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Job Satisfaction and Related Factors among Intensive Care Nurses in Governmental Hospitals at Khartoum State - Sudan

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Abstract

Background and Objective: As advances have been made in medicine and technology, patient care has become more complex. And to provide appropriate health care, nurses needed specialized knowledge, skills and the health care delivery mechanisms to evolve and support the patients' needs for continuous monitoring and treatment. This study was conducted in governmental hospitals in Khartoum state to study job satisfaction and the factors influencing job satisfaction, to determine the overall level of job satisfaction and to relate socio-demographic characteristic of ICU nurses with overall level of job satisfaction.

Method: A descriptive, cross-sectional hospital based study was done to all intensive care unit nurses. Questionnaire with likert type scale was used to collect necessary data; Likert scale was numerically translated to evaluate job satisfaction scores.

Results: Results revealed high overall level of job satisfaction (mean 85.3 ± 13.1 on 5 points scale). There was significant association between overall level of job satisfaction and monthly salary (P = 0.025). Significant association also found between age group and chance for suggestion and recreation (P = 0.018). And significant association found between qualifications and workload (P = 0.025).

Conclusion: Age group and different qualifications are related to nurse job satisfaction level. And intrinsic job characteristics are as important as extrinsic job conditions on ICU nurse job satisfaction.

Keywords: Intensive care; Nurse; Job satisfaction; Hospital

Introduction

Job satisfaction is an important part of organizational psychology and organizational behavior. WHO defines job satisfaction as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences [1] which is widely discussed and studied because it aims at the physical and mental well-being of intensive care nurses not only from the angle of organizational psychology, but also, from the angle of organizational management and human resource management, concerns with establishing policies for management to improve intensive care nurses job satisfaction and their job-related behaviour and to improve the productivity and profitability of organizations [1,2].

Recent studies show that intensive care nurses often experience psychological -emotional and physical stress at work [2], and they are highly dissatisfied with their jobs, which in turn results in lower morale and seriously affects the quality of healthcare service and customers receive. It has attracted many attentions from both the government and the public [2,3]. More efforts have been made to study the level of critical care nurse's job satisfaction and how to improve their job satisfaction and factors that influence nurse job satisfaction. In order to improve overall level of job satisfaction, the first thing to do is to

find out what leads to job satisfaction, rather than to measure the level of job satisfaction [4,5].

Multi-faceted concept categorized into five groups that affect and associated with the development of job satisfaction; include but not limited to: Individual characteristics such as (age, gender, level of experience and satisfaction with specific aspect of work such as (work itself, salaries and hospital policies), social factors, cultural factors, organizational factors, and environmental factors [6-9]. Job satisfaction is also well linked to shortage of intensive care nurses which exist globally [2]. With nurses shortage nurse to patient ratio will increase. This will result on increasing workload, feeling over whelmed, distressed and dissatisfied with job [5]. The consequence of nursing dissatisfaction would be decrease in quality of patient care, decrease patient safety, increase financial cost from training and recruitment and inability to meet the requirement of accreditation standard [10].

The intensive care unit is a highly charged, specialized area designed for the treatment of seriously ill patients who require sophisticated machinery, constant medical observation, and life-saving measures. The intensive care nurse is responsible for the constant monitoring of the patient's condition. Medications, interpretation of machine recordings and changes in the patient's behaviour all influence the nurse's actions to keep the patient's condition stable [9]. Another

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characteristic feature of intensive care nursing is that the nurse's focus is very intensive and narrows, As a result of these conditions, working in a critical care setting might be perceived as stressful and possible health outcomes of nurses working in critical care settings [9,10].

Job satisfaction is an essential element for the maintenance of the workforce of any organization. Lack of job satisfaction for intensive care nurses not only leads to high turnover rates but could also have detrimental effects on the individual [11]. High levels of influencing factors have been documented for nurses employed in critical care environments. These factors are thought to affect employee health and patient welfare [5]. Intensive care nurses have been characterized as having different behavioural signs of influencing factor to a greater extent than other nurses [8,10]. In order to facilitate coping, additional information is needed about the factors involved in critical care nursing, including how these factors are related to the functioning and/or well-being of the critical care nurse. Patient acuity has increased as a result of advances in technology. As a result, stress levels among nurses can only be expected to increase. It is therefore; important to determine what factors are present in the critical care setting and how they affect the critical care nurses employed in intensive care units [11,12]. Variables studied included life stress, social support and specialty work area. They suggested that additional factors such as coping behaviors and personality predispositions of intensive care nurses may contribute to the greater amounts of occupational dissatisfaction [12].

Methodology

This study was an observational descriptive hospital based .study conducted in Al-Shaab Teaching Hospital (open cardiothoracic surgery ICU). National Center of Neurological Sciences ((NCNS) neurosurgery ICU). Omdurman Teaching Hospital ICU. Khartoum North Teaching Hospital ICU and Ahmed Gasim for cardiac and renal transplantation ICU. Khartoum, Sudan during the period from October 2015 to January 2016. A total number of 125 ICU nurses were enrolled in the study. Questionnaire consists of two parts; first part for socio-demographic variables information and the second part used for job satisfaction. A five likert type scale (Very satisfied (5), satisfied (4), unsure (3), dissatisfied (2), very dissatisfied (1)), with 24 items in which the nurse answer to which extent they perceived the listed factors important to their job satisfaction as shown below to find the total overall job satisfaction. Scale was used in its original version [13].

Results

All ICU nurses were assessed for their job satisfaction using modified five likert type scale with 24 items. The results showed that more than half of participants are females (77.6%), their age between 20-29 years old (67.2%). Most of nurses are bachelor educated (64.0 %) and single (66.4%) and their experiences and years working in ICU mainly less than 1 year (30.4%). These findings revealed that mean of overall job satisfaction among ICU nurses is 85.3 with standard deviation of 13.1 (85.3 \pm 13.1) and 40.8% are unsure about their satisfaction they get from their job, 26.4% are satisfied, 25.6% are dissatisfied and only 7.2% are very satisfied (Tables 1-5) (Figures 1 and 2).

Variables	Options	Frequency	Percent
Gender	Male	28	22.40%
	Female	97	77.60%
	20-29 yrs	84	67.20%
	30-39 yrs	41	32.80%
Age group	40-49 yrs	0	0%
	more than 50	0	0%
	Single	83	66.40%
	Married	38	30.40%
	Widow	1	0.80%
Marital status	Divorced	2	1.60%
	Separated	1	0.80%
	Diploma	23	18.40%
	Bachelor	80	64.00%
Qualifications	Master	21	16.80%
Qualifications	Doctorate	1	0.80%
	500 - <1000	96	76.80%
	1000 - < 1500	27	21.60%
Monthly salary	1500 - < 2000	2	1.60%
	More than 2000	0	0%

Table 1: Distribution of socio-demographic characteristics of ICU nurses (N = 125).

	Value Range	Eroguenov	Percent %
	value Range	Frequency	Percent %
Very satisfied	≥ 100	22	17.6
Satisfied	86 -100	40	32
Unsure	71 – 85	46	36.8
Dissatisfied	55 – 70	17	13.6
Very dissatisfied	0	0	0
Total	-	125	100
Total Score (mean ± SD)	13.1 ± 85.3	-	-

Table 2: The Total score and mean of overall job satisfaction (N = 125).

Very Satisfied Satisfied Unsure Dissatisfied Dissatisfied Total P.	P. value
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Gender							P = 0.390
Male	24.00%	23.30%	7.70%	32.10%	12.50%	22.40%	
Female	76.00%	76.70%	92.30%	67.90%	87.50%	77.60%	
Age group		'	'	'	,	'	P = 0.349
20-29 yrs	68.00%	62.80%	53.80%	67.90%	87.50%	67.20%	
30-39yrs	32.00%	37.20%	46.20%	32.10%	12.50%	32.80%	
Marital status		'	'	<u>'</u>	·	'	P = 0.202
Single	80.00%	53.50%	53.80%	67.90%	87.50%	66.40%	
Married	16.00%	41.90%	41.90%	32.10%	12.50%	30.40%	
Widow	0.00%	2.30%	0.00%	0.00%	0.00%	0.80%	
Divorced	4.00%	0.00%	7.70%	0.00%	0.00%	1.60%	
Separated	0.00%	2.30%	0.00%	0.00%	0.00%	0.80%	
Qualifications				<u>'</u>	,	'	P = 0.330
Diploma	32.00%	14.00%	7.70%	21.40%	12.50%	18.40%	
Bachelor	48.00%	69.80%	69.20%	57.10%	81.20%	64.00%	
Master	16.00%	16.30%	23.10%	21.40%	6.20%	16.80%	
Doctorate	4.00%	0.00%	0.00%	0.00%	0.00%	0.80%	
Employment status		1	'	-	1	1	
Contract							P = 0.176
Permanent							

 $\textbf{Table 3a:} \ Association \ of Socio-demographic characteristics \ and \ overall \ level \ of job \ satisfaction \ (N=125).$

	Very Satisfied	Satisfied	Unsure	Dissatisfied	Very Dissatisfied	Total	P. value
Years of experience							
< 1Yr	24.00%		46.20%	17.90%	25.00%	30.40%	
1 Yr - < 2 Yrs	0.00%		15.40%	25.00%	18.80%	20.80%	
2 Yrs - < 3 Yrs			15.40%	17.90%	37.50%	18.40%	
3 Yrs - < 4 Yrs	0.00%		7.70%	10.70%	12.50%	8.80%	
> 4 Yrs	20.00%		15.40%	28.60%	6.20%	21.60%	
Monthly salary	onthly salary						P = 0.023
500 - < 1000	80.00%	74.40%	69.20%	82.10%	75.00%	76.80%	
1000 - < 1500	16.00%	25.60%	30.80%	17.90%	18.80%	21.60%	
1500 - < 2000	4.00%	0.00%	0.00%	0.00%	6.20%	1.60%	
More than 2000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Table 3b: Association of Socio-demographic characteristics and overall level of job Satisfaction (N = 125).

Age Group and Qualification	Intrinsic Variables					
	Opportunities to progress and promotion in your job	Feedback from supervisor	Feedback from patients	Responsibility allotted to ICU nurse	Chance for suggestion and recreation	The feeling of being treated equally
Age group	P = 0.808	P = 0.854	P = 0.365	P = 0.274	P = 0.018	P = 0.679
Qualification	P = 0.294	P = 0.594	P = 0.184	P = 0.144	P = 0.012	P = 0.007

Table 4: Association of Age group and Qualification with important intrinsic factors (N = 125)

Age Group and Qualification	Extrinsic variables					
	Satisfaction from salary	The relationship with patients	The relationship with co-workers	The comprehensive goals & guidelines in the unit		The quantity of allotted work to you (workload)
Age group	P = 0.094	P = 0.387	P = 0.578	P = 0.844	P = 0.746	P = 0.195
Qualification	P = 0.162	P = 0.377	P = 0.601	P = 0.104	P = 0.254	P = 0.025

Table 5: Association of Age group and Qualification with important extrinsic factors (N = 125).

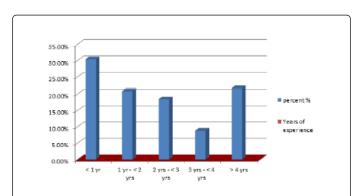
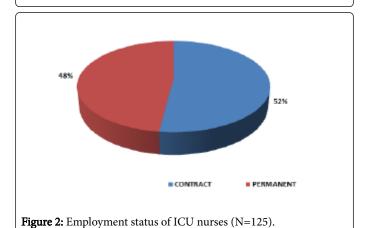


Figure 1: Distribution of ICU nurses according years of experience (N = 125).



Discussion

The results revealed that there was high level of overall job satisfaction scores (mean 85.3 \pm 13.1 on 5-point sale). Compared with previous study conducted in Saudi Arabia [14] that also revealed high level of overall job satisfaction scores (mean = 3.75 on a 5-points scale) and be strongly associated with influencing factors [14]. The result revealed also that mean age was (28 \pm 3.75 SD) and that implies those participants are at middle age.

There was no significant association with age group and level of overall job satisfaction (P = 0.349), and middle age nurses 20-29 yrs had the highest job satisfaction; While when nurses were in 30-39 yrs their job satisfaction declined; because their expectation in their job becomes more different; nurses got married.

Life has changed a lot, Besides their jobs they should care more about their families, children which would increase physical and mental stress and decrease job satisfaction, which is not similar to studies conducted in Saudi Arabia and Utah 1985 [14,15] that showed ICU nurse job satisfaction was U-shaped in age, with higher level among young nurses (level = 3.48) but that declines sharply (to 3.02) when nurses are in their middle age, satisfaction increases again in later life with age 40-49 yrs (to 3.16).

There was no significant association between age group and workload (P=0.195), that is one of important extrinsic job characteristics and in spite of that 38.4% are dissatisfaction and 25.6% are very dissatisfied from workload, and there was significant association between level of education and workload (P=0.025) due to heavy workload and inadequate staffing and this is similar with study conducted in Saudi Arabia [14]; that revealed significant association between workload and job satisfaction due to heavy workload and inadequate staffing that lead to job-related stress and dissatisfaction [14].

Results indicate that job satisfaction of ICU nurses with the degree of Bachelor was higher than others with the diploma, master and PHD;

that means the majority of nurses employed in ICU having bachelor degree and those who have master or PHD do not have different works or job description and have same paid; which make significant decrease in their numbers among governmental hospitals because they look for other best opportunity to them according to their certification, and that affect their job satisfaction and This is consistent with pervious study conducted in china 2006 [16]. But it is inconsistent with study conducted in Saudi Arabia [14]; that showed higher satisfaction among nurses holding associate degree than those holding diploma and bachelor degree due to expect high salary and responsibility and different job description [14].

Result also revealed significant association between qualification and some important intrinsic factors (Chance for suggestion and recreation (P= 0.012) and the feeling of being treated equally (P =

Similar to result of the pervious study conducted in Saudi Arabia [14], which showed that nurses were most satisfied with their relationship with coworkers and head nurses, and least satisfied with their opportunities for promotion and pay level [14].

Most of the nurses about 70.4% have no ICU training and that due no regular training schedule and no availability of educational professional development programmes in their hospitals.

Also result revealed that majority (85.6%) of nurses experience hazards on their health due to exposure to illness and severs injury from their job and that explained that is not enough utilization of safety measures and no determined health protection precaution policy in their units.

Another important finding is that (60.8%) of respondent were very dissatisfied with their salary, and there was significant association between monthly salary and job dissatisfaction (P = 0.025). It appears that lower level of rewarding, encouraging personal achievement and sense of accomplishment. This finding is contradicted with studies conducted in Saudi Arabia and Utah [14,15]. That showed that high salaries attract and recruit young or new nurses to stay in nursing careers.

Conclusion

ICU nurses' job satisfaction had high overall levels of job satisfaction (mean = 85.3 ± 13.1). As there are not enough occupational safety measures followed and nursing shortage continues to worsen with increasing workload; the satisfaction of nurses is of vital importance. Nurse promotion, further learning and training should pay attention to provide maximum intensity of patient health care delivery system. The study revealed that age group and qualification were related to nurse job satisfaction. Intrinsic job characteristics are as important as extrinsic job conditions on ICU nurse job satisfaction; especially monthly salary which was significant

predictor in association with overall level of job satisfaction (P = 0.025), and from the results we observe that most of nurses basically focused on extrinsic factors especially salary and workload that directly affect their satisfaction.

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