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Patient Satisfaction with Quality of Nursing Care at Governmental Hospitals, Ha'il City, Saudi Arabia

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Abstract

This study examines patient satisfaction with nurses' quality of care across three tertiary hospitals in Ha'il Region, Saudi Arabia. The objectives were to establish patients' satisfaction through one survey and rate nurses' job performance through another, surveying unit head nurses. A quantitative research design was selected based on a 5-point Likert scale.

Assessment of the staff nurses' job performance by unit head nurses and nurse supervisors was conducted using the Ministry of Health's 46-item questionnaire in English and Arabic for Saudi and non-Saudi staff. Patient Satisfaction with Nursing Care Quality Questionnaire (PSNCQQ) was used to measure patient satisfaction and comprised of 22 items based on the quality of care given by staff nurses that were translated in Arabic. All the instruments were rated on a 5-point Likert scale by head nurses and patients respectively. Reliability tests were conducted on the instrument.

A total of 90 Saudi and non-Saudi head nurses and 87 Saudi patients were surveyed using convenience sampling over a two-month period in 2015. Questionnaires were administered through the Office of the Continuing Nursing Education (CNE) of the Nursing Service Department that were collected and encoded by three faculty research assistants of Medical and Surgical Department of the College of Nursing. Standard procedures for data collection and storage were employed for the protection of respondents' information.

This study has revealed a very good level of quality of nursing care in terms of the high ratings on nurses' job performance in the wards and patient satisfaction. Statistically significant results were found between patient satisfaction and marital status, health before admission, and size of ward. Significant results were also found between staff nurses' job performance and the means of admission, and prior admittance.

Overall, the quality of healthcare in a tertiary setting in Ha'il region can be reflected by the performance of the three hospitals in the surveys of staff nurses and patient satisfaction. In addition, this also shows that standard of care imposed by the Ministry of Health remains to be met. However, regular surveying should be undertaken to ensure its continuity. Strategic plans for continuous quality improvements should be focused on the physical set-up of the hospitals in terms of ward size; admission procedures including patient experience during admission; training and support for nursing staff; and a family-oriented healthcare since the majority of patients are married.

Keywords: Patient Satisfaction, Quality of Nursing Care, Saudi Arabia

1. Introduction

The Ministry of Health employs some 71,000 nurses in its hospitals, and over for the private sector throughout Saudi Arabia (WHO, 2013) . There are 13 provinces in the Kingdom. Ha'il City is the capital of the Ha'il province (population 670,000) and lies some 600 km northwest of Riyadh. The province has eleven Ministry hospitals, two private hospitals, and ancillary health centres for public health and specialist services. There were 2106 nurses employed in the Ministry's hospitals in the province in 2014, predominantly women (81%) and over half (58%) Saudi Nationals (Ministry of Health 2015, Table 2-16). The three hospitals included in this study have a total population of 1,009 female staff nurses (Saudi and non-Saudi), specifically King Khaled Hospital with 280 beds and 494 nurses, Ha'il General Hospital with 245 beds and 236 nurses; and Maternity and Children's Hospital with 135 beds and 279 nurses.

The Saudi healthcare system was developed from the late 20th century. In responding to high population growth in 1970 up to 1990, the Ministry of Health used international contractors to develop and staff its healthcare facilities; indeed, this approach was used for all social development, including the education system (WHO, 2013). As tertiary education expanded, more Saudis entered healthcare, however ancillary healthcare workers and nurses dominate occupations of the Saudi workforce and many do not have university

qualifications (Alsaqri, 2014). As in other countries, Saudi Arabia experiences nursing shortages (Abolfotouh et al., 2014).

Satisfaction evaluations reflect the outlooks from the patients' point of view in comparison with the realities of the care received (Tang et al., 2013). Patient satisfaction is associated with nursing care but there is not enough evidence to support it (Palese et al., 2011) most especially the current framework of satisfaction measurement revolves around medical care and treatment outcomes. In Saudi Arabia, where diversity has been increasing in the health care workforce since the past decades, the influx of care providers has been for nurse staffing. In spite of the immense contributions of nurses in the health care system of Saudi Arabia, it seems their job performance is diluted by various working conditions and yet they tend to remain resilient to ensure safe and quality care hence patient satisfaction becomes a good indicator of quality in the health care system and provides the means for quality improvement.

1.1 Objectives of Study

The objectives for the research were to assess the quality of nursing care and patients' satisfaction in three tertiary level hospitals: (1) King Khaled Hospital; (2) Ha'il General Hospital, and (3) Maternity and Children's Hospital. And from these data, formulate a plan for continuous quality improvement. Two surveys were conducted to determine: Head Nurses' evaluation of staff nurses in each unit, and Patients' Satisfaction with the standard of nurse care.

The analyses from these quantitative surveys explored relationships between the variables to identify meaningful factors that could be used for quality assurance for healthcare in Ha'il Region.

2. Literature Review

Quality of nursing care is critical to healthcare, and the literature reflects its importance (Alasad et al., 2015, Atallah et al., 2013, Albagawi, 2014). Patient satisfaction is an important indicator of quality care and is frequently included in healthcare planning and evaluation. In England, Almalki et al. (2012) noted that the health authorities require hospitals to regularly audit patient satisfaction. In the United States, (Mohammed et al., 2016) placed patient satisfaction as a key to value-based healthcare delivery in hospitals and is used to improve service delivery.

Patient satisfaction is nevertheless subjective and 'perceptions may differ by settings and condition' (Mohammed et al., 2016) p. 12. In a review of studies on patient satisfaction indicators, the researchers identified the following factors that can be assessed by the patient: the carer's availability and his/her knowledge and skills, patient-carer communications, pain control, patient education and shared decision making, the hospital environment, and the admission/discharge process. Thus patients' satisfaction in these services is not simply a measure of service quality. It is also the objective of healthcare delivery. In another study, caring behaviour, nurse competency and technical care were reported by patients affecting the quality of nursing care (Al Momani and Al Korashy, 2012). Due to these recent findings the literature review is arranged in as follows: health care-related factors which include demographic variables, working conditions and nursing care; patient-related factors which include demographic variables, perception about care; and the conceptual framework of the study.

2.1 Health Care-Related Factors: Nurses Demographic Variables, Working Conditions and Nursing Care

In the study of Henderson et al. (2007), patient satisfaction in the context of "caring" is perceived by the patients "cared for" when nurses can respond to their specific requests. Thereby, increasing the level of patient satisfaction relies on the nurses if they can readily accommodate patients' requests, or if not immediately nurses are able to communicate the reasons. The study has also illuminated the problem brought about by "bureaucratic demands" in terms of increased workloads and reduced staffing levels. The net impact is having a limited time for nurses to interact with patients which becomes a major source of dissatisfaction. Moreover, it is when patients feel disempowered or their integrity is threatened that they make a complaint.

Patient satisfaction and quality of health care factors determined by Mohammed et al. (2016) can be extended to Saudi Arabia. However, the Ministry of Health's reliance on expatriate staff and use of English as

the "lingua franca" in its workplaces add to Mohammed et al.'s list: language barriers between various nationalities, different nursing qualifications and courses, and high workloads for nursing staff (Almalki et al., 2012). There are also cultural issues within the Saudi community due to the lack of male nurses, gender separation in public places is not observed, and female nurses care for male patients which is discomforting for Saudi men. Traditional practices mean that Saudi women must get the permission of a mahram (male relative) for healthcare interventions, and Saudis have traditional potions and remedies for illnesses which may conflict with healthcare treatment (Almalki et al., 2012).

Further, there is an element of inexperience in the demographics of the Saudi nurses. Alboliteeh (2015) recently found that Saudi nationals who were nurses in Riyadh (n=741) were young (average 27 years) and inexperienced (predominantly less than 5 years); they reported poor working conditions, lacked social status in their profession, sought professional development, and nearly half wanted to leave the profession. Haines (2013) assessed error management practices of registered nurses working in a tertiary hospital in Jeddah (n=176) and their supervisors (n=12), determining different perceptions of error by each group. The areas of difference were in identifying nurse errors, questioning the practices of peers, staff nurses' views on a non-punitive environment, and their varying ability to refer to the difference between error and negligence. Education and an improved error-management environment were recommended.

The findings in Alboliteeh (2015) on nurses' working condition, as significant factor, has been reported in an earlier study. According to Han, Connolly, and Canham (2003), the working experience in the nurse's unit indeed has influence to patient satisfaction based on patient satisfaction surveys from medical and surgical units (n=477) in a large teaching hospital in southern Taiwan. On the other hand, patient demographic variables, primary nurse's age, marriage, and total working experience were not significant. Nurse-patient interaction has not been key variable to achieve patient satisfaction.

In the study of Al-Ahmadi (2009)among nurses (n=923) across 15 hospitals in Riyadh, job satisfaction and organizational commitment are strong predictors of nurses' performance. Job performance is positively related to years of experience, nationality, gender, and marital status. On the other hand, the level of education is negatively related to performance.

Despite these issues, Atallah et al. (2013) found a high satisfaction rating (86%) with the quality of nursing care among patients (n = 100) in a Riyadh hospital; however, patients only marginally approved (56% each) language fluency and discharge information. Language issues were also reported by Albagawi (2014) in surveying nurses in five Saudi hospitals, although this was mitigated by patient perception of better communication skills by expatriate nurses, that is, a perception that good communications influence care. Confirming these findings, again in Riyadh, Alasad et al. (2015) found a high level of satisfaction of nursing care among a larger (n = 424) patient sample. In a previous patient satisfaction Riyadh study (n = 448), Al Momani and Al Korashy (2012) found that while patients were largely satisfied with factors relating to communication, expertise and care, they were less satisfied with education on self-help and empathy.

The study of Samina et al. (2010) on nursing services as perceived by patients (n=2121) in a large teaching hospital in India using prospectively over a year has indicated responsiveness, availability and ward organization (more than 95%) ability of the nurse were related to satisfaction. However, explanation and information (31.6%) and caring attitude (11.5%) were related to dissatisfaction.

Suhonen et al. (2007)have explored the effect of individualized care to patient outcomes through a cross-sectional correlational survey (n=723) specifically, in surgical, gynecological and internal medicine units. The study has measured patient satisfaction, patient autonomy and perceived health-related quality of life. It can be inferred from their findings that patient interaction as met by the provision individualized self-care can positively affect patient autonomy to perform "self-help" or self-management. This also holds true in the study of Wolf et al. (2008) using a clinical randomized posttest design after providing patient-centered care. The relationship of the nurse to the patient is a factor to be considered when measuring patient satisfaction.

In another study by Akinci and Sinay (2003), health care access (measured at three levels: health plan, individual providers and healthcare organization) has an effect to satisfaction using multivariate logistic regression. Difficulty with obtaining referrals, self-rated general health, marital status and age over 80 years were among the significant variables. The demographic variables were consistent with the findings of Al-Doghaither (2000) among patients (N= 301) from five primary health care centers across Kuwait City. Gender, and marital status were among the most consistent demographic predictors of satisfaction. However, in the study of Haviland, Morales, Reise, and Hays (2003) it was found that being Asian and having limited English-speaking

ability in the demographic profile negatively impacts satisfaction with health care based on the National Research Corporation Healthcare Market Guide survey (N=120,855) in 1998. Other factors included were access to care, providers' delivery of care, customer service, and cost/benefits of care.

2.2 Patient-Related Factors: Demographic Variables and Perceptions About Care

Al-Faris et al. (1996) has been the earliest to report on patient demographic factors. Being married with the addition of being housewives has shown higher satisfaction ratings. Older age and being non-Saudi were included. Patients' educational level and sex have no significant effect on the overall satisfaction. Health care factors included ideal physician attributes (e.g. sympathy, careful examination, listening to patients' complaints and experiences), doctors' communication practice (e.g. explaining patient's condition, eye to eye contact), nursing services (e.g., language barrier, disorganization and non-cooperation), features of health centers (e.g., overcrowding, absence of appointment systems and inadequate drug supply or laboratory services), and long waiting time (> 1 hour) and consultation time (less than 5 minutes and more than 20 minutes).

On the other hand, Liu and Wang (2007) has investigated other factors influencing satisfaction with nursing care among inpatients (N=320) in a teaching hospital in China. Patients' age, educational background and hospital wards were included in the main factors. These findings were found in a similar study by Milutinović et al. (2012) among patients (N=240) who were discharged from surgical clinics of the Clinical Center of Vojvodina in Novi Sad, Serbia. They reported patients' age and including educational level and previous hospitalization period. In addition to these findings, the type of medical procedure has also been shown to affect patient satisfaction based on the study of Wolf, Miller, and Devine (2003) among patients (N=73) undergoing invasive cardiac procedures. A moderately strong relationship (r=0.53, p=0.01) between nurse caring and satisfaction was found.

In the longitudinal study of Hall et al. (1993) on the causal factors related to health status and satisfaction with medical care, it was shown that patients (N=590) with better self-perceived health status and functional ability were more satisfied after 1 year (N=526). The results were consistent in the findings of Ren et al. (2001) using data from Veterans Health Administration among ambulatory care patients from 1996 to 1998 wherein the effects of health status on satisfaction has been shown to be more important than the effects of satisfaction on health status. A later study by Thi et al. (2002) has conferred with the previous studies. Medical and surgical patients after two weeks of discharge (N=533) has shown that older age and better self-perceived health status at admission were the strongest predictors of satisfaction. Men tended to be more satisfied than women. Other predictors specific for certain dimensions of satisfaction were: being married, Karnofsky index (functional impairment scale) more than 70, critical/serious self-reported condition at admission, emergency admission, choice of hospital by her/himself, stay in a medical service, stay in a private room, length of stay less than one week, stay in a service with a mean length of stay longer than one week.

The finding that male patients are likely more satisfied than females by Thi, Briancon, Empereur, and Guillemin (2002) was supported by Rafii, Hajinezhad, and Haghani (2008) in their study of patients (N=250) who were hospitalised for medical conditions or surgical procedures during 2007 in various teaching hospitals in Tehran, Iran that were affiliated to Iran University of Medical Sciences. They indicated a statistically significant relationships between male patient reports of nurse caring and satisfaction with nursing care (r=0.72, p=0.000; CI 95%).

In contrast, Al-Doghaither (2000) based on the results of the study of inpatients (N=400) in King Khalid University Hospital, Riyadh female patients with less education are more satisfied as compared to male patients with higher education particularly from surgical and medical ward. These were factors to be considered in the culture in Saudi Arabia as reported by Almalki et al. (2012). Other variables that were significant to hospital services are admission and communication. Communication is a common cause of low satisfaction among patients not because of a language barrier but in the manner of asking for the patient condition. It was found that physicians enquiring about patient conditions and opinions when planning care have the highest score for patient satisfaction and the lowest for physicians asking for opinions about care quality and problems. This has indicated gender and level of education are significant factors.

According to the study of Iezzoni et al. (2002) among patients older and younger than 65 years (n=16 403) using the 1996 Medicare Current Beneficiary Survey, having a disability in the health satus negatively impacts satisfaction. Specifically, for elderly persons with any major disability, the adjusted odds ratios (95%

confidence interval) of dissatisfaction were: 3.2 (2.4-4.3) for overall quality; 3.2 (2.2-4.6) for access to specialists; 4.4 (3.1-6.4) for follow-up; and 4.2 (3.1-5.7) for ease of getting to doctors. Elderly persons receiving managed care were less satisfied with access to specialists but more satisfied with costs.

2.3 Conceptual Framework: Health Care-Related Factors and Patient-Related Factors

The findings of the studies in the literature and of colleagues that were presented above have led to the development of a framework that is "nursing management-driven" to capture both "patient satisfaction" and "quality nursing care" (Figure 1). The "domains" that comprised the nurses' job performance were based on the standard evaluation tool of the Ministry of Health in Saudi Arabia. On the other hand, patient satisfaction domains were based on the study of Laschinger et al. (2005). This is believed to arise as a consequence of fulfilling the management on the delivery of care and to control its barriers by the nurses. Quality of care pertains to the overall positive experience of patients.

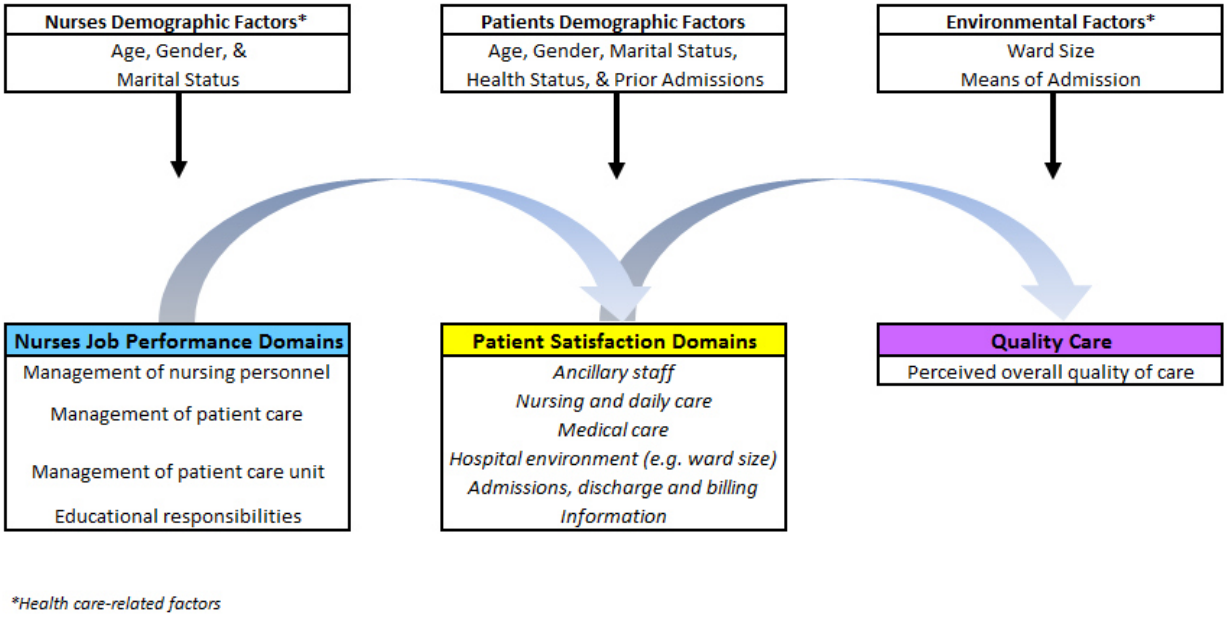

Figure 1. Conceptual Framework On Nurses Job Performance, Patient Satisfaction and Quality Nursing Care.

3. Methodology

This study employed a quantitative research design to measure Saudi patients' perceptions of the quality of care during their stay at in Ha'il City Hospitals. The design included correlational analysis to determine whether, and to what degree, a relationship exists between two or more quantifiable variables on the survey instruments (Polit and Beck, 2013) . In both parts of the study, convenience sampling was employed. The criteria for eligibility for staff nurses includes (a) being a nurse manager in the hospital either as head nurse or nurse supervisor and (b) can cooperate to fulfil a survey. On the other hand, patients should (a) be Saudi national, (b) have minimum of three days' admission, (c) admitted in the ward, (d) has stable condition or awaiting a discharge order, (e) have the ability to assess their experiences and the hospital environment, and (f) willing to participate in the study. All were to agree to participate and received assurances of anonymity and ethical data collection and management.

The survey instrument selected for nurse managers was a scale developed by the Ministry of Health to measure quality of nursing care. The 46-item English and Arabic questionnaire was in four parts: Management of nursing personnel (Items 1.1 to 1.7), Management of patient care (Items 2.1 to 2.26), Management of patient care unit (Items 3.1 to 3.4), and Educational responsibilities (Items 4.1 to 4.9), and is measurable by a 5-point Likert scale (Table 1).

Patient Satisfaction with Nursing Care Quality Questionnaire (PSNCQQ) was acquired online (http://publish.uwo.ca/~hkl/tools/psncqq/index.html) and with the permission of the author (Laschinger et al., 2005), it was used to measure the patients' satisfaction in the research setting based on the quality of nursing care they received on a 5-point Likert scale (Table 1) using the 19 questions derived from Patient Judgement of Hospital Quality survey of Meterko et al. (1990) by Laschinger et al. (2005) that were translated in Arabic form for Saudi patients. Items 7, 9 to 13 pertains to nursing and daily care; Items 14 to 16 for ancillary staff and hospital environment; Item 8 for medical care; Items 3 to 6 for information; Item 1 for admissions; Items 17 to 18 for discharge and billing; and four questions (Item 19.1 to 19.4) measure satisfaction with the overall quality of care (Amin and Zahora Nasharuddin, 2013), specifically: Items 19.1 to 19.2 for overall quality of care and services; Item 19.4 for recommendations and intentions; and Item 19.3 for overall health outcomes (Meterko et al., 1990).

The questionnaire and procedures for administration were reviewed by the Research Ethics Committee in the College of Nursing of the University of Ha'il and in the hospitals surveyed. Pilot studies were conducted for 15 each of non-respondent head nurses and patients to confirm the items were clear and unambiguous (acceptability). Cronbach's coefficient alpha was measured within range based on the study results of Laschinger et al. (2005), that is, very high reliability. Internal consistency was tested using the split-half method, which confirmed consistency in the measurement of items for the study topic. Internal consistency was adjusted for the split-half/full item tests using the Spearman-Brown formula. All calculations used SPSS version 22. Table 2 shows measures for reliability.

Table 1. Scale Measures and Definition.

Scale	Percentage (%)	Description
5	85 – 100	Excellent
4	70 – 84	Very Good
3	55 – 69	Good
2	40 – 54	Fair
1	39 and Below	Poor

Table 2. Measures for Reliability.

Cronbach's α	Measure
0.00 – 0.20	Slight reliability
0.21 – 0.40	Low reliability
0.41 – 0.60	Moderate reliability
0.61 – 0.80	High reliability
0.81 – 0.99	Very high reliability
1.00	Perfect reliability

Questionnaires were administered by an assigned CNE Staff of the Nursing Service Department in each hospital using convenience sampling over two months in 2015 and were encoded by three faculty research assistants from the Medical and Surgical Department of the College of Nursing. A total of 90 out of 100 Saudi and non-Saudi head nurses and nurse supervisors and 87 out of 100 Saudi patients have fulfilled the questionnaires used in this study following the inclusion criteria (Figures 2 and 3). Standard procedures for data collection and storage was employed for the protection of respondents information which include (1) participation in this study was completely voluntary and can be withdrawn at any time for any reason; (2) accomplished questionnaires were kept in a locked cabinet in the College of Nursing; (3) only the principal investigator and research assistants had access to information about the respondents; and (4) accomplished questionnaires will be destroyed after two years' time.

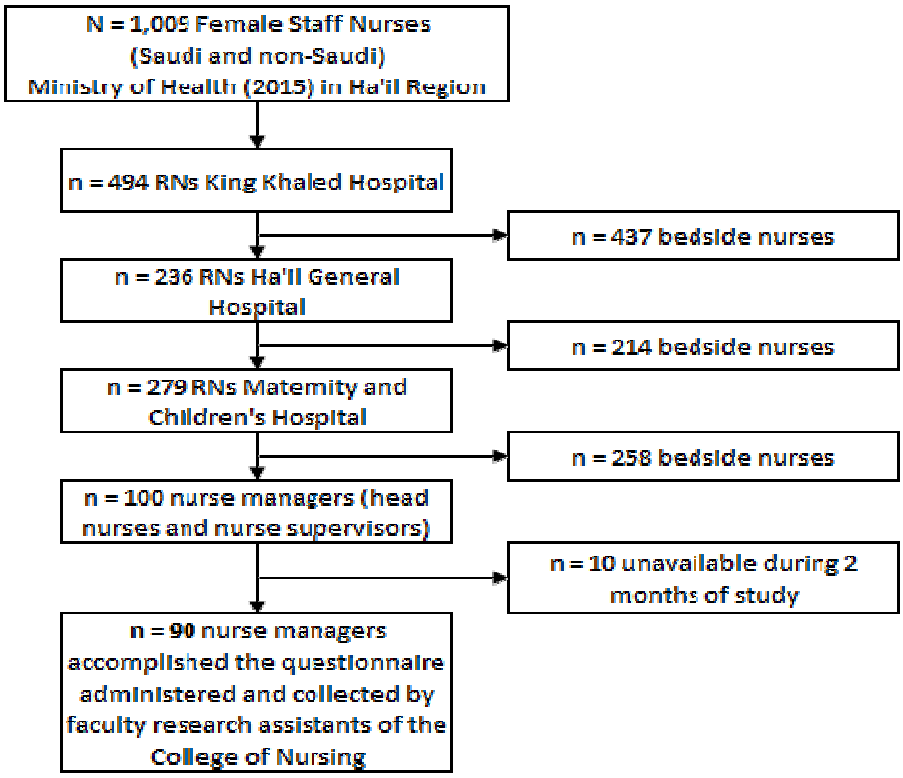

Figure 2. Determination of the Possible Number of Nurse Managers.

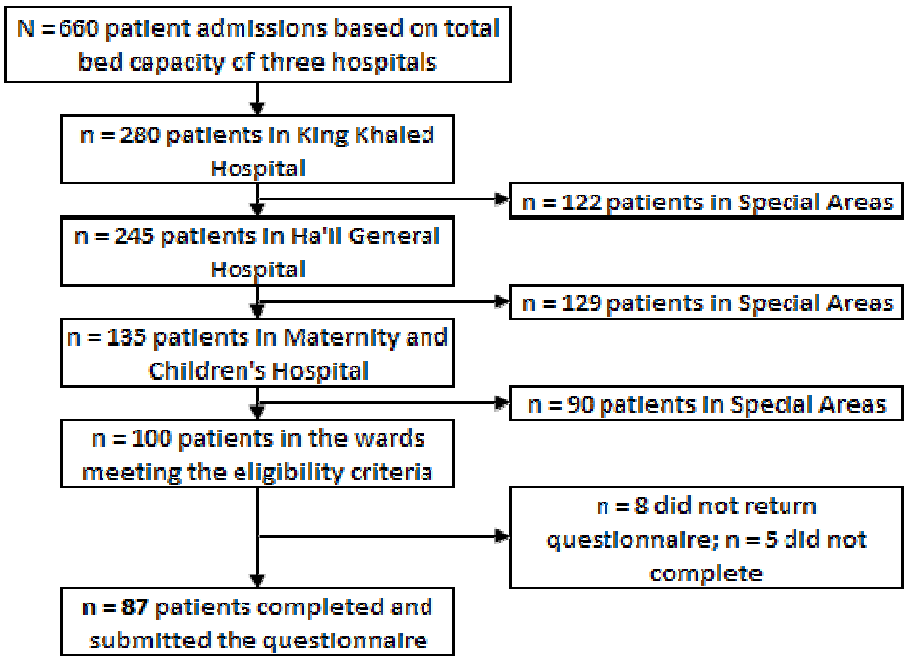

Figure 3. Determination of the Possible Number of Patients.

4. Results

Patient demographic and hospital experience. Table 3 shows the demographic analysis and the hospital experience of the patients.

Table 3. Patient Characteristics (N = 90).

Variable	Item	N	Percentage
Gender	Male	54	60
	Female	36	40
Total		90	100
Age	< 25 years	27	31.0
	26 – 35 years	19	21.8
	36 – 51 years	22	24.04
	52 years +	22	24.4
Total		87	100*
Marital status	Single	40	44.4
	Married	50	55.6
Total		90	100*
Previous hospitalisation (2 years)	Once	23	25.6
	Twice	29	32.2
	3 times	16	17.8
	4 times +	22	24.5
Total		90	100
Patient's health status prior to this admission	Unsure	13	14.4
	Very Poor	24	26.7
	Poor	14	15.6
	Fair	18	20.0
	Good	15	16.7
	Excellent	6	6.7
Total		90	100*
Means of admission	Emergency	53	58.9
	Direct to unit	17	18.9
	After day procedure	13	14.4
	Transferred from another facility	7	7.8
Total		90	100*
Ward size	Single	34	37.8
	2-bed	29	32.2
	2-bed+	27	30.0
Total		**90**	**100***

*Rounding error

Table 3 shows that the patients were predominantly male (60%), young (52.8% under 35 years) and somewhat surprisingly, had been admitted into hospital at least once in the previous two years. One-quarter (25%) had chronic conditions, necessitating several trips to hospital. Nearly half (42.3 %) had poor to very poor health before admission; while the remainder had fair to excellent health, arguably denoting a high rate of accidents leading to hospitalization. This assessment was supported by over half (58.9%) being admitted through the emergency unit. Wards were not overcrowded, with less than a third (30%) sharing the room with two or more others.

Objective 1: Head nurses' evaluation. The Ministry of Health's quality assessment survey was used for head nurses (N = 87) to evaluate the level of nurse care in their unit. Table 4 below shows the results.

Table 4. Evaluation of Staff Nurse Performance by Their Unit Head Nurse.

Variable (N=87)	Job Performance Score	Mean Score (μ)	Percentage (%)	Equivalent
Total staff nurse performance	220	169.55	73.71	Very Good
Total management of staff nurses	35	27.41	78.31	Very Good
Total management of patient care	130	100.71	77.47	Very Good
Total management of patient care in unit	20	14.90	74.50	Very Good
Total educational responsibilities	45	34.41	76.47	Very Good

Table 4 shows the results of the Ministry's evaluation of their Saudi staff nurses by the head nurse of the unit. The total mean for staff nurse performance (nurse management) was 169.55 (73.71%) and is equivalent to "Very Good" at 4.1.The mean for total management of staff nurses was 27.41 (78.31%) equivalent to "Very Good" at 1.6. The mean for total management of patient care among staff was 100.71 (77.47%) and is equivalent to "Very Good". The mean total management of patient care in unit among was 14.90 (74.50%) and is equivalent to "Very Good". The mean for total educational responsibilities among staff was 34.41 (76.47%) and is equivalent to "Very Good".

Objective 2: Patients' satisfaction with standard of nurse care. The results revealed that the mean level of satisfaction of patients was 82.41 (74.92%) and is equivalent to "Very Good" among patients.

The surveys' variables were analysed to establish relationships within and between surveys. These are presented as below.

Analysis 1. Determining the relationship between head nurses' evaluation and patients' responses. Pearson's r coefficient for a 2-tailed test of significance was used to determine the relationship between the independents variables (staff nurses' job performance, management of staff nurses, management of patient care, management of patient care unit, and educational responsibilities), with the dependent variable of patients' satisfaction. Results of this study revealed that no significant correlations existed among independent variables and dependent variables. (Refer to Table 5).

Table 5. Relationship Between Job Performance Subscales And Patients' Satisfaction of Care.

Subscales		1	2	3	4	5	6
1. Management of staff nurses	*r*	1					
	p						
2. Management of patient care	*r*	**.872***	1				
	p	.000					
3. Management of patient care unit	*r*	**.798***	**.919***	1			
	p	.000	.000				
4. Educational responsibilities	*r*	**.862***	**.891***	**.858***	1		
	p	.000	.000	.000			
5. Staff performance	*r*	**.914***	**.990***	**.933***	**.935***	1	
	p	.000	.000	.000	.000		
6. Patient satisfaction	*r*	.057	.041	.023	.090	.054	1
	p	.602	.706	.835	.406	.622	

*Significant at $\alpha \leq 0.05$

Analysis 2. Determining any relationship between patient characteristics with staff nurses' job performance and patient satisfaction. Pearson's r 2-tailed test of significance was used to determine any relationship between the independent variables (patient characteristics) with the dependent variables (staff nurses' job performance, patients' satisfaction). Results of this study revealed that no significant correlations existed among independent variables and dependent variables (Refer to Table 6)

Table 6. Relationships between Patient Variables with Nurse Performance, Patient Satisfaction.

Variable		1	2	3	4	5	6	7	8
1.Age	p	1							
	r								
2.Marital status	p	**.628***	1						
	r	.000							
3.No. of admissions	p	**.225***	**.252***	1					
over 2 years	*r*	.033	.017						
4.Patient health status	p	.128	.064	**.289***	1				
before admission	*r*	.230	.547	.006					
5. Unit entry for	p	.120	.107	.146	.020	1			
admission	*r*	.258	.316	.170	.854				
6. Ward size	p	.018	**.236***	-.158	-.170	.093	1		
	r	.869	.025	.137	.108	.386			
7. Staff nurse	p	-.006	.001	-.027	.147	-.136	-.072	1	
performance	*r*	.959	.994	.806	.173	.210	.509		
8. Patients	p	.114	-.011	-.051	.182	.063	-.027		1
satisfaction	*r*	.284	.917	.635	.085	.554	.800		

*Significant at $\alpha \leq 0.05$
Head nurse N =87, patients N= 90

Analysis 3. Relationships between nurse performance and patients' satisfaction in relation to the following: males and females, age groups, marital status, stays in hospital; health status; admission entry point; ward sizes. An independent sample t-test was used to examine difference in the level of staff nurses' job performance and patients' satisfaction with respect to gender; one-way ANOVA was used to examine difference in the level of staff nurses' job performance and patients' satisfaction with respect to age, marital status, health status, unit of admission, health before admission, ward size, and previous admissions. Table 7 shows the effects of gender.

Table 7. Difference in Gender , Marital Status and Nurse Performance and Patient Satisfaction: Gender.

Gender, Marital Status and Nurse Performance

Variable (N = 90)	**N**	**Mean (μ)**	**SD (σ)**	***t*-value**	**df**	**p-value**
Male	54	170.48	40.011	.288	85	.774
Female	36	168.03	35.728			
Single	40	164.89	34.216	1.000	85	.32
Married	50	173.16	41.088			
Gender , Marital Status and Patients' Satisfaction						
Male	54	83.30	16.404	.640	88	.524
Female	36	81.08	15.522			
Single	40	77.28	15.64	2.828	88	.006*
Married	50	86.52	15.22			

*Significant at $\alpha \leq .05$

Head nurse N = 87, patients N = 90

Table 7 for the gender variable shows no statistical significant difference in staff nurses' job performance between male patients (M=170.48, SD= 40.011) and female patients (M = 168.03, SD = 35.728, t (85) = .288, p = .774). No statistical difference in patients' satisfaction between male patients (M=83.30, SD= 16.404) and female patients (M = 81.08, SD = 15.522, t (88) = .640, p = 0. 524)

Marital status. This was also presented in two groups. Again, there was no statistical significant difference at p< .05 between marital status and nurses' job performance (F (3, 83) = .523, p = .668). However, a statistically significant difference was between marital status and level of patients' satisfaction (F (3, 86) = 3 .603, p = .017).

The remaining analyses are age, admission unit, health status before admission, ward size and previous admissions. These are depicted in Table 8.

Table 8. Difference between Groups for Selected Patients Demographic Characteristics with Nurse Performance and Patient Satisfaction

Variables	N	Mean (μ)	SD (σ)	Group	F- ratio	DF1	DF2	p-value
Age								
< 25 years	22	167.59	34.405	Head Nurse	0.304	3	83	.823
		171.05	43.954					
26 – 35 years	27	175.70	29.867					
		164.86	42.605					
36-51 years	19	78.78	17.32	Patient	0.796	3	86	.500
		83.26	12.46					
52 years and above	22	85.73	15.44					
		82.82	17.69					
Means of admission								
Emergency	53	178.08	35.052	Head Nurse	3.184	3	83	**.028***
		149.53	33.198					
Direct to unit	17	157.62	46.550					
		179.43	38.703					
After day procedure	13	89.71	10.012	Patient	1.177	3	86	.323
		77.00	13.402					
Transferred	7	83.46	15.565					
		82.92	17.275					
Patient health status before admission								
Unsure	13	161.67	57.315	Head Nurse	0.852	5	81	.517
		159.30	27.774					
Very Poor	24	175.21	31.256					
		181.88	32.580					
Poor	14	171.07	48.072					
		172.67	29.615					
Fair	18	91.92	8.914	Patient	5.681	5	84	**.000***
		74.46	14.545					
Good	15	76.86	19.414					
		79.44	12.030					
Excellent	6	88.47	14.412					
		100.33	11.206					
Ward size								
One bed	34	178.64	42.374	Head Nurse	4.146	2	84	**.019***
		153.04	31.859					
2-bed	29	176.35	36.317					
		82.23	18.131	Patient	0.054	2	87	.947
>2 bed	27	81.93	15.023					
		83.16	14.861					
Prior admissions (2 years)								
Once (current)	23	174.05	29.899	Head Nurse	2.864	4	82	**.028***
		152.96	43.554					
Twice	29	185.20	37.323					
		168.56	32.733					
3 times	16	82.56	18.288	Patient	0.941	4	85	.445
		81.95	15.497					
4 times and above	22	85.44	12.197					
		85.38	12.842					

*Significant at $\alpha \leq 0.05$
Head Nurse N = 87, Patients N = 90

Age. This was the first variable in Table 8, presented in four cohorts. There was no statistical significant difference found at the p< .05 between different age groups and nurses' job performance (F (3, 83) = .304, p =

.823). Additionally, there was no statistical significant difference between different age groups and level of patients' satisfaction (F (3, 86) = 0.796, p = .500).

Means of admission. There were four means of admission to the wards and a statistically significant difference at p< .05 was found between different admission routes and nurses' job performance (F (3, 83) = 3.184, p = .028). This finding did not extend to patients' satisfaction, where no significant difference was recorded (F (3, 86) =1.177, p = .323). (Refer to Table 8).

Patients' health before admission. Patients in this study were graded by six (6) variables prior to their admission. A person's health prior to arrival at hospital, whether through accident, a chronic condition, or a voluntary procedure may affect the patients' expectations about the care. There was no statistically significant difference at the p<.05 between patients' prior health and the staff nurses' job performance [F (5, 81) = .852, p = .517]. There was a significant difference between prior health and patient satisfaction [F (5, 84) =5.681, p = .000)].

Ward size. The number of people in a ward can influence patients' perception of the hospital services. The wards were classified as single bed, two beds, or more. It was found that room size and number of occupants showed a significant difference at p<.05 between the number of patients in a room and staff nurses' job performance (F (2, 84) = 4.146, p = .019). However, there was no statistically significant difference between ward size and patients' satisfaction (F (2, 87) =.054, p = .947).

Prior admissions (2 years). Again, patients may be influenced by comparing previous admissions in a hospital with their current experience. Results revealed that there was a statistically significant difference at p< .05 between the number of previous admissions and staff nurses' job performance (F (4, 82) = 2.864, p = .028). No significant difference between previous admissions and patients' satisfaction (F (4, 85) =.941, p = .445).

5. Discussion

The results of this study reveal similarities and differences with the existing international literatures. Patient satisfaction has been viewed as an effective result measure of a health care delivery system in hospitals. Therefore, the aim of this study was to examine the relationship between nurses' caring behaviors and patients' satisfaction.

As reported before, most of the studies conducted on nurse caring and its association with patient satisfaction as an outcome have focused on data deriving from retrospective patients' data rather than on the real perceptions of patients (Griffiths, 2009) . This might have led to the report of results not reflecting the existing situation. This study is a report of modern, actual findings, based on recent data. Therefore, the results reflect the current situation, as this appears among patients.

In this study, the nurses' caring behaviour and patients' satisfaction have not been significantly correlated. This may be explicated by the findings of Henderson et al. (2007), who found a weak relation due to bureaucratic demands, increased workload, and reduced staffing levels. Large numbers of patients and nurses spend most of their time and energy to perform doctor's orders, writing the reports and doing some secretarial jobs. Such a condition would cause nurses fatigue, and nervousness and would prevent professional caring relationships with patients and their families. Then, the patients' respect and emotional needs may be ignored leads to lower satisfaction (Rafii et al., 2008). This came consistent with a study done by (Han et al., 2003) about surgical and medical patients (N=477), documenting the relationship between patient satisfaction and nursing care within a primary nurse working unit in a large Taiwanese teaching hospital. Unfortunately, there is no evidence on the relationship between caring and patient satisfaction within European countries. On the other hand, the finding of this study seemed to be contrasting with previous studies which demonstrated significant correlation between individualized care and patient satisfaction (Suhonen et al., 2007, Leeman et al., 2008, Wolf et al., 2008) which goes some way to confirm this relationship (Weiland et al., 2003, Acaroğlu et al., 2007). Therefore, the results of this study indicated that patients' satisfaction was affected by other factors such as health care environment of hospitals. The patients perceived that their nurses had the necessary knowledge and skills, but these were not important in terms of their overall satisfaction with their care. Therefore, forming a health care environment and improving the nurses' caring behaviors may improve the patient quality of care and that may improve the patients' satisfaction. Implementing some in-service training programs about caring behavior and its different areas along with increasing the number of nurses in charge may positively affect the nurses caring behaviors.

This study has also demonstrated that patients with a history of admission to hospital during the last two years found nurses more caring. It seems that more lengths of stay in hospital increase patients' opportunities for receiving more nurses' care and observing their caring behaviours. According to Wolf et al. (1998), (Al-Doghaither, 2000), shorter lengths of stay in hospital may contribute to changes in patients' perceptions of nurse caring and satisfaction with nursing care.

In this study, the effect of health status before admission on patient satisfaction with nursing quality of care was examined. It was found that health status does affect patients' assessment of their satisfaction with nurse quality of care. Patients who perceived themselves to be in excellent or good health are more likely to be satisfied with their health care. However, health status seems to be more strongly related to satisfaction with access to care than to either satisfaction with the professional staff or overall quality of care received. Consistent with the literature (Hall et al., 1993, Ren et al., 2001, Thi et al., 2002, Haviland et al., 2003, Iezzoni et al., 2002, Akinci and Sinay, 2003), our study showed that people who perceived themselves as being healthy were more likely to be satisfied with access to care. Healthier people do not need as much medical care and interact with health-care providers less frequently. They have less opportunity to experience problems with access to health care and therefore may express more satisfaction with access.

Married patients reported higher satisfaction score with nursing quality of care than patients who were single which this finding is consistent with previous findings (Al-Ahmadi, 2009, Akinci and Sinay, 2003, Al-Faris et al., 1996, Al-Doghaither, 2000).

Ward size has been significant due to the number of beds for admission that nurses can manage or organize for patients. Ward size can increase the occurrence of poor communication between nurses with patients, failure of collaboration between nurses and physicians, discharge nurses and nurse job dissatisfaction (Samina et al., 2010).

Patients' admission through transfer from other hospitals found nurses more caring with nursing care. It seems that patients transfer required more care and observation than other patients. Limited literature has explored in the effect of means of admission (transfer from other facility) towards nurse caring behavior.

This study revealed that there were no significant differences of patients' satisfaction between age, gender, means of admission, prior admissions (2 years), and ward size. The finding of this study was appeared to inconsistence with prior studies which revealed significant association between patient satisfaction and age (Liu and Wang, 2007, Milutinović et al., 2012). In relation to gender, this study was not able to conclude any difference of patient satisfaction. Therefore, the findings were consistent with previous study. Wolf et al. (2003) found no differences in nurse caring and patient satisfaction for male versus female cardiac patients. Moreover, there were no significant differences of nursing caring behavior between age, gender, and patient health status before admission.

6. Limitations

This study is subject to some limitations. In particular, this study has employed convenience sampling and limited data collection to one type of hospitals in Northern Saudi Arabia. Therefore, the results of this study cannot be generalized beyond this group of patients and staff. This study should be viewed with attention, since the sample was not selected by a random technique. Moreover, the sample was not homogenous by medical diagnoses or surgical procedures.

7. Conclusion

Overall, the quality of healthcare in Ha'il region can be reflected by the performance of the three hospitals in providing tertiary level of care based on the surveys of staff nurses and patient satisfaction. This also shows that the standard of care imposed by the Ministry of Health remains to be met. However, regular surveying should be undertaken to ensure its continuity.

The findings of this study revealed that married patients were more satisfied with nursing care than singles patients, and patients who perceived themselves to be in excellent or good health are more likely to be satisfied with nursing care than patients with poor health. Furthermore, more nurses' caring behaviour with

patients admitted through emergency department and transfer from other facility , ward size with one bed , and finally patients prior admission four times to hospital.

The main finding of this study there is not significant correlation between nurses' caring behaviors and patient satisfaction. Patient satisfaction with nursing may be influenced by numerous variables. Furthermore, there were no significant differences of patients' satisfaction between age, gender, means of admission, prior admissions (2 years), and ward size.

8. Recommendations

Since patient satisfaction with nursing care may be affected by a number of factors (demographic and care provider-related) further studies are recommended to include the communication process that influence these two constructs particularly in the context of Islamic countries. It may be beneficial to examine more homogenous samples of patients, admitted for specific medical conditions or surgical procedures, to determine the relation between nursing care and patient satisfaction

Strategic plans for continuous quality improvements should be focused on the physical set-up of the hospitals in terms of ward size; admission procedures including patient experience during admission; training and support for nursing staff; and a family-oriented healthcare since the majority of patients are married.

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