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Article Workload and job satisfaction among nurses in a tertiary level hospital

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Abstract: Workload and job satisfaction are interrelated and have an impact on health care. A cross sectional study was conducted to assess the workload and job satisfaction among nurses in a tertiary level hospital, Rajshahi. Three hundred and eighty four Nurses were selected and interviewed with semi-structured questionnaire. Collected data were checked and transferred in to SPSS version 25 for analysis. Frequency, Percentage, Mean, SD and other statistics were calculated. In the study, 63.8 % of the respondents ages were within 21-30 years and majority (94.2%) was female. More than half 57.03% of the respondents had expressed low job satisfaction, 40.62% expressed moderate satisfaction and only 2.34% of nurses were highly satisfied with their job. About 25% respondent's opinion regarding workload in surgical wards and 18% in medicine ward. In this study, nurse patient's ratio in- pediatric medical unit was- 16:1, surgical unit- 15:1, medicine unit-14:1. About 96.9% got support from colleague, 88.5% respondents realize shortage of staff in that hospital. In this study near half of the nurses had not enough time to provide emotional support to the patient and almost 90% stated on shortage of staff nurses in the hospital. Fifty percent of the nurses expressed on excess workload and more than half of the nurses satisfied regarding nursing care given to the patients. Among the nurses 30% dissatisfied with the hospital work environment and overall job security. In this study, 88.5% respondent's opined regarding shortage of staff nurses in that hospital. Health facilities requires increase of nursing personnel.

Keywords: nurse; workload; job satisfaction; tertiary level hospital

1. Introduction

Bangladesh is a small and densely populated underdeveloped country with limited natural resources. To meet the demand of these vast populations, the country's manufacturing and service sectors are growing tremendously. The healthcare sector is also growing as manufacturing and other service sectors. To sustain in the health market, it is very important to provide quality service to its customers, which is achieved fruitfully when a country could ensure the satisfaction of healthcare employees especially the nurses. In recent years, providing high-quality health care delivery system is a fundamental challenge. To reach that quality level, reasonable level of nurses' job satisfaction should be attained (Elsherbeny and El-Masry, 2018). Likewise, it is also known that there is close connection between the job satisfaction of health care staffs and the total quality of health services. Job satisfaction in health care workers have a great impact on quality, effectiveness and work efficiency and at the same time on healthcare costs. Besides it is importance for patients and healthcare system as a whole, Professional satisfaction in healthcare workers indirectly connected with absence from work, human relations and organization of work. Kumar *et al.* (2013) finding was not similar to the findings of another study which reported that the majority of the participants were not satisfied with their job. Job satisfaction is a very important attribute which is frequently measured by organizations. The most common way of measurement is the use of rating scales where employees report their reactions to their job. Questions relate to rate of pay, work responsibilities, variety of tasks, promotional opportunities, the work itself and co-workers. Job satisfaction is an individual's cognitive, affective and evaluative reactions towards his or her job. It is the state where one's needs and one's outcomes match well, and a combination of cognitive and affective reactions to the differential perceptions of what an employee wants to receive compared to what he or she actually receives. Although the cost of nurse job dissatisfaction has not been directly measured, the high cost of turnover rate has been well established. Patient fall rate also increases the cost of healthcare (Gulavani and Shinde, 2014). Evidently, it is a factor that would induce the employee to work in the long-term position, and how pleased an employee is with his or her position of employment.

Job satisfaction is the extent of which employees like their job. It is also defined as the attitude and feelings of the people about their work. Thus, job satisfaction is one of the most vital factors that define efficiency and productivity of human resources (Elsherbeny and El-Masry, 2018). The low job satisfaction among nurses and the outcome such as the issues that affect both quality and cost of patient care. Organizations such as the American Nurses Association (ANA) and JCAHO have established quality indicators for healthcare institutions to use as monitoring standards. The ANA proposed that job satisfaction is one of the sensitive indicators for quality of patient care. Both organizations recognized staff satisfaction as a human resources quality indicator (Mohite *et al.*, 2014).

Job Satisfaction can be an important indicator of how employees feel about their job and a predictor of work behaviors such as organizational citizenship, absenteeism and turnover. Further, job satisfaction can partially mediate the relationship of personality variables and deviant work behaviors. In many countries, job satisfaction survey is regularly conducted and by monitoring obtained data, it is possible to notice omissions in organization of work (Mohite *et al.*, 2014).

Nurses need enthusiasm and feeling love, caring attitude and alarming concern to fulfill the needs of their patients (Henry and Henry, 2004). They have to face many awkwardness in providing care to the patients with their quick changing roles and separate environment (Mok and Au-Yeung, 2002). Quality assurance in health includes all the movements taken to encourage and intensify health care (Massoud *et al.*, 2001). Studies have provided evidence that satisfied workers tend to be more productive, creative, committed and will eventually contribute to higher quality patient care and patient satisfaction. Low Job satisfaction indeed contributes to nurses' in efficiency and affects their dedication to job quality and care given (Alvarez and Fitzpatrick, 2007).

2. Materials and Methods

The present research had been undertaken with the objective to assess the workload and job satisfaction among nurses in a tertiary level hospital.

2.1. Ethical consideration

Prior to the commencement of this study ethical approval of the research protocol from the Institutional Review Board (IRB) of National Institute of Preventive and Social Medicine (NIPSOM) was taken.

2.2. Research Design

The study design was a cross sectional study.

2.3. Study Setting

The study was conducted at Rajshahi Medical College Hospital (RMCH), Rajshahi.

2.4. Study period

The study was conducted from 1st January 2019 to 31st December 2019.

2.5. Study Sample

The study population included staff nurse (both male and female) with a work experience more than six month in a tertiary level hospital.

2.6. Sampling technique

Purposive sampling was used for data collection.

2.7. Sample size

Sample size was calculated through following formula.

$n = Z^2 pq/d^2$

From the above formula the estimated sample size was 384. Total 384 samples were collected from tertiary level hospital in Bangladesh.

2.8. Inclusion criteria

Permanent employee in a tertiary level hospital having work experience in the study place for more than six months and willing to participate in the study.

2.9. Tool of the study

The Semi Structured Questionnaire and observational checklist was prepared in English and then translates into Bangla. Questionnaires were planned designed according to the objectives to get information of the different variables. At the beginning of data collection, consent from concerned authorized person was taken. The purpose of the study was explained in details. Interview was taken separately. The interviews were done by face to face. The statistical analysis was conducted using SPSS version 24. The findings of the study were presented by frequency, percentage in tables and graphs. Means and standard deviations for continuous variables and frequency distributions for categorical variables were used to describe the characteristics of the total sample.

2.10. Scoring of the question

- Part A consists of seven socio-demographic questions.
- Part B: contains 17 items that help to measure workload among nurses. After intensive literature reviewed it was found that internationally standard nurse-patient ratio is 1:3 and nationally standard nurse-patient ratio is 1:5 and in this study, nurse patient ratio 1:5 is taken as standard. So Increase nurse patient ratio indicate increase the workload.
- Part C: contains 17 items that help to measure Job Satisfaction among nurses by using McCloskey/Mueller Satisfaction Scale (MMSS). A five-point Likert item represents each of the items. Likert item has options from1 to 5 where 1 represents "Strongly dissatisfied", 2 "Dissatisfied", 3 "Satisfied"4 "Moderate Satisfied "and 5 Strongly Satisfied. The subjects were asked to choose answer from 5 choices of each for Likert item question. The total score ranged from 17 -85. We categorise the score 17 39 Low satisfied, 40 59, Moderate satisfied and 60 85 highly satisfied. The higher scores indicated the higher level of job satisfaction.
- Part D: Nurse job satisfaction related factors having 6 items question which five question have yes/no answer and one question having four items measured with a 4-point Likert scale ranged from 1 (Very Poor Hygiene) to 4 (Very Good Hygiene).

3. Results and Discussion

Attributes		Frequency	Percent
Age	18 – 20 years	5	1.3%
-	21 - 30 years	243	63.8%
	31 - 40 years	81	21.1%
	41 - 50 years and above	55	13.8%
Sex	Female	355	92.4%
	Male	29	7.6%
Religion	Muslim	361	94%
-	Hindu	21	5.5%
	Christian	2	0.5%
Educational	Diploma in Nursing	248	63.4%
Qualification	BSc in Nursing	72	19.2%
	MPH/ MSc	64	17.4%
Marital Status	Married	310	80.7%
	Unmarried	72	18.8%
	Divorced	2	0.5%
Monthly income	Bellow- 20000 Taka	8	2.1%
-	20001 – 30000 Taka	214	55.7%

Table 1. Distribution of the respondents according to socio-demographic characteristics among nurses (n=384).

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	30001 – 40000 Taka	112	29.2%	
	40001 – 50000 Taka and above	50	13%	
Job experience	1-10 years	321	83.6%	
_	11-20 years	36	9.4%	
	21-30 years	27	7%	

Table 1 shows among the respondents, 63.8% had job experience of 21-30 years were 92.4% female and Muslim were 94%. More than half were (63.4%) Diploma in Nursing and 55.7% had monthly income of 20001 - 30000 Taka, 83.6% respondents had job experience between 1-10 years.

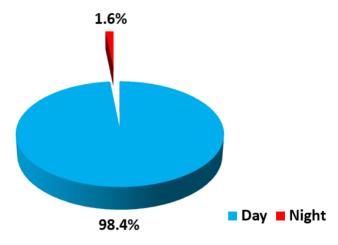


Figure 1. Distribution of the respondents according to preference of duty shift (n=384).

Figure 1 shows that 98.4% of the nurses prefer works at day shift and 1.6% of them prefer work at night shift.

Name of unit	No of unit	Total bed per unit	Total patient admitted per unit	Excess patients admitted	Number of nurses work in that units
Medical unit	8	240	560	320	120
Surgical unit	8	240	472	232	96
ICU	1	15	15	00	20
CCU	1	56	56	00	40
Gynae & Obs unit	4	120	260	140	60
Pediatric medical unit	4	120	249	129	45
Pediatric surgical unit	1	35	65	30	16
Total	27	826	1677	851	397

Table 2. Distribution of nurses according to hospital department.

Table 2 shows that, total bed in above wards had 826 and number of total excess patients against bed was 851 and total nurse's amount was 397 among them in Medical unit bed capacity was 240 and excess patients admitted was 320, in surgical unit capacity was 240 and excess patients admitted was 232, in gynae & Obs unit had 120 bed and excess patients was 140, in child medical unit had 120 bed and excess patients was 129, in child surgery unit had 35 bed and excess patients was 30 and only CCU and ICU where no excess patients was admitted.

Table 3. Distribution of the respondent's workload in the hospital unit according to patient - nurse ratio (n=384).

Name of unit	Total bed	Total patient	Total nurse	Total nurses working in each shift	Patient-Nurse ratio
Medicine unit	240	560	120	120/3=40	14:1
Surgical unit	240	472	96	96/3=32	15:1
ICU	15	15	20	20/3=7	2:1
CCU	56	56	40	40/3=13	4:1

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Gynae & Obs unit	120	260	60	60/3=20	13:1
Pediatric medical unit	120	249	45	45/3=15	16:1
Pediatric surgical unit	35	65	16	16/3=5	12:1

Table 3 shows that in medicinal unit Nurse-Patient ratio was 14:1, in surgical unit it was 15:1, Child medical unit it was 16:1 and in Child surgical unit the ratio was 12:1 that indicate more workload according to standard nurse-patient ratio.

Table 4. Distribution of the respondent's opinion regarding workload (n=384).

Workload related attributes	Y	es	No	
	Frequency	Percent	Frequency	Percent
Get support from colleague	372	96.9	12	3.1%
Enough staff to adequately cover the unit	163	42.4	221	57.6%
Enough time to complete all of nursing tasks	202	52.6	182	47.4%
Enough time to provide emotional support to the patient	224	58.3	160	41.7%
Answer all the health related advised to the patients	261	68.0	123	32.0%
Enough breaks for rest	120	31.2	264	68.8%
Realize shortage of staff in this hospital	340	88.5	44	11.5%
Know about Job description	338	88.0	46	12.0%

Table 4 shows that, 96.9% respondents give opinion they are get support from colleague, 88.5% respondents realize shortage of staff in that hospital, 88.0% respondents had concept about Job description, 68.0% respondents said they are answered all the health related advised to the patients, 58.3% respondents think they had enough time to provide emotional support to the patient, 52.6% respondents think they had enough time to complete all of nursing tasks, 42.4% respondents given opinion that they had enough staff to adequately cover the unit and 31.2% respondents said they had enough breaks for rest.

Table 5. Distribution of the respondents according to job satisfaction (n=384).

Attributes		T	ypes of satisfaction	on	
	Strongly dissatisfied	Dissatisfied	Satisfied	Moderate satisfied	Strongly satisfied
	N (%)	N (%)	N (%)	N (%)	N (%)
Satisfaction on wages and salaries	6 (1.6)	15 (3.9)	211 (54.9)	143 (37.2)	9 (2.3)
Satisfaction on hospital rules and regulations	9 (2.3)	63 (16.4)	142 (37.0)	164 (42.7)	6 (1.6)
Satisfaction on hospital work environment	20 (5.2)	127 (33.1)	104 (27.1)	125 (32.6)	8 (2.1)
Satisfaction on hospital overall job security	51 (13.3)	118 (30.7)	105 (27.3)	107 (27.9)	3 (.8)
Satisfaction on Annual leave receive from the hospital	8 (2.1)	50 (13.0)	176 (45.8)	145 (37.8)	5 (1.3)
Satisfaction on shift rotation	22 (5.7)	34 (8.9)	275 (71.6)	50 (13.0)	3 (.8)
Satisfaction about nursing care given to clients	11 (2.9)	30 (7.8)	219 (57.0)	102 (26.6)	22 (5.7)
Satisfaction on working with colleagues in this hospital	2 (.5)	14 (3.6)	329 (85.7)	34 (8.9)	5 (1.3)

Table 5 shows that 54.9% respondents satisfied on Wages and salaries in this hospital and rest of them strongly Dissatisfied 1.6%, Dissatisfied 3.9%, Moderate Satisfied 37.2% and Strongly Satisfied 2.3%. In hospital rules and regulations 37.0% respondents satisfied and rest of them Strongly Dissatisfied 2.3%, Dissatisfied 16.4%, Moderate Satisfied 42.7% and Strongly Satisfied 1.6%. On hospital work environment 27.1% respondents satisfied and rest of them Strongly Dissatisfied 33.1%, Moderate Satisfied 32.6% and Strongly Satisfied 2.1%. Respondents had satisfaction on hospital overall job security 27.3%, Strongly Dissatisfied 13.3%, Dissatisfied 30.7% and Moderate Satisfied 27.9%. Satisfied on annual leave that are received from the hospital 45.8%, and Moderate Satisfied 37.8%. Respondents 71.6% satisfied on shift rotation,

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Strongly Dissatisfied 5.7%, Dissatisfied 8.9%, Moderate Satisfied 13% and Strongly Satisfied.8%. Respondents satisfied about nursing care given to clients 57.0%, Strongly Dissatisfied 2.9%, Dissatisfied 7.8%, Moderate Satisfied 26.6% and Strongly Satisfied 5.7%. In working with colleagues in this hospital respondents 85.7% satisfied.

Job satisfaction related attributes		Yes		No	
	Frequency	Percentage	Frequency	Percentage	
Get enough support from immediate supervisor	261	68	123	32.0	
Share experiences among colleague	323	84.1	61	15.9	
Have chance of promotion	299	77.	85	22.1	
Have accommodation facility	155	40.4	229	59.6	

Table 6 shows that, 84.1% respondents share experiences among colleague, 77.9% respondents have chance of promotion, 68.0% respondents get enough support from immediate supervisor and 40.4% respondents recommend that have accommodation facility.

Categorization of satisfaction level	Frequency	Percent
Low	219	57.03
Moderate	156	40.62
Highly	9	2.34
Total	384	100

Table 7 shows more than half (57.03%) respondents had expressed low job satisfaction, (40.62%) expressed moderate satisfaction and unfortunately, only (2.34%) of nurses were highly satisfied.

4. Conclusions and Recommendations

Health care employees' job satisfaction is the key factor of a health center's efficiency. Job satisfaction can be ensure by supportive management attitude, balance salary and benefits, friendly working environment, participation in decision making process and organization's caring gesture about career and welfare related matter. In this study conclude that shortage in nursing and human resources faced by the health facilities requires nurses to work overtime to meet the patient's needs.

On the basis of the finding of this study, the following recommendations may be suggested. Appraisal and Acknowledgement of co-workers behavior and supports should be encouraged. The study recommends that workload should be reduce by maintain nurse-patient ratio. As nurses have reported increasing satisfaction regarding, it can be improved by hospital rules, regulations, security and merit promotions, awards.

Conflict of interest

None to declare.

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