

Job Satisfaction of nurses in a Tertiary Medical Care Center: A Cross Sectional Study, Riyadh, Saudi ArabiaAhmed AbdulatifBahnassy¹, AbdulazizFahadAlkaabba², AbdallaAbdulwahidSaeed¹, Turkey Al Ohaidib¹

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Abstract: Job satisfaction is of interest to both people who work in organizations and people who study them. In the Kingdom of Saudi Arabia, the health care delivery system relies heavily on expatriate human resources; hence their job satisfaction is crucial for patient satisfaction and quality of care. The objectives of this study are to: determine the overall job satisfaction and its correlates among nurses working in a tertiary care. This is a cross sectional study among nurses working in a tertiary care center. A stratified random sample with proportional allocation used to choose 980 nurses. A self administered questionnaire was used. Descriptive, bivariate and multivariate analysis was used for data analysis using SPSS version 17 software. The level of significance was set to be <0.05 throughout the study. The study results showed that mean satisfaction scores for all participants was 105.2 out of 150 (70% satisfaction), males were less satisfied than females, Saudis were less satisfied than non Saudis but the differences were not significant. Significantly higher satisfaction was associated with Staff nurse 2, nurses working in Women hospital, nurses with lower than doctorate qualification and nurses with higher salaries. In general the overall job satisfaction of nurses is acceptable and comparable to similar medical care facilities. The study recommends: Revision of salaries and fringe benefits to make them more attractive in this competitive market and in depth inquiry about the specific reasons and determinants of the poor satisfaction among nurses with doctorate qualification, nurses working in Rehabilitation hospital to boost their job satisfaction level.

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Introduction:

For any organization, job satisfaction of its workers means a healthier work force that is productive, retained and motivated. There will be significant reduction in complaints, grievances, absenteeism, turnover, termination; and significant improvement in punctuality and morale (Yaffee, 2011). In health care institutions job satisfaction is also related to satisfaction of patients and their families. Nursing professionals have the greatest impact in this respect. Nursing which is an integral component of any health care facility is a highly stressful occupation. Nurses are particularly at risk from stress-related problems, with high rates of turnover, absenteeism, and burnout (Antigoni, 2011 and Mark and Smith, 2012). This has detrimental effects both on their mental and physical health, productivity and efficacy at work, absenteeism, as well as on patients' outcomes such as increased mortality and patient dissatisfaction (Yafe, 2011; Antigoni, 2011 and Mark and Smith, 2012). The situation is more complicated by the national and international shortage of qualified nurses. The Kingdom of Saudi Arabia (KSA) is a fast developing Gulf country, which has been suffering for a long time of the shortage of human resources in the healthcare

institutions, especially qualified professional nurses (Al-Wadel, 2009). Most hospitals and healthcare facilities are staffed predominantly by expatriate nurses, recruited from different parts of the world with different cultural backgrounds, religions, languages, trainings and expectations. The annual supply of Saudi nursing graduates has been insufficient in meeting the demands of the expanding healthcare services. Saudi nurses constitute less than 30% of the total nursing workforce Kingdom wide (Gazzaz, 2009). It is of vital importance in this era of acute shortage of Saudi and Non Saudi nurses to study different aspects of nurses job satisfaction particularly factors associated with poor satisfaction level. Awareness of the factors affecting job satisfaction in the nursing profession has led to the development of many creative approaches to the recruitment and retention of nurses (Aiken et al., 2001). Many studies identified some of the factors that might contribute to the job satisfaction which in general consist of: wages, benefits, accomplishment, independence, acknowledgment, communication, working job conditions, job importance, co-workers, professionalism, organizational climate, relationships, working for a reputable agency, supervisor support, positive, job security, workplace flexibility, team

environment and leadership style (AbdRahmad et al., 2013; Lober and Skela, 2012 and Top et al., 2013). Other authors suggest that employees' job satisfaction has relationship to friendship network other than professional commitment, and argue that friendship network in the same ward and across wards will have different effects on employees' job satisfaction (Li-Se et al., 2012). Nurses satisfaction studies reported that Job dissatisfaction among nurses in western countries ranged from 17% to 41%. This was mostly correlated with job, nurse-physician collaboration, and autonomy (Aiken et al., 2001; Lorber and Skela, 2012; Wang et al., 2012). Previous studies in KSA reported variable levels of nurses satisfaction and the associated factors. The satisfaction levels ranged from high in nurses serving general hospitals (Al-Aameri, 2000; El-Gilany and Al-Wehady, 2001) to moderate (Al-Ahmadi, 2002) while almost two thirds of nurses were dissatisfied in a military hospital (Al-Wadel, 2009). The reasons for dissatisfaction in these studies included lack of incentives, work conditions and climate and organizational factors (Al-Wadel, 2009; Al-Aameri, 2000; El-Gilany and Al-Wehady, 2001). The objectives of this study are to: determine the overall job satisfaction and its correlates among nurses working in a tertiary care.

Methodology:

This is a cross sectional study. The study subjects were nurses working in a major tertiary care center in Saudi Arabia which has 4 hospitals; main, women, children and rehabilitation hospitals. Sample Size estimation was based on the following assumptions: satisfaction rate is 50% among nurses and type I error is 0.05, Type II error is 0.2, the Power is 80%, and permissible error is 0.05, thus the required sample size was estimated to be more than 784 nurses. Assuming the response rate around 80% from all required nurses, the sample size was increased to 980 nurses. A stratified random sample with proportional allocation from all nurses working in this facility was used. This sample was proportional according to the Job Rank (Directors and managers, Head nurses, Charge nurses, Staff nurses, health care assistants, and midwives).

Although there are many instruments to measure job satisfaction in the literature, the authors preferred to create their own questionnaire to suit the nature and traditions of the Kingdom of Saudi Arabia. This specially-designed questionnaire had been validated and piloted. The self-administered questionnaire with clear instructions was distributed to the selected nurses who participated in the study. The questionnaire contained: demographic variables, job rank and 30 statements on a 5 - point Likert scale to measure the nurses' satisfaction. These items covered satisfaction with the recent job, supervisors, colleagues, and

appreciations. The reliability of the questionnaire had been tested using Cronbach's alpha (α). The results showed that the reliability for the used questionnaire equals to: 0.833. An Institutional Review Board approval was obtained and a written consent form was obtained from all participants. To assess the test-retest reliability of the questionnaire, a sub-sample of 40 nurses- not included in the final analysis- working in the center were selected randomly. They had been informed that they might be contacted by an investigator in any time and they agreed to leave their phone numbers. These nurses were contacted by phone two months later and they answered the questionnaire another time. The test retest result was 0.81. Besides, five scholars in both public health and nursing have reviewed and agreed with this questionnaire assessment of nurses' job satisfaction.

Statistical Analysis:

Data were collected and entered in a SPSS version 17 file which was used – as well- for analysis. Descriptive statistics i.e. mean score + its standard deviation (sd) for each quantitative variable, and frequency for the qualitative variables were calculated. Bivariate analyses were used to test the possible relationship among different study variables. t-test, one way ANOVA with Sheffee method for multiple comparisons and chi - square test were used, as appropriate, to find if there were any significant relationship(s) between satisfaction scores and the predictor variables i.e. gender, nationality, last educational degree etc. The level of significance was set to be < 0.05 throughout the study.

Results

In this study, 980 nurses working in a tertiary care hospital in Riyadh, Saudi Arabia were enrolled between February till the end of June 2012. Of these 722 nurses completed the self-administered questionnaire used in this study (a response rate of 73.67%). The mean age of the respondents was 34.3 \pm 7.9 years. The majority of them, 647 (89.5%), were females, 46 (6.4%) were Saudis; most of them had B.Sc. degree 505 (69.8%); the majority of them were staff nurses 364 (52.8%) see table 1.

Table 2 shows mean satisfaction scores and percent satisfaction for some demographic variables. Those who were in the youngest age group (< 30 years) scored the highest satisfaction with percent satisfaction 70.7%, followed by those who were 50 years and above with percent satisfaction 70.55%. No statistically significant difference in mean satisfaction scores was detected between age groups ($p=0.22$). With respect to gender, females scored higher mean satisfaction scores compared to males, with no significant difference ($p=0.15$). The results also show that non Saudis had

higher percent satisfaction than Saudis 70.23% vs. 68.61%, but with no statistically significant difference ($p=0.06$). According to marital status, divorced nurses scored the highest mean satisfaction scores, while widowed ones scored the lowest (106.1 ± 7.6 vs. 100.2 ± 7.9), with $p=0.14$.

Table 3 shows statistically significant differences for nurses' specific occupation; where staff nurse 2 had the highest scores 106.8 ± 8.3 with percent satisfaction 71.18% with ($p=0.02$). It shows also a statistically significant difference for different places of work ($p=0.02$). Those nurses who were working in the rehabilitation hospitals scored the lowest 101.2 ± 8.9 compared to those who were working in the women hospital 106.1 ± 6.3 ($p=0.02$). Those who hold PhD scored the lowest mean satisfaction scores compared to any other educational degrees (85.6 ± 9.4) ($p<0.001$). Nurses who obtained the last educational degree from Africa scored the lowest mean satisfaction scores than others, while those who obtained it from Australia had the highest mean scores (99.2 ± 8.1 and 113.01 ± 1.0 respectively) ($p=0.272$). Nurses who were very satisfied with their payment had the highest mean satisfaction scores than others 109.6 ± 6.9 ($p<0.01$). There was a significant association between salary and satisfaction ($p<0.001$), the higher the payment the nurse, the more satisfied he/she would be. No statistically significant difference was found between satisfaction scores and either recent years of experience or total years of experience ($p=0.38$ and $p=0.24$ respectively).

Discussion:

The results of this study showed that overall satisfaction of nurses was 105.2 out 150 (70.13%). There were variations in overall satisfaction and its correlates. The significant differences were only for level of education, salary, type and place of work. The overall job satisfaction of nurses in this study is comparable to results of previous studies in civilian hospitals (Al-Aameri, 2000; El-Gelani and Al-Waehady, 2001; Al-Ahmadi, 2002 and Alshallah, 2004) and in a tertiary care teaching hospital (Al-Dossary, Vail and Macfarlane, 2012). International studies reported very wide variations in overall satisfaction of nurses from as low as 13 % to more than 90% in health care facilities (Aiken et al., 2001; Sultana et al., 2011 and Bahalkani et al., 2011). These wide variations in overall job satisfaction of nurses may have been confounded by other factors such as methodology and instruments used, rating scales and sampling variations. The significant correlates of nurse job satisfaction in this study include education, income, type and place of work. Nurses with doctorate degree are less satisfied than those with less than doctorate qualification. The association of educational level on

job satisfaction of nurses has been conflicting. Some studies in agreement with this study have found that nurses with doctorate qualifications were less satisfied than nurses with no doctorate degrees. Nurses with a diploma were found to have a higher level of satisfaction compared to bachelor degree holders (Al-Dossary, Vail and Macfarlane, 2012 and Cummings et al., 2008). The inverse relationship supports the argument that education raises expectations that subsequently are not met (Rajapaksa and Rothstein, 2009). Payment was a significant factor in overall job satisfaction among nurses in this study in agreement with previous studies (Al-Ahmadi, 2002 and Sultana et al., 2011) but income was not significantly associated with satisfaction in other studies (Al-Dossary, Vail and Macfarlane, 2012). The voluntary information about income in general may not be very accurate and professional may not want to admit that financial rewards are more important than the professional interest in the job. In this study nurses are recruited from almost all countries in the world but their nationality was not a significant factor on their level of satisfaction. Studies reported conflicting results of association of nationality with satisfaction among nurses (Sultana et al., 2011 and Bahalkani et al., 2011). Nurses working in Rehabilitation hospital in this study showed a significantly lower overall job satisfaction compared to nurses in Women hospital. The type of work and the nature of patients and their outcome may explain these levels of job satisfaction. Patients in rehabilitation usually suffer from chronic disabilities compared to women hospital who are usually in the child bearing age and healthier. Studies reported that satisfaction was not only associated with the hospital where the nurses are working but also with the department they are working in the same hospital. A study in Taif, KSA indicated that ICU and Emergency staff nurses were under a high level of stress and this contributed to low level of satisfaction among them (Kamal et al., 2012). Other demographic characteristics such as age, gender, marital status showed no significant association with nurse job satisfaction in this study. Studies elsewhere found no association with these demographic variables in agreement with this study (Ravari et al., 2012 and Shah et al., 2004). Other studies, however, reported significant differences in job satisfaction according to age, gender and marital status (McHugh et al., 2011 and Sousa-Poza and Sousa-Poza, 2000). These inconsistencies in the association with of nurse job satisfaction and some of their sociodemographic characteristics are not unexpected. Many other factors could have confounded the result. These may include socio-cultural, religious, personality type and trait and attitudes and beliefs.

Conclusion:

Nurses work in different contexts and settings, often with very different organizational cultures and all of this may lead to a very different experience. Of course individuals choosing these career paths may also differ in terms of characteristics and aspirations and this also may influence the level of satisfaction. This is particularly in KSA where nurse from many different nationalities, ethnic, social, cultural and religious, training and educational backgrounds work together. This may explain some of the differences in satisfaction levels according to socio-demographic characteristics and work environment. This study revealed that highly qualified nurses and nurses working in Rehabilitation hospital show lower job satisfaction. This warrants close look and further studies to retain and satisfy highly qualified nurses and those working in certain hospital departments. There is a worldwide shortage of nurses and Saudi nurses, particularly females, constitute a very minor portion of nurse workforce. The need for strategies to encourage females to choose nursing career and to stay in the job is of paramount importance to achieve organization goals. The study recommends further studies addressing other factors which may affect job satisfaction and not covered in this study. The nurses with low job satisfaction namely nurses with doctorate qualifications and nurses working in Rehabilitation Hospital need special effort to deal with issues associated with their low satisfaction for corrective action. Revision of salaries needs to be a continuous process to match other competing employers.

Study limitations:

The study is a cross-sectional in nature and such designs are weak in providing predictive explanations. Other factors which may be associated with job satisfaction such as leadership styles were not included in the study.

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Competing Interests:

The authors declare that they have no competing interests.

Table 1: Demographic Characteristics of the Study Sample

Variable	No.	%
Gender		
Male	76	10.5
Female	647	89.5
Nationality		
Saudi	46	6.4
Non Saudi	677	93.6
Last Educational Degree		
Diploma	213	29.5
BSC	505	69.8
PH.D	5	0.7
Occupation		
Nurse Manager	4	0.6
Head Nurse	15	2.2
Charge Nurse	43	6.2
Staff Nurse	364	52.8
Staff Nurse 2	212	30.7
Staff Nurse 3	27	3.9
Health Case Assessment	10	1.4
Midwife	15	2.2
Marital Status		
Single	193	28.5
Married	438	64.6
Divorced	35	4.8
Widowed	12	1.7

Table 2: Mean satisfaction Scores and Percent Satisfaction for Some Demographic Variables

Variable	Mean ± sd	% Satisfaction	P - Value
Age			0.22
< 30	106.03 ± 8.4	70.70	
30 - < 40	104.67 ± 9.2	69.78	
40 - < 59	104.53 ± 7.7	69.69	
50+	105.67 ± 8.1	70.55	
Gender			0.15
Male	103.43 ± 11.3	68.96	
Female	105.39 ± 8.2	70.26	
Nationality			0.06
Saudi	102.9 ± 10.4	68.61	
Non Saudi	105.3 ± 8.5	70.23	
Marital Status			0.14
Single	104.9 ± 9.2	69.91	
Married	105.5 ± 8.2	70.34	
Divorced	106.1 ± 7.6	70.70	
Widowed	100.2 ± 7.9	66.78	

Table 3: Mean satisfaction scores and percent satisfaction for some demographic variables

Variable	Mean \pm sd	% Satisfaction	P - Value
Occupation			0.02
Nurse Manager	113.5 \pm 1.29	75.67	
Head Nurse	105.1 \pm 5.72	70.09	
Charge Nurse	103.5 \pm 7.2	69.04	
Staff Nurse	104.7 \pm 8.5	69.81	
Staff Nurse 2	106.8 \pm 8.3	71.18	
Staff Nurse 3	103.8 \pm 9.1	69.19	
Health Care Assessment	103.3 \pm 17.3	68.87	
Midwife	102.7 \pm 5.8	68.44	
Place of Work			0.02
Children Hospital	106.5 \pm 6.8	71.01	
Women Hospital	106.1 \pm 6.3	70.75	
Rehabilitation	101.2 \pm 10.1	69.71	
Main Hospital	105.2 \pm 8.9	70.16	
Level of Education			< 0.001
Diploma	106.1 \pm 8.5	70.70	
Bachelor	105.02 \pm 8.4	70.01	
PhD	85.6 \pm 9.4	57.07	
Place of Obtaining Last Degree			0.272
Saudi Arabia	104.6 \pm 10.1	69.75	
Arab Countries	105.7 \pm 9.1	70.45	
Europe	101.5 \pm 14.8	67.67	
South East Asia	105.3 \pm 8.2	70.23	
Africa	99.2 \pm 8.1	66.11	
Australia	113.01 \pm 1.0	75.33	
Payment			< 0.001
Unsatisfied	99.3 \pm 9.3	66.21	
Neutral	99.7 \pm 8.9	66.33	
Satisfied	104.0 \pm 7.5	69.49	
Very Satisfied	109.5 \pm 6.9	72.99	
Recent Years of Experience			0.38
≤ 5	104.56 \pm 8.8	70.31	
5 – 9	105.46 \pm 8.2	69.77	
≥ 10	105.7 \pm 9.1	70.13	
Total Years of Experiences			0.24
≤ 5	106.6 \pm 7.9	71.07	
6 – 10	105.1 \pm 8.9	70.08	
11 – 15	105.9 \pm 8.02	69.69	
16+	104.5 \pm 9.4	70.01	

Authors' Contributions:

A.Bahnassy conceiving, designing collection and analyzing the data and supervised the research. A.Alkaabba participated in the data collection and communicated with the nurse's administration. A Saeed participated in writing the discussion and drafting the manuscript. T.Al Ohaidib participated in data collection and analysis. All authors have read and approved the final manuscript.

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