

FACTORS RELATED NURSE' JOB SATISFACTION IN WORKPLACE

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ABSTRACT

Objective: The aims of study determined the rate of nursing job satisfaction in clinical and its relevant factors at an army hospital in Vietnam.

Method: A descriptive cross-sectional study using stratified propotional sampling technique. The research instrument was a self-completed questionnaire following the JSS – version 1 of Paul Spector and using SPSS 13.1.

Subject: 383 nurses were working at 38 clinical departments at 175 Military hospital from October 2022 to June 2023.

Result: The clinical nurse had high rate of job satisfaction in their career with 45.4% is satisfied, 52.5% is ambivalent, and 2.1% is dissatisfied. Job satisfaction with intention to leave and worktime over forty hours found a correlation.

Conclusion: Nurses satisfied with their job (45.4%) and less intention to quit. There is no disparity between nursing job satisfaction levels based on few socio-demographic and occupation-related characteristics.

Keywords: nursing job satisfaction, JSS, job satisfaction, clinical nursing, intention to leave.

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1. INTRODUCTION

Nursing shortages are reported globally, especially in Southeast Asian countries including Vietnam (9). The rate of nurses quitting their jobs is always reported to be increasing over the years in the world as well as in Vietnam (2,5). Job satisfaction is identified as a key factor in human resource management of an organization because it is related to work performance and intention to quit (3). Therefore, improving the career satisfaction of nurses is a factor that helps improve the quality of patient care and reduce the rate of nurses quitting job. At the same time, measuring and improving job satisfaction is also a factor that helps find solutions to retain nurses and reduce the turnover rate (4). This is an issue of concern in the Vietnamese health system, but very little research has been done on this topic, especially in the military hospital system. So we conducted this study with the following specific goals: To identify the level of job satisfaction of nurses at the clinical department of Military Hospital 175 and factors related to socio-demographic characteristics and career-related characteristics that affect nurses' job satisfaction.

2. SUBJECTS AND METHODS

2.1. Research subjects: nurses working at the clinical departments of Military Hospital 175 who agreed to participate in the study.

Exclusion criteria is new nurses working less than 2 months.

Research time is from October 2022 to June 2023.

Sample size: calculated according to one-proportion estimate formula:

$$n = Z^2 \frac{p(1-p)}{d^2}$$

P: The desired rate refers to the job satisfaction rate of nurses according to research by Nguyen Thi Thuan at Thu Duc District Hospital 2021(2). The sample size according to the formula is 380 plus 10% sample loss rate due to the sample collection process, total sample size is 418. After data processing, the number of qualified samples is 383.

2.2. Research design: The study was cross-sectional, convenience sampling and stratified, sampling number is about 64% of the total number of nurses in each department.

2.3. The method of data collection:

The data collection tool is a self-completed research questionnaire consisting of 2 parts. Part A includes 12 questions about socio-demographic characteristics and career-related characteristics of the research subjects. Part B is a set of Job Satisfaction Survey (JSS) questionnaire developed by Spector including 36 questions divided into 9 small components: Pay, Promotion, Supervisor,

Fringe Benefits, Contingent Rewards, Operating Procedures, Co-workers, Nature of work, and Communication. The scoring scale is from 1 to 6. For positively scored category, level 1 is equivalent to 1 point, level 6 is equivalent to 6 points. For the negative score category, the score is calculated in reverse, level 1 is equivalent to 6 points, level 6 is equivalent to 1 point.

The reliability of the Job Satisfaction Survey (JSS) scale has a Cronbach's alpha coefficient of 0.91, each statement ranges from 0.60 to 0.82. The JSS score is calculated as the total score of a total of 36 items ranging from 36 to 216, with dissatisfaction ranging from 36 to ≤ 108 (equivalent to 1 to ≤ 3), satisfaction from ≥ 144 to 216 (equivalent levels from ≥ 4 to 6) and from > 108 to < 144 are ambivalent (equivalent levels from > 3 to < 4). For each component calculated from 4

to 24, scores from 4 to ≤ 12 are dissatisfied, ≥ 17 to 24 are satisfied, and > 12 and < 16 are ambivalent (8).

2.4. Data analysis: Data were analyzed using SPSS 13.1 program. Descriptive statistics were used to describe frequencies and percentages of quantitative variables. T-test, ANOVA and Scheffe's methods are used to compare differences in nursing job satisfaction based on related factors.

2.5. Research ethics: The study was approved by the Ethics Council of Ho Chi Minh City University of Medicine and Pharmacy, HCM (Decision No. 846/HDD-DHYD, signed on November 8, 2022) and Ethics Committee of Military Hospital 175, HCM (Decision No. 37/GCN-HDD, signed on January 6, 2023).

3. RESULTS

3.1. General characteristics of research subjects

Table 1. Social Demographics of research subjects

		Number (n)	Rate (%)
Gender	Male	86	22.4
	Female	297	77.6
Ages	<30	136	35.5
	30 – 39	160	41.8
	40 – 49	79	20.6
	<50	8	2.1

Education	Intermediate	13	3.4
	College	144	37.6
	Bachelor	221	57.7
	Master	5	1.3
Marital status	Single	128	33.4
	Married	246	64.2
	Divorce	9	2.4

The average age of nurses participating in the study was 32.2 ± 7.4 years old, the lowest being 21 years old and the highest being 59 years old. The majority were female (77.6%), university graduates (57.7%), and married (64.2%). College degree or higher is the majority group in the study (95.3%).

Table 2. Occupational characteristics of research subjects

		Number (n)	Rate (%)
Years of Experience	≤ 1 year	57	14.9
	1 - <5 years	69	18.0
	5 - <10 years	87	22.7
	10 - <15 years	78	20.4
	≥ 15 years	92	24.0
Kind of contract	Military personnel	125	32.6
	Labor contract	258	67.4
Total night shift/week	≤ 3 shifts	298	77.8
	≥ 4 shifts	15	3.9
	none	70	18.3
Total working time/week	≤ 40 hours	91	23.8
	>40 hours	292	76.2
Work position	Head nurse	30	7.8
	Administrative nurse	49	12.8
	Direct-care nurse	304	79.4

Department	Internal Medicine Departments	113	29.5
	Center of Oncology and Nuclear Medicine	36	9.4
	Cardiovascular Center	22	5.7
	Surgery Departments	144	37.6
	ICU and Emergency Department	68	17.8
Intention to quit	Strongly disagree	118	30.8
	Disagree	135	35.3
	Neutral	81	21.1
	Agree	42	11.0
	Strongly agree	7	1.8

The majority of nurses participating in the study were between the ages of 30 and 39, with over 15 years of nursing experience being the highest group (24%), with more than half of the participating nurses being contract workers (67.4%). Over 80% of nurses work in shifts, of which the majority work over 40 hours/week (76.2%) with the frequency of working under 3 shifts mainly being 77.8%. There are 38 clinical departments divided into 5 groups, of which the number of nurses in the Surgery department accounts for the largest proportion (37.6%), followed by the Internal Medicine department (29.5%). The majority of nurses who do not want to quit their job are 66.1%.

3.2. Assess the rate of job satisfaction of nurses

Table 3. Job satisfaction scores according to the JSS questionnaire

		Min	Max	Mean	SD
1.	I feel I am being paid a fair amount for the work I do.	1	6	3.52	1.62
2.	There are really too few chances for promotion at my job*.	1	6	3.24	1.54
3.	My supervisor is quite competent in doing his/her job.	1	6	5.33	1.03
4.	I am not satisfied with the benefits I receive*.	1	6	3.29	1.51

		Min	Max	Mean	SD
5.	When I do a good job, I receive the recognition for it that I should receive.	1	6	4.83	1.16
6.	Many of our rules and procedures make doing a good job difficult*.	1	6	2.38	1.34
7.	I like the people I work with.	1	6	5.46	0.89
8.	I sometimes feel my job is meaningless*.	1	6	4.53	1.56
9.	Communications seem good within this organization.	1	6	4.70	1.25
10.	Raises are too few and far between*.	1	6	3.44	1.65
11.	Those who do well on the job stand a fair chance of being promoted.	1	6	4.36	1.47
12.	My supervisor is unfair to me*.	1	6	4.66	1.58
13.	The benefits we receive are as good as most other organizations offer.	1	6	3.23	1.57
14.	I do not feel that the work I do is appreciated*.	1	6	3.33	1.55
15.	My efforts to do a good job are seldom blocked by red tape.	1	6	4.05	1.50
16.	I find I have to work harder at my job because of the incompetence of people I work with*.	1	6	4.58	1.47
17.	I like doing the things I do at work.	1	6	4.78	1.12
18.	The goals of this organization are not clear to me*.	1	6	4.24	1.50
19.	I feel unappreciated by the organization when I think about what they pay me*.	1	6	3.45	1.50
20.	People get ahead as fast here as they do in other places.	1	6	4.16	1.34
21.	My supervisor shows too little interest in the feelings of subordinates*.	1	6	4.37	1.61
22.	The benefit package we have is equitable.	1	6	3.74	1.54
23.	There are few rewards for those who work here*.	1	6	3.38	1.54
24.	I have too much to do at work*.	1	6	3.09	1.42
25.	I enjoy my coworkers.	1	6	5.08	1.04

		Min	Max	Mean	SD
26.	I often feel that I do not know what is going on with the organization*.	1	6	4.22	1.46
27.	I feel a sense of pride in doing my job.	1	6	4.93	1.15
28.	I feel satisfied with my chances for salary increases.	1	6	4.20	1.39
29.	There are benefits we do not have which we should have*.	1	6	2.59	1.44
30.	I like my supervisor.	1	6	5.05	1.11
31.	I have too much paperwork*.	1	6	2.55	1.52
32.	I don't feel my efforts are rewarded the way they should be*.	1	6	3.36	1.49
33.	I am satisfied with my chances for promotion.	1	6	3.94	1.28
34.	There is too much bickering and fighting at work.	1	6	4.08	1.57
35.	My job is enjoyable.	1	6	4.50	1.24
36.	Work assignments are not fully explained*.	1	6	4.30	1.55

The total nursing job satisfaction score (JSS) was 145 ± 21.9 points, ranging from 87 to 214 points. The highest average scores are statement 3 “My supervisor is quite competent in doing his/her job” (5.33) and statement 7 “I like the people I work with” (5.46). The two statements with the lowest scores were statement 6 “Many of our rules and procedures make doing a good job difficult (average 2.38)” and statement 31 “I have too much paperwork” (average 2.55). Nurses’ job satisfaction scores in statements belonging to the Supervisor component (questions 3, 12, 21, 30), Co-workers (questions 7, 16, 25, 34), Nature of work (questions 8, 17, 27, 35) and Communication (questions 9, 18, 26, 36) are all higher than the remaining aspects.

Table 4. Overall job satisfaction level according to the JSS

Rate (Score)	N	%
Dissatisfied (36 - \leq 108)	8	2.1
Ambivalent ($>$ 108 - $<$ 144)	201	52.5
Satisfied (\geq 144 - 216)	174	45.4
Total	383	100

In 383 nurses, 45.4% of participants achieved satisfaction. However, more than half of clinical nurses' attitudes are ambivalent (52.5%) and 2.1% are dissatisfied with their work.

Table 5. Job satisfaction level according to each component of the JSS

	Mean ± SD	Min - Max	Job satisfaction rate
1. Pay	14.6 ± 4.3	4 – 24	Ambivalent
2. Promotion	15.7 ± 3.7	4 – 24	Ambivalent
3. Supervisor	19.4 ± 3.9	4 – 24	Satisfied
4. Fringe Benefits	12.9 ± 4.0	4 – 24	Ambivalent
5. Contingent Rewards	14.9 ± 3.6	6 – 24	Ambivalent
6. Operating Procedures	12.1 ± 3.8	4 – 24	Ambivalent
7. Coworkers	19.2 ± 3.4	4 – 24	Satisfied
8. Nature of work	18.7 ± 3.5	6 – 24	Satisfied
9. Communication	17.5 ± 3.8	7 – 24	Satisfied
Total	145.0 ± 21.9	87 – 214	

The results show that the average score of the Supervisor component is the aspect with the highest satisfaction score (19.4 ± 3.9), followed by Coworkers, Nature of Work and Communication. Operating Procedures and Fringe Benefits are the two areas with the lowest satisfaction scores with average scores of 12.1 ± 3.8 and 12.9 ± 4.0 respectively.

3.3. The relationship between job satisfaction and related factors

Table 6. Association between job satisfaction and demographic factors

		Number (n)	JSS score	T/F value	p
Age	<30	136	145.3 ± 23.6	0.142	0.935
	30 – 39	160	144.3 ± 20.2		
	40 – 49	79	145.1 ± 22.0		
	<50	8	148.9 ± 26.0		
Gender*	Male	86	144.9 ± 22.1	0.026	0.871
	Female	297	145.0 ± 21.8		

		Number (n)	JSS score	T/F value	p
Education	College	144	143.5 ± 22.7	0.359	0.778
	Bachelor	221	145.8 ± 21.4		
	Master	5	143.6 ± 12.2		
	Intermediate	13	146.7 ± 23.4		
Marital status	Single	128	147.2 ± 23.2	1.003	0.368
	Married	246	143.8 ± 21.1		
	Devorced	9	145.0 ± 23.0		
*: <i>Ttest</i>					

The results showed that there was no difference in job satisfaction between gender, age group, education level and marital status with $p > 0.05$.

Table 7. Relationship between job satisfaction and career factors

		N	JSS	T/F value	p
Years of Experience	≤ 1 year	57	152.5 ± 25.9	2.223	0.066
	1 - <5 years	69	145.6 ± 20.9		
	5 - <10 years	87	143.0 ± 22.3		
	10 - <15 years	78	143.7 ± 20.2		
	≥ 15 years	92	142.8 ± 20.1		
Kind of contract *	Military personnel	125	145.7 ± 20.7	0.262	0.609
	Labor contract	258	144.6 ± 22.4		
Total working time/week *	≤ 40 hours	91	152.4 ± 25.9	18.137	<0.001
	>40 hours	292	142.6 ± 19.9		
Total night shift/ week	≤ 3 shifts	298	144.9 ± 21.7	1.468	0.232
	≥ 4 shifts	15	136.3 ± 19.3		
	None	70	147.0 ± 22.7		
Work position	Head nurse	30	150.2 ± 19.5	2.05	0.13
	Administrative nurse	49	140.2 ± 21.3		
	Direct-care nurse	304	145.2 ± 22.1		

		N	JSS	T/F value	p
Department	Internal Medicine Departments	113	144.4±21.7	3.016	0.018
	Center of Oncology and Nuclear Medicine	36	154.9±29.6		
	Cardiovascular center	22	135.4±12.8		
	Surgery Departments	144	144.3±20.0		
	ICU and Emergency Department	68	145.0 ±22.1		
Intention to quit	Strongly disagree	118	157.5 ± 24.1	24.997	<0.001
	Disagree	135	145.4 ± 19.4		
	Neutral	81	134.6 ± 14.6		
	Agree	42	132.4 ± 13.6		
	Strongly agree	7	120.1 ± 17.8		
*: <i>Ttest</i>					

There is a statistically significant relationship when comparing job satisfaction with intention to quit and total working time per week ($p < 0.001$). In addition, no difference was found in the level of nursing job satisfaction with the remaining professional characteristics, $p > 0.05$. Multiple regression model was performed to find the relationship between job satisfaction with total working time per week and intention to quit. Test result $F = 56.109$ with value sig. < 0.05 . The R-squared value had been adjusted = 0.224 shows that total work hours per week and intention to quit included in the regression analysis explained 22.4% of the variation in job satisfaction of the nurse job.

4. DISCUSSION

4.1. Differences in nurse's job satisfaction of nurses level with demographic and occupational characteristics

Most of the demographic and social factors of this study are equivalent

to previous studies, except for the factor of type of labor contract including military personnel and labor contract due to the specific characteristics of military hospitals. Majority of nurses are satisfied with their current job (45.4% satisfied and 52.5% neutral), only a very small percentage of nurses are dissatisfied

(2.1%). This can be explained because the hospital's changed policies after the COVID-19 epidemic, contributed to improve the satisfaction of the nursing force who taking care directly for patients in clinical departments. Similar results were also found in several studies using the JSS questionnaire conducted in Iran (7). A study in Vietnam also showed that the overall job satisfaction of clinical nurses was 55%, however the author adjusted the scale from 6 levels to 5 response levels with an assessment result of satisfaction from 4-5 points and dissatisfied from 1-3 points. Regarding the components of satisfaction, the results of this study show that the majority of nurses are satisfied with Supervisor (highest average score) and Colleagues, the lowest are Organizational conditions and Fringe Benefits.

4.2. Factors related to job satisfaction of nurses in clinical departments

There is a statistically reliable difference between weekly working hours, intention to quit and job satisfaction of nurses reported in the study with $p < 0.001$, the remaining factors are about Socio-demographic and occupational characteristics did not find statistically significant differences and relationships ($p > 0.05$). This result is similar to Masum (2016) who discovered a relationship between satisfaction in nurse job and the likelihood of leaving the current hospital

within the next 1 to 2 years ($r = -0.723$, $p < 0.01$) (11). In addition, in a comprehensive study of a military hospital, the results showed that job satisfaction is the decisive factor in the intention to leave the job of civilian nurses, because military officer often have clear policies like must not leave the unit or transfer to another hospital (10).

Nurses who work more than 40 hours have a lower level of satisfaction than nurses who work less than 40 hours, these are the nurses who take care of patients with a 24-hour duty schedule ($p < 0.001$). Nurses who work office hours often do not feel more pressure than nurses who have to attend night shifts, which may also contribute to their lower satisfaction. However, no studies in the world have been found with similar results, possibly because currently there is no country that still has 24-hour working shifts like Vietnam, most of the studies reported on nursing are on duty less than 12 hours (6).

5. CONCLUSION

Job satisfaction of clinical nurses is quite high, nurse's job satisfaction level according to the JSS scale is 45.4% satisfied and 52.5% ambivalent. Nurses have higher levels of job satisfaction when they have lower turnover intentions and less weekly work hours. In addition, no notable differences were found in the rate of job satisfaction of nurses with some other socio-demographic and occupation-related characteristics.

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