

JOB SATISFACTION AMONG NURSES WORKING IN MANSOURA UNIVERSITY HOSPITAL: EFFECT OF SOCIO-DEMOGRAPHIC AND WORK CHARACTERISTICS

By

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Abstract

Introduction: Job satisfaction refers to the extent to which employees like their jobs. It is one of the most vital factors that define efficiency and productivity of human resources. In Egypt, nurses are the backbone of the health care system. However, they are not well appreciated in most institutions. Nurses' job satisfaction is a multidimensional occurrence affected by many variables. **Aim of work:** to assess the level of job satisfaction and its associated socio-demographic and workplace factors among nurses working in Mansoura University Hospital (MUH). **Materials and Methods:** A cross-sectional study was conducted among Mansoura University Hospital nurses during the period from 1March to 31May 2017. The data was collected using self-administered questionnaire formed of three parts: Socio-demographic characteristics, Work characteristics and McCloskey/Mueller Satisfaction Scale (MMSS) that having eight subscales to assess nurses' job satisfaction level. **Results:** A total of 346 nurses were included, yielding a response rate of 88.49%. The majority of our group expressed low job satisfaction (61.8 %). The significant independent predictors of low job satisfaction among nurses were in the following order: lack of communication with their colleagues (OR =4.18) and deprivation from supervisor support (OR =2.32). **Conclusion:** The present study indicated that nearly two thirds of Mansoura University Hospital nurses expressed low job satisfaction. Lack of colleagues-communication and supervisor support at work predicted the outcome variable. Achievement of high level of job satisfaction is recommended to provide high-quality health care system. With this

information, staff nurses could improve their own satisfaction by cultivating their peer communication. In addition, changing attitude of nurse supervisor towards positive relation with staff nurses is crucial to increase job satisfaction.

Keywords: Job satisfaction, Nurses, Mansoura University and Work characteristics.

Introduction

Job satisfaction refers to the extent to which employees like their jobs (Ahmed et al., 2013). It is also defined as the attitude and feelings people have about their work (Kumar et al., 2013 b). Thus, job satisfaction is one of the most vital factors that define efficiency and productivity of human resources (Dignani and Toccaceli, 2013).

Nurses constitute major professional group among healthcare workers (Kamal, 2011). In recent years, providing high-quality health care delivery system is a fundamental challenge (Al-Enezi et al., 2009). To reach that quality level, reasonable level of nurses' job satisfaction should be attained (Olatunji and Mokuolu, 2014).

In Egypt, nurses are the backbone of the healthcare system (Kabeel and Eisa, 2017). They play a vital role in promoting the healthcare program of the country by contributing their own share for the achievement of the Millennium Development Goals (MDGs) (Francis,

2013). Although the fact that these are the people who take care of our beloved relatives when they are hospitalized (Alam and Mohammad, 2010), nursing staffs in most medical institutions are the most unappreciated staff members (Pillay, 2009).

Nurses' job satisfaction is a multidimensional occurrence affected by many variables (Alnems , 2005). They can be divided to intrinsic and extrinsic variables. Extrinsic factors include perceptible aspects of the work, such as benefits and salary, whereas intrinsic factors include personal and professional progress chances and recognition (Yilmazel, 2013 and Kabeel and Eisa, 2017). Currently, nurses seem to be less satisfied due to many unidentified factors, and hence, there is a constant threat of attrition (Kumar et al., 2013a). The nursing profession is also unable to attract adequate number of people due to shift schedule, salaries and social perception of nurses (Al-Ahmadi, 2002). Up to our knowledge, there are limited studies

addressing nurses' job satisfaction and its associated factors in Egypt (Salem et al., 2016 and Kabeel and Eisa, 2017). Hence, the current study was conducted to achieve this issue.

Aim of work

To assess the level of job satisfaction, and its associated socio-demographic and work factors among nurses working at Mansoura University Hospital (MUH).

Materials and methods

Study design: This is a cross-sectional study with analytic component.

Place and duration of the study: this study was carried out in Mansoura University Hospital (MUH), Mansoura, Egypt during the period from March 1 to May 31, 2017.

Study sample: All nurses working in MUH for one year at least, on duty at the time of the study and agreed to participate. A total of 757 nurses fulfilled the legibility criteria

Sample size calculation: low satisfaction of the nurses was taken as a primary outcome of interest to calculate the sample size. Sample size

calculation is based on 33% prevalence of low satisfaction that was previously reported among nurses (Semachew et al., 2017). The calculated sample size of the study will be at least 340 nurses of both sexes according to Daniel formula (Daniel, 1998). To overcome the drop out, we added 15% to the sample size thus; the final total number will be 391 nurses.

Sampling method: All nurses who were working in ICU (67), outpatient department (55), operating room (OR) (18), laboratory (19) and specialized unit (50) were included. A total of 174 out of 209 nurses completed the questionnaire.

The remaining 548 nurses were working in the inpatient departments. A systematic random sample (every 3rd nurse) was selected from the list of nurses available at the administration office and 172 out of 182 nurses completed the questionnaire.

The completed returned questionnaires were 346 which satisfying the least estimated sample size (the response rate was 88.49%).

Study method: The present study collected data using anonymous self-administered semi-structured questionnaire formed of three parts:

- **Part I:** Socio-demographic characteristics including age, sex, marital status, residence and educational level. It was developed by the investigators.
- **Part II:** Work characteristics developed via reviewing the literature to address communication-related factors, support at work (from colleagues, supervisors and organization) and some other work features as work experience, position, department working hours, presence of shift work, work conflicts.

The content and face validity of work characteristics questionnaire was established by a panel of expert. It was pilot tested for reliability on a group of nurses (their number was 20) that was not included in the final analysis. Cronbach's alpha was 0.88.

- **Part III:** an international validated and reliable 29 items-McCloskey/Mueller Satisfaction Scale (MMSS)

that having eight subscales: Extrinsic reward subscale, Scheduling subscale, Family and work balance subscale, Coworker subscale, Interaction opportunity subscale, Professional opportunities subscale, Praise and recognition subscale, Control and responsibility subscale. MMSS was used to assess nurses' job satisfaction level (O'Neal, 2012).

Nurses were allowed to respond on 4 items Likert scale ranging from 1 (very dissatisfied) to 4 (very satisfied) with elimination of the neutral response option in order to encourage participants to make a decision regarding their thoughts and feelings as opposed to indicate that they had no opinion (Daniels, 2004). The overall score was ranging from a minimum of 29 to a maximum of 116. For cut of value purpose, a data driven classification system was used to classify the job satisfaction level into low, moderate, and high (Dagget et al., 2016).

Consent

An informed written consent was obtained from all nurses before participation. They were informed that

all collected data will be confidential and used for scientific purposes only.

Ethical approval

Formal approval was obtained from Institution Research Board (IRB) of Mansoura Faculty of Medicine with clearance code number (R/17.12.122) and the University Hospital Authority.

Data management

The data were checked for completeness and analyzed using SPSS software (version 16.0 for Windows; SPSS Inc., Chicago, IL, USA). Descriptive statistics were calculated for qualitative variables as frequencies and percentages while for quantitative variables as Mean \pm SD. The satisfaction level was calculated according to the guidelines of MMSS. Then, it was reclassified into two groups; the first group was low satisfaction while the second group included moderate and high level of satisfaction for the purpose of logistic regression analysis. Chi-square and Fisher's exact tests were used for comparison of categorical data.

Finally a binary logistic regression analysis was performed on the significant factors determining the low satisfaction

level among nurses in order to find out the predictors of low job satisfaction. Odds ratio (OR) and 95% confidence interval (CI) were calculated. p-value ≤ 0.05 was considered statistically significant and ≤ 0.01 was considered highly significant.

Results

Regarding the socio-demographic features, most of our nurses were females (85.3%), aged 20-30 years (44.8%) with mean age 32.7 \pm 8.2, living in rural setting (76.6%) and married (70.8%) with high school nursing education (69.7%).

Regarding work characteristics, most of the studied group were staff nurse (79.2%) with >10 years working experience (59.5%), working in the inpatient wards (46.7%), with ordinary shift (69.4%), having day working schedule (69.4%). Fortunately, the majority of respondents were free of work conflicts (69.4%) while (54.9%) were enjoying support from their nurse colleagues in addition to the adequate communication with their patients (73.7%). However,

they were complaining of deficient communication with their physicians (59.5%) and nurse-mates (52.0%) as

well as deficient support from their supervisor and organization (75.4%, 85.5%; respectively) (data was not displayed in tables).

Figure (1): Job satisfaction level among the studied nurses according to MMSS

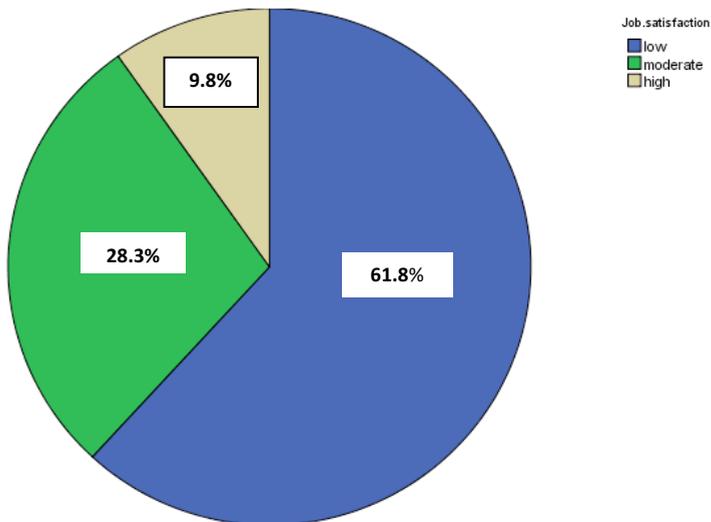


Figure (1) shows the distribution of job satisfaction among the studied group as defined by MMSS. The majority of our group expressed low job satisfaction (61.8 %) while moderate satisfaction was 28.3% and unfortunately, only 9.8% of nurses were highly satisfied.

Table 1: Distribution of socio-demographic characteristics among nurses according to job satisfaction categories.

Socio-demographic characteristics	Low satisfaction No=214 No (%)	Mod. and high satisfaction No =132 No (%)	p-value
Age (years):			
20-	104 (48.6)	51 (38.6)	0.103
30-	86 (40.2)	55 (41.7)	
40-	16 (7.5)	19 (14.4)	
50-60	8 (3.7)	7 (5.3)	
Gender:			
Male	26 (12.1)	25 (18.9)	0.084
Female	188 (87.9)	107 (81.1)	
Marital status:			
Unmarried ^a	61 (28.5)	40 (30.3)	0.721
Married	153 (71.5)	92 (69.7)	
Residence:	1		
Rural	64 (76.6)	101 (76.5)	0.980
Urban	50 (23.4)	31 (23.5)	
Educational level:			
High school	143 (66.8)	98 (74.2)	0.290
Faculty of nursing	67 (31.3)	31 (23.5)	
Postgraduate	4 (1.9)	3 (2.3)	

a: Unmarried include single, divorced and widow

Table (1) showed that there was no significant difference between nurses with low job satisfaction compared to those with moderate and high satisfaction as regard socio-demographic characteristics.

Table 2: Distribution of work characteristics among nurses according to job satisfaction categories.

Work characteristics	Low satisfaction No =214 No (%)	Mod. and high satisfaction No =132 No (%)	p value
Position Nurse supervisor Head nurse Staff nurse	11 (5.1) 39 (18.2) 164 (76.6)	7 (5.3) 15 (11.4) 110 (83.3)	0.231
Work experience (years) < 5 years 5-10 years ≥10 years	62 (29.0) 36 (16.8) 16 (54.2)	22 (16.7) 20 (15.2) 90 (68.2)	0.019*
Department Inpatient ICU Outpatient OR Othersa	110 (51.4) 41 (19.2) 26 (12.1) 9 (4.2) 28 (13.1)	62 (47.0) 19 (14.4) 26 (19.7) 9 (6.8) 16 (12.1)	0.230
Working hours Ordinary shift (6 hours/d) Long day (12 hours)	148 (69.2) 66 (30.8)	92 (69.7) 40 (30.3)	0.916
Shift work Day Night	149 (69.6) 65 (30.4)	91 (68.9) 41 (31.1)	0.893
Work conflicts No Yes	149 (69.6) 65 (30.4)	91 (68.9) 41 (31.1)	0.893
Physician-nurse communication No Yes	144 (67.3) 70 (32.7)	62 (47.0) 70 (53.0)	0.000**
Nurse-nurse communication No Yes	145 (67.8) 69 (32.2)	35 (26.5) 97 (73.5)	0.000**
Nurse-patient communication No Yes	60 (28.0) 154 (72.0)	31 (23.5) 101 (76.5)	0.350
Colleague support No Yes	112 (52.3) 102 (47.7)	44 (33.3) 88 (66.7)	0.001**
Supervisor support No Yes	182 (85.0) 32 (15.0)	79 (59.8) 53 (40.2)	0.000**
Organization support No Yes	196 (91.6) 18 (8.4)	100 (75.8) 32 (24.2)	0.000**

*Significant: p-value ≤ 0.05

a: Laboratory and specialized unit nurses.
OR: Operating Room

**Highly significant: p-value ≤ 0.01

ICU: Intensive Care Unit.

Table (2) revealed significant difference between nurses with low job satisfaction compared to the other nurse group (moderate and high job satisfaction) regarding work experience, physician-nurse communication, nurse-nurse communication, colleagues, supervisor and organization support.

Table 3: Socio-demographic and work characteristics as predictors of low job satisfaction among the studied nurses using binary logistic regression analysis.

Predictor	β	AOR (95% CI)	p value
Work experience			
< 5 years	0.444	1.56 (0.831- 2.923)	0.167
5-10 years	0.088	1.092(0.560-2.127)	0.797
\geq 10 years	---	1 (r)	---
Nurse-nurse communication			
No	1.429	4.18 (2.473 - 7.052)	0.000**
Yes	---	1 (r)	---
Supervisor support			
No	0.841	2.32 (1.296 - 4.147)	0.005**
Yes	---	1 (r)	---
Constant	-1.123		
% predicted	73.7%		
Model c2	76.617		
p-value	0.000		
-2 log likelihood	383.421		

β : Regression Coefficient, r: reference group, CI: confidence interval, AOR: adjusted odds ratio, c2: Chi-square, **Highly significant: p-value \leq 0.01.

Table (3) displayed that the significant independent predictors of low job satisfaction among nurses were nurse-nurse communication and supervisor support whereas nurses with lack of communication with their colleagues and deprived from supervisor support were more liable to low job satisfaction (OR = 4.18 and 2.32 respectively).

Discussion

The present study assessed the level of job satisfaction among a group of Egyptian nurses working in an university hospital. The present work detected that the overall prevalence of nurses encountering low job satisfaction was high (61.8 %) (Figure 1). This finding was in accordance with the result of a study conducted in Pakistan and revealed that all the studied nurses in both the private and public sectors were dissatisfied with their jobs (Hamid et al., 2014), while it was incomparable with other studies in which the prevalence of low job satisfaction were lower than our rate; 33.5% in Ethiopia (Semachew et al., 2017), 37.14% in Islamabad (Sultana et al., 2011), 29% in Australia (Holland et al., 2012), and 23% in India (Saini and Singh, 2005). These different rates could be due to variation in socio-demographic factors, work characteristics and economic levels in addition to different organizational resources and policies associated with the other studies (Saini and Singh, 2005; Sultana et al., 2011; Holland et al., 2012 and Semachew et al., 2017). The high prevalence of low

job satisfaction among public nurses was explained by Hamid et al.(2014) that nurses working in public sectors were under harsh circumstances and exposed to limited resources as well as searching for doctors, patients and society respects . Also, whether the nurses suffer from a low job satisfaction or not, this depends on their personal, social, and work features (Gardulf et al., 2008). These features may buffer the impact of job demands on job strain, including dissatisfaction. It was therefore crucial to inspect the socio-demographic and work characteristics that could be associated with low job satisfaction of the studied nurses.

The present work denied any significant differences between nurses with low job satisfaction versus those with moderate and high satisfaction regarding their socio-demographic characteristics (Table 1). To the end of our knowledge, there are deficient studies to explore the relationship between nurses' job satisfaction and socio-demographic characteristics particularly in countries suffering from nursing shortage including Egypt.

However, work characteristics in term of working experience, presence of physician-nurse communication and nurse-nurse communication as well as colleagues, supervisor and organization supports were significantly lower among nurses with low job satisfaction compared to those with moderate and high level of satisfaction (Table 2). Previous studies showed different finding; while some of them conducted in Ethiopia (Semachew et al., 2017), in Italy (Dignani and Toccaceli, 2013) and in Kuwait (Al-Enezi et al., 2009) found that the highest level of nurse satisfaction was related to satisfaction from coworkers and the least satisfaction was from professional opportunities and extrinsic reward, other studies from USA (American Nurses Association, 2005), Lebanon (El-Jardali, 2009), and Jordan (Mrayyan, 2006) showed nurses with higher satisfaction with regard to career development.

Our study revealed that nurses lacking colleagues communication were nearly 4 times more prone to low job satisfaction (OR =4.18). Furthermore, those deprived from supervisor support were about 2 times more liable to low

job satisfaction (OR =2.32) (Table 3). Previous study conducted on Ethiopian nurses working in public hospital, reported that absence of mutual understanding at work was a significant predictor of low job satisfaction which was in accordance with our result. However, the Ethiopian study found also other predictors as lack of professional commitment, excess work load and working in outpatient clinics (Semachew et al., 2017). Also Bjørk et al. (2007) mentioned that working for a long time in the profession and in a specific unit/ hospital were predictors of higher levels of job satisfaction. Meanwhile, Jayasuriya et al. (2012) concluded that work climate, supervisory support, community support were significant predictor of job satisfaction.

Conclusion and Recommendations

The present study indicated that nearly two thirds of MUH nurses expressed low job satisfaction. Lack of colleagues-communication and supervisor support at work predicted the outcome variable which is low job satisfaction. Achievement of high level of job satisfaction is recommended to provide high-quality healthcare system.

Study limitation

Despite using a validated tool, it is possible that nurses may under or over report their level of satisfaction. The second limitation was the use of questionnaire in English language without Arabic translation and this may possibly cause some misunderstanding. However, we assume that nurses can read and understand English.

Future Implications

Many nurses reported that colleague's communication and supervisor support were determining factors regarding job satisfaction. With this information, staff nurses could improve their own satisfaction by cultivating their peer communication into supportive and encouraging ones. In addition, changing attitude of nurse supervisor towards positive relation with staff nurses is crucial to increasing job satisfaction and consequently improves the quality of healthcare.

Conflict of interest

None.

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