Post-Cardiac Surgery Patient Satisfaction with Quality Nursing Care at Institute Jantung Negara (IJN)

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ABSTRAK

Jagarawatan berkualiti akan memberi kesan mendalam terhadap kepuasan pesakit. Jagarawatan berkualiti dianggap oleh pesakit pos kardiak sebagai keperluan dari segi fizikal, emosi dan rohani yang perlu di penuhi ketika berada di hospital. Objektif kajian ini adalah untuk mengenalpasti faktor-faktor jagarawatan berkualiti yang mempengaruhi tahap kepuasan pesakit pos kardiak. Kajian deskriptif keratan rentas ini menggunakan instrumen 'NURSQUAL' yang merangkumi empat elemen iaitu kecekapan teknikal (technical competence), pemberian maklumat (information giving), jaminan (assurance) dan empati (empathy), untuk menilai tahap kepuasan pesakit terhadap jagarawatan berkualiti. Ianya merangkumi empat soalan kajian dengan 33 item untuk mengukur keempat-empat elemen tersebut. Daripada Januari hingga Mac 2005, seramai 52 pesakit pos kardiak yang telah menjalani pembedahan jantung di IJN yang memenuhi kriteria telah mengambil bahagian dalam kajian ini. Hasil kajian menunjukkan perbezaan yang signifikan diantara elemen kecekapan teknikal (technical competence), pemberian maklumat (information giving), jaminan (assurance) dan empati (empathy) dengan kepuasan pesakit dengan nilai $p < 0.05$. Elemen jaminan (assurance) memberi sumbangan statistik yang kukuh dan unik dalam menentukan kepuasan pesakit dengan nilai $p < 0.05$.

Kata kunci: surgeri pos kardiak, kepuasan pesakit, jagarawatan kualiti

ABSTRACT

Quality nursing care has a great impact on patient satisfaction. Quality nursing care is perceived by the post cardiac surgery patient, as the degree of physical, emotional and spiritual needs that have to be fulfilled while hospitalisation. The objective of this study was to identify factors in quality nursing care that determine post cardiac patient satisfaction. This single cross-sectional descriptive study using 'NURSQUAL' instrument consisted of four elements; technical competence, information giving, assurance and empathy to measure patient satisfaction with quality nursing care. It consisted of four research questions with 33 items to measure the four elements. Between January to March 2005, 52 post cardiac surgery patients from Institute Jantung Negara (IJN), who fulfilled the inclusion criteria were recruited for this study. There was a significant difference between technical

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competence, information giving, assurance and empathy with patient satisfaction with p value < 0.05. The element of assurance made the strongest statistically significant unique contribution to the prediction of patient satisfaction with a p value < 0.05.

Key words: post cardiac surgery, patient satisfaction, quality nursing care

INTRODUCTION

Patient satisfaction is the patient's perception of care received compared with the care expected. Patients base their expectations on their own encounters with behaviours of nurses (Aiello et al 2003). According to Eriksen (1995), critical attributes of patient satisfaction with quality nursing care are reliability, tangibles, responsiveness, empathy and information giving. Reliability is defined as being "dependable, accurate, timely, competently, done right the first time." "Assurance includes "trust, problem is in good hands, credibility, security, and reassurance". Tangibles are "physical appearance of facilities staff." Responsiveness consists of "promptness, accessibility." Empathy relates to 'individualised attention, kind, courteous, understanding, friendly, able to listen, unhurried attention." Information giving is "keeping patient informed" and "explaining to patient". During hospitalisation, patient satisfaction represents a balance between the patient's perception and expectation of their nursing care (Han et al 2003). The patient's perception of quality nursing care also include caring, compassion, competence, confidence, conscience and commitment in the delivery of care (Gunther et al 2002). It is interpreted as a therapeutic response, which leads to speedy recovery among post-cardiac surgery patients (Doering et al 2002; William 1998).

The achievement of patient satisfaction among post cardiac surgery patients is specific to the interventions implemented by the nurse. The four domains of outcomes have been identified as technical competence, information giving, assurance and empathy (Larrabee et al 2001). The post cardiac surgery patients require constant vigilant nursing care, as their condition can be life threatening (Doering et al 2002). The types of cardiac surgeries include coronary artery bypass graft (CABG), valve surgery, correction of atrial septal defect (ASD), ventricle septal defect (VSD), tetralogy of Fallot (TOF), pulmonary atresia and aortic aneurysm. Post cardiac surgery patient satisfaction is pivotal to the achievement of optimum clinical outcomes, speedy recovery, reduced length of stay and avoidance of recurrent admission (Larrabee et al 2001). On the other hand, patient dissatisfaction would result in poor compliance with the treatment regimen, premature self-termination of care plan and seeking care outside the plan. Such patients would portray anger and verbal abuse (Jafar et al 2003). Achieving optimum patient satisfaction with quality nursing care has been the primary focus of nurses.

It is with this intent that the researcher conducted a study on post cardiac surgery patient satisfaction with quality nursing care in the surgical wards of IJN. The objective of this study was to identify factors in quality nursing care that determined patient satisfaction.

SUBJECTS AND METHODS

A descriptive study was undertaken at IJN. This study was conducted from January 2005 till March 2005. A conceptual framework was formulated for the purpose of having an overview of the critical attributes (Figure 1). Primary data were collected using NURSQUAL, a fully structured questionnaire, to measure the

four domains in relation to technical competence, information giving, assurance and empathy (Larrabee et al 2001). There were two sets of questions; section A consisted of 33 items to measure quality nursing care and section B comprised six questions with regard to demographic data. In section A, the above questions were scored with a seven-point Likert-type scale. Scores were rated as follows: one-strongly disagree and seven-strongly agree, whereas section B used a nominal scale. Fifty two respondents who fulfilled the inclusion criteria were recruited from the surgical wards (Mawar and Cempaka) of IJN.

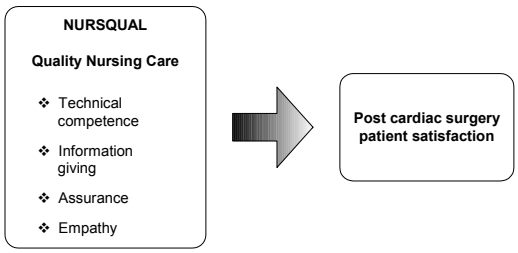

Figure 1: A Conceptual Framework - NURSQUAL consisting of four domains

The inclusion criteria of the respondents were post cardiac patients more than 18 years old, elective cardiac surgery CABG and valve surgery and emergency cardiac surgery (CABG) and valve surgery without complication. The exclusion criteria of the respondents were those undergoing any emergency cardiac surgery (CABG) and valve surgery with complications, critically ill and nursed in high dependency unit.

The research instrument was a self-administered questionnaire. The questions relating to the four domains are listed in Figure 2, Figure 2A, and Figure 2B

Ethical approval was undertaken and permission obtained from the ethics committee of the Faculty of Medicine, University Kebangsaan Malaysia (UKM) and Institute Jantung Negara (IJN). The study was carried out in accordance with the ethical principles and guidelines of UKM and IJN. Confidentiality of the respondents were assured. Research questionnaires were given and collected by the researcher on the same day, to prevent respondents from discussing their answers among themselves or with others such as family members, nurses or visitors.

Figure 2: Questions related to element of technical competence and information giving

Attributes	Items
Technical competence	1. Nurses are skilful with procedures they do on me. 2. Nurses are capable of detecting immediately any changes that can compromise my condition. 3. Nurses timed their work well to avoid disrupting my sleep. 4. Nurses gave pain medication on time. 5. Nurses provide treatment promptly. 6. Nurses able to answer my questions in ways that I can understand. 7. Nurses are enthusiastic about their work.
Information giving	1. Nurses give adequate information when I needed it. 2. Nurses provide education regarding my condition. 3. Nurses explain about every procedure before doing the procedure. 4. I can rely on nurses for any information that I don't understand. 5. Nurse has explained to me when something goes wrong with me. 6. Nurses teach me how to recognize problems that might arise at home after post cardiac surgery. 7. Nurses have told me what to do if problems related to my condition arise at home. 8. Nurses provide information about available resources within community that can help whenever I need.

Figure 2A: Questions related to element of assurance.

Attributes	Items
Assurance	1. Nurses allay any fears that I will have when equipment monitoring my condition produce an alarm. 2. Nurses teach and encourage me to use proper technique of breathing, coughing and positioning. 3. Nurses check regularly to see if I'm all right. 4. Nurses make me feel I'm in good hands. 5. I feel safe because nurses watch over and closely monitor my condition. 6. Nurses introduce themselves to me as the nurse in-charge of my care before each shift. 7. Nurses encourage me to clarify any doubts I might have regarding my condition/health. 8. Nurses respond to my call cheerfully. 9. Nurses will check regularly on me, even when I don't call to see whether I need anything.

Statistical analysis was done using the statistical package for social science (SPSS) windows, version 11.5. Demographic data of respondents were analysed by descriptive statistics of frequency. Statistical methods included Pearson correlation coefficient, the differences of mean between patient

satisfaction with technical competence, information giving, assurance and empathy. A multiple linear regression test was utilised to identify the attributes on patient satisfaction with quality nursing care (Burns & Bush 2003).

Figure 2B: Questions related to element of empathy

Attributes	Items
Empathy	1. Nurses show sympathy and understanding with what I'm going through. 2. Nurses give me full attention during delivery of care. 3. Nurses provide a quiet environment for me to rest. 4. Nurses provide me enough rest to get well. 5. Nurses make sure that I had privacy when I needed it. 6. Nurses address me by my name. 7. Nurses show respect when talking to me. 8. Nurses assist/help me in my personal hygiene. 9. Nurses make me feel they enjoy taking care of me.

RESULTS

Respondents' demographics data consisted of gender, age, ethnicity, marital status, highest education level and occupation, as shown in Table 1.

Table 1: Respondents' demographic data distribution.

Variables		Respondent (N=52)
Gender	Male	41 (79%)
	Female	11 (21%)
Age	18 – 33 years	2 (4%)
	34 – 49years	13 (25%)
	50 – 65 years	28 (54%)
	> 65 years	9 (17%)
Race	Malay	32 (62%)
	Chinese	12 (23%)
	Indian	8 (15%)
Marital status	Single	3 (6%)
	Married	49 (94%)
Education level	Primary school	14 (27%)
	Secondary school	33 (64%)
	College	4 (8%)
	University	1 (2%)
Occupation	Own business	14 (27%)
	Industrial	5 (10%)
	Private sector	17 (33%)
	Public sector	16 (31%)

Eighty three percent of patients agreed that the nurses were technically competent, 83% that they gave adequate information, 87% that they provided assurance, and 94% that they showed empathy (Table 2).

Table 2: Respondent's satisfaction score with technical competence, information giving, assurance and empathy.

Variables	Respondent N=52
Technical competence	
❖ Competence	43(83%)
❖ Incompetence	9(17%)
Information giving	
❖ Adequate	43(83%)
❖ Inadequate	9(17%)
Assurance	
❖ Provided	45(87%)
❖ Not provided	7(13%)
Empathy	
❖ Shown	49(94%)
❖ Not shown	3(6%)

There was a strong correlation between technical competence, information giving, assurance and empathy with questions on "how would you rate your satisfaction with overall nursing care received during stay in hospital?", "would you comply to the nurses advise regarding your care at home?", "would you come back to this hospital to seek treatment if needed?" and "do you have intention of recommending this hospital to your family member, relatives and friends?". (Table 3)

Table 3: Pearson correlation coefficient: correlation between technical competence, information giving, assurance and empathy with respondent's satisfaction

Questionnaire	Domains	r	Sig.(2-tailed)
How would you rate your satisfaction with overall nursing care received during your stay in hospital?	• Technical competence	0.729**	0.000
	• Information giving	0.527**	0.000
	• Assurance	0.518**	0.000
	• Empathy	0.718**	0.000
Would you comply to the nurses advise regarding your care at home?	• Technical competence	0.662**	0.000
	• Information giving	0.670**	0.000
	• Assurance	0.657**	0.000
	• Empathy	0.764**	0.000
Would you come back to this hospital to seek treatment if needed?	• Technical competence	0.478**	0.000
	• Information giving	0.311*	0.025
	• Assurance	0.715**	0.000
	• Empathy	0.447**	0.001
Do you have intention of recommending this hospital to your family member, relatives and friends?	• Technical competence	0.0.567**	0.000
	• Information giving	0.505**	0.000
	• Assurance	0.766**	0.000
	• Empathy	0.654**	0.000

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

The strongest predictors of patient satisfaction were assurance (beta coefficient of 0.557) and technical competence (beta coefficient of 0.280) (Table 4)

Table 4: Prediction of patient satisfaction in relation with technical competence, information giving, assurance and empathy.

Variables	(β) standardised coefficient	p-value
Technical competence	0.280	0.029*
Information giving	-0.186	0.158
Assurance	0.557	0.004*
Empathy	0.228	0.211

* p value < 0.05 significant differences

DISCUSSION

The findings from this study were consistent with those previously published. Patient satisfaction with regards to the four domains of quality nursing care may vary but they are interrelated to one another (Aiello et al 2003; Jafar et al 2003; Uzun et al 2001). The results of this study highlighted the importance of technical competence, information giving, assurance and empathy in the holistic management of the post cardiac surgery patient during hospitalisation.

The study found a significant association between gender and the elements of assurance and empathy. Men were found to be more satisfied than women. The reason for this gender differences in our study was not specifically explored in-depth. According to Lumby et al (2000), women possessed negative perceptions of assurance than men. Valentin et al (2005) concluded similar findings in relation to gender which may be true for our population.

According to Uzun (2001), patients' aged ≥ 50 years gave high scores for nursing care compared to patients aged <50 years. The results of the present study support this finding and that of another study where older patients were found to be more compromising and contented (Staniszewska et al 1999), particularly with regards to the domains of technical competence, assurance and empathy.

The results of this study also showed a significant positive correlation between the elements of technical competence, information giving, assurance and empathy, and the overall satisfaction with nursing care, willingness to comply with nurses advice regarding their care at home, willingness to come back to the hospital to seek treatment if needed and intention of recommending the hospital to family members, relatives and friends (p value < 0.01 and 0.05). Jacox et al (1997) found a strong relation between technical skill and quality nursing care provided, which is in keeping with our findings.

For element of information giving, a positive association exist between patient compliance to the nurses advice regarding their care at home. Jafar et al (2003) also reported similar findings with respect to patient's information, satisfaction and hospital revisits. Similarly, for element of empathy, a positive association was also noted. Lumby et al (2000) reported that empathy had a significant relationship with patient satisfaction. It is also unclear how the weighting of each dimension could be determined, since there will be differences in their relative importance for each patient as each person has a unique frame of reference and a set of personal norms for making judgments about nursing care (Valentin et al 2005). There will be differences based on patient's attitudes to receiving care, their knowledge of the services available, their previous experience and reports that they obtained from others.

Indeed the most valuable element in our study was assurance provided by the nurses. "Assurance" made the strongest statistically significant unique contribution to the prediction of patient satisfaction. From an organization structure perspective, nurses who use rules, procedures and instructions positively would influence patient satisfaction (Lumby et al 2000).

Since IJN has been established as a cardiac referencing hub, it has been used as a benchmark for other hospitals in Malaysia to emulate their own cardiac centre. The organization has experts in every sector of their management, including nursing. Post cardiac surgery patients are more satisfied with nurses who incorporate organisational and professional guidelines as their tool for implementing quality nursing care. Therefore, organisation must consistently include the latest guidelines and standards in their rules, procedures and instructions to meet the demands of globalisation and evolution in nursing care (Han et al 2003).

CONCLUSION

In conclusion, this study has demonstrated the importance of nurses being sensitive and knowledgeable of four major domains, which are technical competence, information giving, assurance and empathy among the post cardiac surgery patients. Of these, assurance from the nurses has been found to be of top priority and a crucial factor in determining patient satisfaction with quality nursing care.

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