilities in a very poor working environment and with an enormous discrepancy between the supplies and demands of workforce and resources. They have faced a variety of challenges in several ways: such as poor health care delivery system, under staffing, poor distribution of responsibility and high workload, low salary structure and less opportunity for personal and professional developmental. Therefore, many professional demands are often unmet, because nurses have less opportunity to speak out in the policy level (Latif *et al.,* 2014) [9]. Job satisfaction among nurses is a major concern in Bangladesh; no research evidence has existed about the factors associated with nurses' job satisfaction in the country. In this regards, some surveys reported that job satisfaction among nurses in Bangladesh was near to the ground (Hossain *et al.,* 2016) [10].

A healthy workplace environment makes good business sense and is characterized by respect that supports employee engagement and creates a high performance culture that encourages innovation and creativity. (Samson *et al.,* 2015) [6].

In Bangladesh, particularly Cox's Bazar working environments and the problems associated with it are always neglected. Hospitals therefore have to create a working environment where their employees take pleasure in their work, believe their output is appreciated and rewarded appropriately enabling them to reach their potential. For the purpose of research whether to assess the Working Environment and Job Performance of Nurses in a Tertiary Level Hospital.

2. METHODS AND MATERIALS

2.1 Ethical Considerations: Ethical permission from Director of Cox's Bazar Medical College and Hospital was taken before data collection. Neither any intervention nor any invasive procedure was done.

Written informed consent was provided before data collection. Privacy and confidentiality of the data was maintained following standard guideline. The information obtained was published for research and technical purpose without mentioning the name and address the respondents.

2.2 Study Design: A cross-sectional study was conducted.

2.3 Study population: Nurses were working in Cox's Bazar Medical College and Hospital, Cox's Bazar.

2.4 Study period: The study was from 1st January to 31st December, 2019.

a) **Study place:** The study was conducted at Cox's Bazar Medical College and Hospital, Cox's Bazar, which is a government tertiary level hospital.

b) **Sampling technique:** A Purposive sampling technique was followed to select the sample. Sample size was 210.

c) **Inclusion criteria:**
✓ Nurses who were worked in the hospital for more than six month.
✓ Nurses who were presented in the hospital during data collection time.
✓ Respondents who agreed to participate in the study.

d) **Exclusion Criteria:**
✓ Respondents who were physically sick.
✓ Nursing management personnel.

e) **Tool of the study:** Semi-structured questionnaire prepared by using Copenhagen Psychosocial Questionnaire(COPSOQ) and Performance Evaluation Rating Scale. Physical environment related questions consist of 17 items that reflected the physical workplace environment situation of nurses in Cox's Bazar Medical College and Hospital. Five point likert score was used with rankings of 1 Not at all, 2 slightly, 3 moderate, 4 considerably, 5 extensively where higher score indicated higher exposure. A sum score was calculated from the 17 items. Range of possible score was 17 to 85. For easy measurements 17 items were categorized under 3 broad headings like, 17-39 score considered as good, 40-62 considered as Average and 63- 85 indicate poor from the total score of physical environment. Performance evaluation rating scale was a job performance evaluation direction used by the human resources office of Lamer Institute of Technology to measure the performance of their employees. The scale included 14 questions defining performance. These questions are also prepared based on the 5-point Likert Scale with ranking of 1 means major improvement needed, 2 some improvement needed, 3 meets expectations, 4 often exceeds expectations, 5 consistently exceeds expectations. Here, major improvement needed response represented the most negative and unfavorable rating while consistently exceeds expectations response represented the most positive one. Therefore, the ratings close to 5 means job

performance is increased and consistently exceeds expectations and those close to 1 means performance is reduced and major improvement needed in their performance. A sum score was calculated from the 14 items. Range of possible score was 14 to 70. 14-25 indicate Major improvement needed, 26-36 Some improvement needed, 37-47 Meet expectations, 48-58 Often exceeds expectation and 59-70 Consistently exceeds expectation. Data from the respondents were collected through face-to-face interview by using the pre –designed questionnaire. Data analysis was done by the use of computer with the help of software statistical package for social science (SPSS) version 20.

2.RESULT:

This cross sectional study was conducted in a tertiary level hospital named Cox's Bazar Medical College and Hospital. The study was aimed to find out the existing working environment and job performance of Nurses and association in between them. The demographic characteristics of the respondents are shown in Table 1.

Table 1: Socio-demographic characteristics of the respondents (n=210)

Gender	Frequency	Percentage	Statistics
Female	190	92.1%)	
Male	20	7.9%	
Age (years)			
20-29	15	7.1%	
30-39	95	45.6%	Std. Deviation = ± 6.221
40-49	90	42.9%	
50 -59	10	4.4%	
Educational qualification			
Diploma in Nursing	121	56.3%	
Nursing graduation	71	34.9%	
Post-graduate	18	8.6%	
Monthly income(Taka)			
25000-29000	19	8.3%	
30000- 34000	73	35.5%	
35000-39000	87	41.5%	Std. Deviation= ± 5238.056
40000-44000	12	5.7%	
45000-49000	8	3.8%	
50000-59000	11	5.2%	
Type of family			
Nuclear family	171	81.3%	
Extended family	34	18.7%	
Place of working ward			
Medicine ward	35	14.3%	
Surgery ward	35	14.3%	
Gynaecology & obstetrics	26	12.4%	
Pediatrics	20	9.5%	
Cardiology	19	9.0%	
Orthopedics	15	7.1%	
Nephrology,	15	7.1%	
Oncology	10	4.8%	
Gastroenterology, ENT and emergency ward.	35	14.3%	
Duration of service (years)			
0-4	50	24.1%	
5-9	32	15.00%	
10-14	63	29.3%	
15-19	44	21.0%	Std. Deviation= ± 6.320
20-24	13	7.3%	
25-29	7	3.3%	
Total	210	100%	

Table- 1. Shows that, 92.1% of the respondents were female where're, 45.6% respondents age group were 30-39. Out of total respondents 56.3% were diploma in nursing education and 41.5% respondent`s monthly income were 35000-39000 taka. Here, 81.3% respondents were form nuclear family and 29.3% respondent's length of service were 10 – 14 years and 24.1% from 0 – 4 years.

Table 2: Distribution of the respondents regarding physical environment factors affecting their work (n-210)

psychosocial environment	Poor	Average	Good
Quantitative demands	79(36.6%)	54(25.7%)	77(36.7%)
Work pace	49(23.3%)	83(39.5%)	78(37.1%)
Emotional demands	30(14.3%)	85(40.5%)	95(45.2%)
Influence	61(29.0%)	91(43.3%)	58(27.6%)
Degree of freedom at work	97(46.2%)	72(34.3%)	41(19.5%)
Role clarity	-	51(24.3%)	159(75.7%)
Quality of leadership	48(22.9%)	95(45.2%)	67(31.9%)
Social support from Supervisors	80(38.1%)	91(43.3%)	39(18.6%)
Trust regarding management	50(23.8%)	83 (39.5%)	77(36.7%)
Justice and respect	43(20.5%)	95 (45.2%)	72(34.3%)
Rewards	103(49.0%)	68(32.4%)	39(18.6%)
Job satisfaction	29(13.8%)	-	181(86.2%)
Stress	94(44.8%)	62(29.5%)	54(25.7%)
Self-rated health	-	24(11.4%)	186(88.6%)
Work-family conflict	56(26.7%)	83(39.5%)	71(33.8%)

Table- 2. It was seen from the table 2 that, out of 15 items, most of the respondents mentioned that 5 items (office building space, noise, overcrowding, prolonged standing position and uncomfortable posture) influenced their works considerably.

Table 3: Distribution of the respondents regarding situation of psychosocial environment (n=210)

Physical environment	Not at all	Slightly	Moderate	Considerably	Extensively
Office building space	-	58(27.6%)	97(46.2%)	55(26.2%)	-
Availability of lighting	22(10.5%)	105(50.0%)	60(28.6%)	23(11.0%)	-
Availability of Water	109(51.9%)	78(37.1%)	23(11.0%)	-	-
Old furniture	25(11.9%)	87(41.4%)	82(39.0%)	16(7.6%)	-
Overcrowding	-	-	48(22.9%)	117(55.7%)	45(21.4%)
Noise	-	-	55(26.2%)	112(53.3%)	43(20.5%)
Cleanliness	35(16.7%)	114(54.3%)	40(19.0%)	21(10.0%)	-
Availability of emergency drugs	66(31.4%)	87(41.4%)	43(20.5%)	14(6.7%)	-
Availability of staff personnel	33(15.7%)	105(50.0%)	51(24.3%)	21(10.0%)	-
Availability of PPE	78(37.1%)	93(44.3%)	25(11.9%)	14(6.7%)	-
Prolonged standing position	-	57(27.1%)	103(49.0%)	41(19.5%)	9(4.3%)
Uncomfortable posture	-	20(9.5%)	90(42.9%)	80(38.1%)	20(9.5%)
Changing room	19(9.0%)	74(35.2%)	92(43.8%)	21(10.0%)	4(1.9%)
Prayer room	55(26.2%)	85(40.5%)	54(25.7%)	16(7.6%)	-
Cafeteria	194(92.4%)	16(7.6%)	-	-	-

Table- 3. It was seen from the table 3 that, out of 15 items, respondents mentioned that 4 items (Quantitative demands, degree of freedom at work, rewards and stress) had poor and 8 items (Work pace, influence, quality of leadership, social support from supervisors, trust regarding management, justice, work-family conflict and respect) had average and the rest were 4 items (emotional demands, role clarity, job satisfaction and self-rated heath) good during to providing their service.

Table 4: Distribution of the respondents according to job performance (n=210)

Performance	Major Improvement Needed	Some Improvement Needed	Meets Expectations	Often Exceeds Expectations	Consistently Exceeds Expectations	Total
Quality of Work	-	78(37.1%)	96(45.7%)	31(14.8%)	5(2.4%)	210
Productivity	7(3.3%)	116(55.2%)	61(29.0%)	21(10.0%)	5(2.4%)	210
Knowledge of Job	-	67(31.9%)	104(49.5%)	30(14.3%)	9(4.3%)	210
Adaptability	9(4.3%)	117(55.7%)	60(28.6%)	19(9.0%)	5(2.4%)	210
Dependability	17(8.1%)	120(57.1%)	51(24.3%)	15(7.1%)	7(3.3%)	210
Initiative and Resourcefulness	71(33.8%)	64(30.5%)	54(25.7%)	17(8.1%)	4(1.9%)	210
Judgment and Policy Compliance	41(19.5%)	89(42.4%)	51(24.3%)	25(11.9%)	4(1.9%)	210
Relations with People & Customer Service	-	90(42.9%)	102(48.6%)	13(6.2%)	5(2.4%)	210
Attendance and Punctuality	-	68(32.4%)	118(56.2%)	20(9.5%)	4(1.9%)	210
Safety and Security	9(4.3%)	115(54.8%)	63(30.0%)	19(9.0%)	4(1.9%)	210
Leadership Ability	68(32.4%)	78(37.1%)	42(20.0%)	12(5.7%)	10(4.8%)	210
Appraisal and Development of People	-	137(65.2%)	48(22.9%)	19(9.0%)	6(2.9%)	210
Planning and Organization	57(27.1%)	75(35.7%)	51(24.3%)	17(8.1%)	10(4.8%)	210
Communication Skills	-	106(50.5%)	75(35.7%)	21(10.0%)	8(3.8%)	210

Table- 4. It was seen from the table 4 that, out of 14 items, most of the Nursing ward in-charge mentioned that 9 items (productivity, adaptability, dependability, judgment and policy compliance, relations with people& customer service, leadership ability, appraisal and development of people, planning and organization and communication skills) of the respondents needed some improvement.

Table 5: Distribution of the Nurses by state of physical environment (n =210)

State	Frequency	Percentage
Good	71	33.8%
Average	108	51.4%
Poor	31	14.8%
Total	210	100.00%

Table 5 indicated that state of physical environment had good 71(33.8%), average 108(51.4%), and poor 31(14.8%).

Table 6: Distribution of the Nurses by state of psychosocial environment (n =210)

State	Frequency	Percentage
Good	6	2.8%
Average	135	64.4%
Poor	69	32.8%
Total	210	100.00%

Table 6 indicated that state of psychosocial environment had good 6(2.8%), average 135(64.4%), and poor 69(32.8%).

Table 7: Distribution of the Nurses educational qualification in relation with their level of job performance and state of psychosocial environment in relation with their level of job performance (n =210)

Educational qualification	Job performance of the respondents		Total	Test Statistics
	Some improvement needed	Meets and Often exceeds expectations		
Post-graduate	3(16.7%)	15(83.3%)	18(100%)	χ^2 = 44.942
Graduate	43(58.1%)	31(41.9%)	74(100%)	df = 2
Diploma	102(86.4%)	16(13.6%)	118(100%)	P-value = 0.000
Total	148(70.5%)	62(29.5%)	210(100%)	
State of Psychosocial environment	Job performance of the respondents		Total	Test Statistics
	Some improvement needed	Meets and Often exceeds expectations		χ^2 = 5.859
Average to Poor	138 (73.0%)	51(27.0%)	189(100%)	df =1
Good	10(47.6%)	11(52.4%)	21(100%)	P-value =
Total	148(70.5%)	62(29.5%)	210(100%)	0.015

Table – 7. The results revealed that there was a significant relationship between educational qualification and workplace performance of nurses (p< 0.001; pulled from χ^2 text) and we also find out that there was a significant relationship between psychosocial environment and workplace performance of nurses (p<0.015; pulled from χ^2 text).
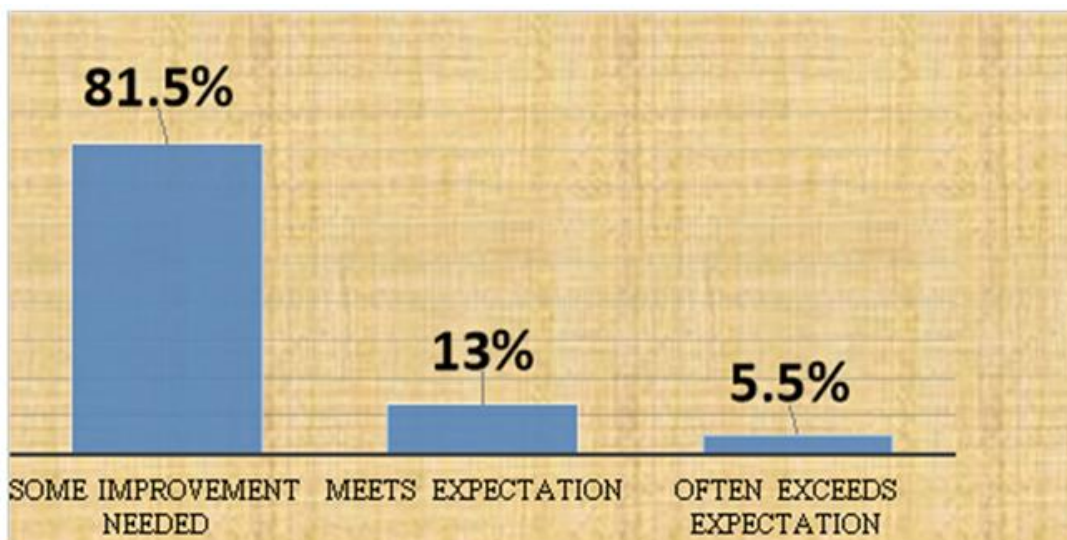
Figure 1: Distribution of the respondents according to level of job performance (n =210)

Figure- 1. Mentioned that, out of 210 respondents, 81.5% respondents were needed some improvement, only 13% respondents were meets expectation and the rest of respondents (5.5%) were often exceeds expectations in their performance.

4. DISCUSSION

This study is an initiative to assess the Working Environment and Job Performance of Nurses in a Tertiary Level Hospital. Study also reveals that there is an adverse relationship with working environment and job performance of nurses. Nurses' job performance level is cornerstone for better productivity of health care organizations. Less performing nurses reduces hospital productivity and a reason for poor hospitalized patient health outcomes. This study assessed nurses' Job performance level and identified working environment related factors affecting the job performance of nurses.

In overall job performance, 29.5% of nurses had meet and often exceed expectations and 70.5% of nurses had some improvement needed. This indicates almost two-third of nurses are not performing at their best level which might contribute to long hospital stay and poor patient care out comes. A similar finding was reported by Al-Ahmadi (2009) [11] in Saudi Arabia, more specifically areas rated at lower level by nurses' among performance measures were feedbacks to performance appraisal, remuneration, benefit and recognition, staffing and scheduling, staff development and workplace environment. These are areas where the hospital managers and nursing administrators should give emphases in order to get benefit out of nurse's best effort.

The study findings revealed that out of 210 respondents, most of the respondents (92.1%) were female and 7.9% were male because in Bangladesh, nursing is commonly considered as a woman's profession as similar to many other countries. The

result showed that 27.1% female meet and often exceed expectations and 55.6% male meet and often exceed expectations. The result seen that male nurses had a higher perception of performance than female nurses. So, there was a significant relationship between gender and working performance of nurses (p<0.011). Besides these result revealed that the mean workplace performance score was 41.33 among the male and it was 34.63 among the female. Significance association was observed between gender and job performance score.

Two dimensions of working environment including physical and psychosocial environment. State of psychosocial environment had 2.8% good, 64.4% average and 32.8% poor. Therefore, result revealed that a significant relationship between psychosocial environment and job performance of nurses (p<0.015).

In a study done by the Naharuddin and Sadegi (2013) [12] working environment could affect the job performance. To strengthen the judgment, Chandrasekar (2011) [13] found that the working environment is highly significant to job performance. Moreover Samson *et al.* (2015) [6] report similar result, they report that psychosocial aspects were an important factor in boosting the performance of employees while compared to other two variables; (Physical aspects and work life balance aspects).

From the above discussion it was seen that nurses' job performance was very influenced by psychosocial environment rather than physical environment. Although, this study did not examine the casual effect of working environment on job performance, but the significant relationship particularly between the job performance and psychosocial environment, are important to create conducive environments that will carry out high commitment among nurses towards hospital and bring out good performance.

5. CONCLUSION & RECOMMENDATIONS

Increasing level of Job performance mostly depends on working environment. A positive perception of work environment is related to a number of working conditions, such social support, workload and managerial support. In addition, some nurses' characteristics such as age and educational level play a significant role. It is vital to enhance work conditions and to create professional development opportunities to produce a more satisfied nurse who is willing to retain his/her current job and provide a better quality of care.

These programs could offer support, communication, training, reward and recognition of good job performance, managing workload, staffing and positive work environment through effective human resources management, and such measures could empower and motivate nurses and eventually, enhance performance and patient care.

CONFLICT OF INTEREST

None to declare.

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