JCN Journal of Clinical Nursing

Journal of Clinical Nursing

SPIRITUAL AND EMOTIONAL SUPPORT

Perceptions of patients and nurses towards nurse caring behaviors in coronary care units in Jordan

Ferdous H Omari, Raeda AbuAlRub and Ibrahim RA Ayasreh

Aims and objectives. To (1) identify the perceptions of Jordanian patients who suffer from coronary artery diseases towards nurse caring behaviours in critical care units; (2) identify the perceptions of Jordanian nurses who work in critical care units towards nurse caring behaviours; and (3) compare the perceptions of both patients and nurses towards nurse caring behaviours in critical care units.

Background. Caring is an important concept in nursing, when nursing behaviours were perceived by patients as caring behaviours, and thus, their satisfaction with the quality of care can be improved. Therefore, it is important for nurses to be knowledgeable about the caring behaviours as perceived by patients who complained from coronary artery diseases themselves.

Design. A descriptive comparative design was used.

Methods. A convenience sample of 150 patients who complained from coronary artery diseases and 60 critical care unit nurses completed the demographic form and the Caring Behavior Assessment scale.

Results. Patients in critical care units perceived physical and technical behaviours as most important caring behaviours, whereas nurses in critical care units perceived teaching behaviours as most important caring behaviours.

Conclusion. There were significant differences between patient participants' and nurse participants' perceptions towards four subscales of Caring Behavior Assessment scale that should be considered when caring for patients with coronary artery diseases.

Relevance to clinical practice. Patients with coronary artery diseases need well-trained and clinically competent nurses to meet their needs. 'Spiritual needs' was an important nurse caring behaviour that should be emphasised in nursing practice.

Key words: caring behaviours, Caring Behavior Assessment scale, critical care unit, Jordan

Accepted for publication: 16 July 2013

What does this paper contribute to the wider global clinical community?

- Critical care nurses should be culturally sensitive, because in this study, there are some nurse caring behaviours that are not considered as important caring behaviours as perceived by the patient participants.
- Critical care nurses should reevaluate their practices to be based on important caring behaviors as perceived by their patients.
- Critical care nurses in this study perceived some of the caring behaviors as prerequisite skills for nursing profession such as 'know how to give intravenous medications'.

Authors: *Ferdous H Omari*, DNS, RN, Assistant Professor, Faculty of Nursing, Jordan University of Science and Technology, Irbid; *Raeda AbuAlRub*, PhD, RN, Full Professor, Faculty of Nursing, Jordan University of Science and Technology, Irbid; *Ibrahim RA Ayasreh*, MSN, RN, Full Time Lecturer, Faculty of Nursing, Jerash University, Irbid, Jordan

Correspondence: Ferdous H Omari, Assistant Professor, School of Nursing, Jordan University of Science and Technology, PO Box 3030, Irbid, Jordan. Telephone: +962 2 0772478334.
E-mail: ferdous_omari@just.edu.jo

Raeda AbuAlRub is a member of Sigma Theta Tau International.

© 2013 John Wiley & Sons Ltd

Introduction

Caring is considered as a principal concept in nursing. According to Leininger (1988), 'caring is the dominant intellectual, theoretical, heuristic, and central practice focus of nursing and no other profession is so totally concerned with caring behaviors, caring processes, and caring relationships than nursing' (p. 26–27). Although caring is considered as one of the most discussed concepts in nursing (Watson *et al.* 2003, Khademian & Vizeshfar 2008), still there is no universal definition of caring to be adopted and taught in diverse nursing schools.

According to Woodward (1997), most of the caring behaviours are categorised into two major components: instrumental and expressive components. Instrumental behaviours are associated with technical and physical behaviours, whereas expressive behaviours include psychosocial and emotional behaviours. Studies on caring showed that no caring components is best than the other; however, nurses perceive and demonstrate these behaviours and set their priorities according to their patients' needs (Woodward 1997, Watson *et al.* 1999, Brilowski & Wendler 2005).

It is paramount to identify which nursing behaviours are considered as caring from the point of view of patients, especially that patient's care is the commodity that hospitals sell. If patients perceive a number of nursing activities as caring behaviours, patients may feel more confident and empowered, and this will help them gain control and independence (Hinshaw *et al.* 1999). Patients' satisfaction is also associated with the perceptions of nursing behaviours, and patients who also perceive nursing behaviours as caring are more satisfied with those behaviours (Rafi *et al.* 2006). Additionally, while caring behaviours foster the spiritual freedom and enhance growth and development, noncaring behaviours make patients feel prostrated, isolated, afraid and helpless (Hinshaw *et al.* 1999).

For nurses, caring behaviours enhance feelings of self-accomplishment and well-being and enable them to better know their patients' perceptions and thus enhance the quality of care provided to their patients (Hinshaw *et al.* 1999). Additionally, caring behaviours benefit nurses at the social level by increasing their relationships with clients and by enhancing their sense of personal and professional satisfaction and love for nursing (Hinshaw *et al.* 1999, Brilowski & Wendler 2005). On the other hand, noncaring behaviours might make nurses feel robot-like, afraid, oblivious and fatigued (Hinshaw *et al.* 1999). Thus, identifying nurse caring behaviours is an important issue to improve nursing experiences and patients' satisfaction. Hospital orientation programmes that are built based on identified caring behaviours may be more effective and may enhance the performance of new nurses to meet diverse patient needs. Moreover, identification of the patients' perceptions of nurse caring behaviours will help nurse educators to operationalise the concepts and theories associated with nurse caring behaviours to benefit patients (Kimble 2003).

Jordan is one of the leading countries in health care among Middle Eastern nations. The Jordanian healthcare system is characterised by accelerated spread of advanced technology in clinical settings including private, governmental and military hospitals and medical centres. Such advancement is seen mainly in specialised critical care units (CCUs) and has many benefits at the therapeutic medical and surgical treatment levels. This might have a negative effect on the therapeutic communication between nurses and patients and might affect the quality of care provided by nursing staff.

Most patients who are admitted to CCUs are suffering from coronary artery diseases (CADs), which is one of the most prevalent diseases in the world (WHO 2006). In Jordan, it is estimated that 26,000 cases are newly diagnosed as acute myocardial infarction yearly (WHO 2006), with a percentage of 17% of all deaths attributed to CADs (Khraim *et al.* 2009). Usually, CADs affect the general status of patients such as physical, psychological, emotional and spiritual domains. The critical nature of CADs and the use of advanced technology in CCUs prompt nursing researchers to study perceptions of both patients with CADs and nurses towards nurse caring behaviours. Few published research studies examined the perceptions of both patients with CADs and nurses towards nurse caring behaviours in CCUs. Identification of nurse caring behaviours from the patients' viewpoints could help CCU nurses to provide better nursing care.

Many studies were conducted concerning caring and caring behaviours (Baldursdottir & Jonsdottir 2002, Watson *et al.* 2003). However, most of these studies were conducted in Western countries. Such studies might not be applicable in other settings such as Jordan, as the ritualistic aspects of nursing care might have different meanings among different cultures (Leininger 1988, p. 4–7). Therefore, the purposes of the present study were to (1) identify the perceptions of Jordanian patients who suffer from CADs towards nurse caring behaviours in CCUs; (2) identify the perceptions of Jordanian nurses who work in CCUs towards nurse caring behaviours; and (3) compare the perceptions of both patients and nurses towards nurse caring behaviours in CCUs.

© 2013 John Wiley & Sons Ltd

Background

The literature is abundant of studies that focused on perceptions of nurse caring behaviours (Cronin & Harrison 1988, Baldursdottir & Jonsdottir 2002, Watson *et al.* 2003). Cronin and Harrison (1988) were the first researchers who studied perceptions of patients with CADs, particularly patients with myocardial infarction. These researchers developed the Caring Behavior Assessment (CBA) scale to measure perceptions of 22 hospitalised patients in CCUs and to determine which nursing behaviours were perceived as most and least important. The findings showed that physical care and monitoring of patients were the most expressive indicators of caring. Cognitive aspects of caring were also perceived as important, especially teaching activities. On the other hand, the results revealed that individualised aspects of caring such as 'asks me how I like things done', 'tries to see things from my point of view' and 'visits me when I move to another hospital unit' were perceived as least important in CCUs. The small sample (22 patients) of this study is considered as a major limitation that might have affected and minimised the generalisability of the finding.

Based on Cronin and Harrison's (1988) CBA scale, Baldursdottir and Jonsdottir (2002) and Kimble (2003) identified the important indicators of nurse caring behaviours as perceived by patients in an emergency department. The results of these studies showed that technical and physical caring behaviours were more important than affective behaviours in emergency departments.

Consistent with the previous findings, Zamanzadeh *et al.* (2010) and Chang *et al.* (2005) used the Caring Assessment Report Evaluation Q-sort (CARE-Q) to investigate most important nurse caring behaviours as perceived by oncology patients and nurses. The findings of these studies showed that 'Being accessible' and 'Monitors and follows through' were the most important subscales. Items of 'gives the patients' treatments and medications on time' and 'know how to give shots, IV' were perceived as the most important caring behaviours by both patients and nurses, which ensures that oncology patients and nurses perceived the technical- and physical-based nursing behaviours as the most important. On the other hand, O'Connell and Landers (2008) investigated perceptions of 40 critical care Irish nurses towards nurses' caring behaviours in CCUs. The results revealed that the items that belonged to the (Humanism/Faith–Hope/Sensitivity) subscale such as 'knows what you are doing', 'treat the patient with respect', 'treat the patient as an individual' and 'reassure the patient' were perceived as the most important caring behaviours. In this study, the affective component of caring was the most important as perceived by critical care nurses.

It is obvious from the prior studies that there is a relative agreement among patients with different diagnoses and different clinical care units on the most important nurse caring behaviours. Physical and technical nursing behaviours were perceived as most important caring behaviours. It seems that nurses developed diverse perceptions towards importance of caring behaviours. Nurses considered other aspects of caring such as emotional and teaching behaviours to be as important caring behaviours as physical aspects of caring are. However, there was a scarcity in the literature that was conducted in Arabic communities and little research, if existed, about perceptions of patients or nurses concerning caring behaviours in Jordan. Therefore, this study aims to examine these perceptions from the point of view of nurses and patients in CCUs in Jordan.

Method and design

A descriptive comparative design was used in this study. The setting was four teaching hospitals in Jordan; these hospitals had well-equipped coronary care units and also considered as major destinations of most patients with heart diseases. Coronary care units in these hospitals provide care to patients with all types of coronary artery problems. All units had eight duty hours per nursing shift, except one CCU that had 12 duty hours. All had flexible visiting hours. Data were collected from August 2010–November 2010.

A convenience sample of 150 patients and 60 nurses participated in this study. Each patient had the following criteria to be considered for participation: 20 years of age or older, diagnosed with CADs (unstable angina or myocardial infarction), being Jordanian, admitted to the CCU for at least 48 hours, could speak and comprehend Arabic, and voluntarily agreed to participate in the study through informed consent. Each nurse had the following criteria for participation: all nurses had at least one year of clinical experience in the CCU; being Jordanian; and voluntarily agreed to participate in this study through informed consent. Nurses who were on leave were excluded from the study.

Instruments

The questionnaire included the demographic forms and the CBA scale that was developed by Cronin and Harrison (1988). Two separate forms of demographic data were developed by the researchers and guided by the reviewed literature for this study: one for patients, which included age, gender, marital status, educational level, religion, medical

© 2013 John Wiley & Sons Ltd

diagnosis and previous hospitalisations. The other form was for nurses, which included age, gender, educational preparations for nursing and years of experience in CCUs.

The permission to use and translate the CBA scale into Arabic language was obtained from Cronin and Harrison. The 63 items of CBA are rated on a five-point Likert scale that reflect a specific nursing behaviour according to the degree of importance from '1 = the least important caring behaviour to 5 = the most important caring behaviour'. Items of this scale are clustered into seven subscales: (1) Humanism/Faith–Hope/Sensitivity, which included items such as 'treat me as an individual' and 'know what they're doing'; (2) Helping/Trust, which included items such as 'really listen to me when I talk' and 'do what they say they will do'; (3) Expression of positive/negative feelings, which included items such as 'encourage me to talk about how I feel' and 'help me understand my feeling'; (4) Teaching/Learning, which included items such as 'answer my questions clearly' and 'teach me about my illness'; (5) Supportive/protective/corrective environment, which included items such as 'give my pain medication when I need it' and 'consider my spiritual needs'; (6) Human needs assistance, which included items such as 'know how to give shots, IVs, etc.' and 'let my family visit me as much as possible'; and (7) Existential/Phenomenological/Spiritual forces, which included items such as 'seem to know how I feel' and 'help me feel good about myself'.

Cronin and Harrison established face and content validity for the CBA scale using the expertise of four scholars who were familiar with Watson's theory. In addition, the expert panel rated each behaviour with its given subscale; the items that had interrater reliabilities less than 0·75 were recategorised into more appropriate subscales. The Cronbach's alpha coefficients of the CBA subscales ranged from 0·66–0·90. The alpha coefficient of the CBA subscales in this study for patients and nurses ranged from 0·62–0·97 and 0·70–0·93, respectively. The alpha coefficients of the total CBA scale for patients' and nurses' were 0·80 and 0·91, respectively.

Data collection procedure and ethical consideration

The researchers obtained the approval of the Institutional Review Boards of Jordan University of Science and Technology and the targeted hospitals. With the help of nurse managers, the researcher identified patients who met the inclusion criteria through their medical records. After that, the researcher approached the eligible patients and explained the study purposes for them and invited them to participate in the study. Eligible patients who agreed to participate in this study were asked to sign the consent form. Literate participants were given a copy of the questionnaire containing patients' demographic data form and the CBA scale and were asked to complete them. On the other hand, illiterate patients were approached by one of the researchers who read and explained each item of the CBA scale and asked them to rate each item from 1–5.

Moreover, nurses who met the inclusion criteria were identified and provided verbal and written explanations of the study's purposes. Nurses who met the inclusion criteria and agreed to participate were asked to sign the consent form that was developed for nurses. Then, the researcher provided each nurse with a copy of the demographic data form and the CBA scale along with an envelope. Nurses were asked to complete the questionnaires and seal them in the attached envelope and put them in the box that was placed in the office of the head nurse of each unit. Then, one of the researchers collected the questionnaires from the head nurse office one week after their distribution. Each nurse and patient participated in this study were instructed to answer all the questionnaires of the study independently.

Results

The SPSS, version 17 (SPSS Inc., Chicago, IL, USA) was used to analyse the data. Descriptive statistics were calculated for the items of the CBA scale and the demographic data. All statistical analyses were considered significant at the 0·05 level. Two-tailed *t*-test was used to examine the differences between mean scores of the CBA subscales of the two groups of patients and nurses.

Patient participants

A total of 150 patients who suffered from CADs participated in the study. The majority were married (82·7%) and only 17·3% were illiterate. More than half of them were males (57·3%), middle-aged adult patients (60%), being hospitalised before (60%) and diagnosed as having myocardial infarction (52·7%). Forty-seven of the participants were diagnosed as having unstable angina (47·3%).

Nurse participants

A total of 60 nurses who worked in coronary care units participated in this study. More than one half of nurses (58·3%) were males and had 1–5 years of experience in CCUs (63·3%). The majority of nurse participants were young adults between 20–30 years of age (80%), and the majority held at least a bachelor degree in nursing (95%).

© 2013 John Wiley & Sons Ltd

Table 1 Rank order of the most important nurse caring behaviours as perceived by patient participants (n = 150)

Rank	Item	Mean	SD
1	Consider my spiritual needs	4·49	0·683
2	Offer things (position changes, blankets, back rubs, lightening, etc.) to make me more comfortable	4·41	0·593
3	Accept my feelings without judging them	4·39	0·694
4	Know how to handle equipments	4·39	0·612
5	Know how to give shots, IVs,…, etc.	4·37	0·630
6	Be sensitive to my feelings and moods	4·31	0·696
7	Give pain medication when I need it	4·30	0·663
8	Know what they're doing	4·29	0·773
9	Leave my room neat after working with me	4·27	0·675
10	Do what they say they will do	4·26	0·737

Perceptions of patients towards nurse caring behaviours in CCUs

The findings of this study revealed that there were 19 of 63 items of the CBA scale perceived by patient participants to be very important; each of these items had a mean of 4·01 and above. The 10 most important caring behaviours are listed in Table 1.

Five of the 10 least important caring behaviours belonged to the subscale of Helping/Trust subscale. The least important item as perceived by patients was 'visit me if I move to another hospital unit' with a mean score of 1·36. Furthermore, all items of the subscale Existional/Phenomenological/Spiritual forces were also being ranked by patients within the 10 least important caring behaviours. The 10 least important caring behaviours are listed in Table 2.

Perceptions of nurses towards nurse caring behaviours in CCUs

The findings of this study revealed that six items of the 10 most important caring behaviours belonged to the subscale of Teaching/Learning. Table 3 shows the means and standard deviations of the 10 most important nurse caring behaviours as ranked by nurse participants.

Five of the 10 least important caring behaviours belonged to the subscale of Helping/Trust. These items were 'visit me if I move to another hospital unit', 'talk to me about my life outside the hospital', 'ask me what I like called', 'touch me when I need it for comfort' and 'introduce themselves to me' with mean scores of 1·62, 1·93, 2·05, 2·17 and 2·53, respectively.

Table 2 Rank order of the least important nurse caring behaviours as perceived by patient participants (n = 150)

Rank	Item	Mean	SD
1	Visit me if I move to another hospital unit	1·36	0·605
2	Ask me what I like to be called	1·67	0·631
3	Touch me when I need it for comfort	1·86	0·883
4	Introduce themselves to me	1·86	0·724
5	Talk to me about my life outside the hospital	1·91	0·689
6	Help me feel good about myself	2·09	0·843
7	Help me see that my past experiences are important	2·13	0·895
8	Let my family visit me as much as possible	2·30	0·981
9	Seem to know how I feel	2·36	0·822
10	Help me feel like I have some control	2·36	0·726

Table 3 Rank order of the most important nurse caring behaviours as perceived by nurse participants (n = 60)

Rank	Item	Mean	SD
1	Answer my questions clearly	4·68	0·504
2	Ask me what I want to know about my health/illness	4·62	0·490
3	Teach me about my illness	4·62	0·585
4	Leave my room neat after working with me	4·37	0·551
5	Offer things (position changes, blankets, back rub, etc.)	4·35	0·606
6	Encourage me to ask questions about my illness and treatment	4·35	0·633
7	Ask me questions to be sure I understand	4·32	0·624
8	Treat me with respect	4·32	0·770
9	Really listen to me when I talk	4·30	0·696
10	Help me set realistic goals for my health	4·30	0·671

Comparison between patients' and nurses' perceptions towards nurse caring behaviours in CCUs

t-test elucidated that there were significant differences between patient participants' and nurse participants' perceptions towards four subscales of CBA, which were Humanism/Faith–Hope/Sensitivity, Teaching/Learning, Human needs assistance and Existional/Phenomenological/Spiritual forces subscales. Table 4 presents the mean scores of all subscales.

Discussion

Patients' perceptions of nurse caring behaviours

Among the 10 most important nurse caring behaviours that were perceived by patient participants, six items had physical and technical basis. Such findings were consistent with

© 2013 John Wiley & Sons Ltd

Table 4 Comparison between patients' and nurses' perceptions towards CBA subscales

Subscale	Nurses	Patients	*t* value	*p*
Humanism/Faith–Hope/Sensitivity				
Mean	3·52	3·39	2·351	0·020
SD	0·38	0·37		
N	60	150		
Helping/Trust				
Mean	2·97	2·89	1·323	0·187
SD	0·45	0·34		
N	60	150		
Expression of positive/negative feelings				
Mean	3·53	3·43	1·080	0·281
SD	0·51	0·61		
N	60	150		
Teaching/Learning				
Mean	4·42	3·96	4·205	0·000
SD	0·51	0·79		
N	60	150		
Supportive/protective/corrective environment				
Mean	3·94	3·88	0·939	0·349
SD	0·41	0·39		
N	60	150		
Human needs assistance				
Mean	3·55	3·35	2·811	0·005
SD	0·50	0·47		
N	60	150		
Existential/Phenomenological/Spiritual forces				
Mean	2·72	2·19	5·102	0·000
SD	0·74	0·64		
N	60	150		

CBA, Caring Behavior Assessment.

the findings of previous studies (Cronin & Harrison 1988, Baldursdottir & Jonsdottir 2002, Zamanzadeh *et al.* 2010), in which patient participants perceived physical and technical aspects of care as more important than any other aspects. This finding asserts that patients usually develop their perceptions of care according to their needs. According to Maslow's hierarchy of needs, the physiological needs take the first priority in the patient–nurse relationship (Smeltzer & Bare 2003).

However, the findings of this study revealed that 'consider my spiritual needs' as the most important nurse caring behaviour item as perceived by patient participants with CADs. Nurses' commitment to respect spiritual needs was perceived by patients as the most important nursing behaviour; this finding is not surprising for patients who belong to Jordanian Arabic nation in which Muslims form about 94% of the total population (South 2007). For Muslims, spirit arises from religion and guides their practices and thoughts to approach God. Patients' expression of religious beliefs and practices is usually perceived as spiritual needs (Parker 2001, p. 344–350). During the disease process, Muslim patients usually boost their spiritual religious practices such as reading Qur'an (Holy book of Islam) and praying.

The findings of this study showed that none of the nurses' teaching behaviours were among the top 10 most important caring behaviours. As most of the participants were hospitalised before, the learning needs of these patients might have been fulfilled in the previous hospitalisations. Another explanation could be that patients of the present study might not perceive that nurses could help them in answering their questions, especially Omari (2010) found that Jordanian family members of critically ill patients perceived physicians as the most likely persons to answer their questions related to their loved ones' diagnoses and outcomes.

On the other hand, the least important caring behaviours as ranked by patient participants belonged to the subscale of Helping/Trust. This finding was consistent with the finding of Baldursdottir and Jonsdottir (2002), which revealed that the item of 'visit me if I move to another hospital unit' was rated as the lowest specific nurse caring behaviour. In the current study, some patient participants commented to the researcher, while they were completing the questionnaires, that the following nurse caring behaviours 'visit me if I move to another hospital unit', 'ask me what I like to be called', 'introduce themselves to me', 'talk to me about life outside hospital' and 'touch me when I need for comfort' may not be appropriate caring behaviours because the relationship between nurse and patient is temporary and for therapeutic purposes. In addition, patient participants indicated that building personal relations with nurses is not as important as knowing their qualifications and competencies. Other patients commented that nurses are responsible to provide patient care in their units, but if they move to another unit, the relationships should be terminated. Furthermore, in the Jordanian culture, family members and relatives provide support and visit their loved ones regularly; therefore, they might not need these caring behaviours from the healthcare providers. More than 10 family members of critically ill patients visit their loved ones at once during their hospitalisations (Omari 2009).

Although the family has an important role in providing psychological and affective support for their loved ones who are hospitalised, patients who participated in this study surprisingly ranked 'let my family visit me as much as possible' as the lowest of the 10 least important caring behaviours on the CBA scale. This finding is not congruent with the study of Gonzalez *et al.* (2004), which revealed that patients in intensive care units perceived family visit as

© 2013 John Wiley & Sons Ltd

nonstressful experience and essential; because family can provide and interpret information about patients to healthcare providers, they provide reassurance and comfort measures to the patients. The finding of the current study might be explained as that excessive family visits might cause inconvenience and discomfort to patients in CCUs and that the critical nature of CADs makes the patients with these diseases at high need for extensive time for rest and privacy and little time for family visits. Moreover, the patient participants might not perceive this caring behaviour as important because CCUs have flexible visiting hours, and patients usually have frequent visits from their families. Omari (2009) found that family visits were within the needs that were being met as perceived by Jordanian family members of critically ill patients.

Nurses' perceptions of nurse caring behaviours

The 10 most important nurse caring behaviours as perceived by nurses belonged to the cognitive aspects of care, particularly teaching behaviours. This finding is inconsistent with the findings of O'Connell and Landers's study (2008), which revealed that emotional dimensions of care were perceived as most important by nurses rather than any other care components.

In addition to teaching behaviours, nurse participants in this study perceived the psychological aspects of care to be important caring behaviours, and this was represented by rating the items 'treat me with respect' and 'really listen to me when I talk' within the 10 most important nurse caring behaviours list. These findings were congruent with Rosenthal (1992) who found that nurses in coronary care units ranked 'listening' as the most important caring behaviour in CCUs. Nurses in CCUs perceived psychological aspects of care as important for patients with CADs, because the critical nature of the disease makes the patients more susceptible to psychological distress and problems such as anxiety, depression and mood swings, which may lead to more deterioration of the function of the heart.

Inconsistent with the findings of Zamanzadeh *et al.* (2010) and Chang *et al.* (2005), in this study, nurses did not rank instrumental caring behaviours such as 'know how to give shots, IV' and 'know how to handle equipment' within the top 10 most important caring behaviours. It is interesting that, some nurses in this study commented that competency in demonstrating skills is not considered as caring behaviour, but it is an essential prerequisite for nursing profession. Moreover, other nurses stated to the researcher that explanation of any procedure or skills is more important to be considered as caring behaviour than competency in doing these skills.

On the other hand, five items of the least important caring behaviours as perceived by nurse participants belonged to the subscale of Helping/Trust. This finding might be explained as that the relationship between nurses and patients is temporary and for therapeutic purposes; thus, no need to build personal relations with patients. Furthermore, shortage of nurses and work overload limits the time that nurses spend with patients (AbuAlrub 2007). 'Let my family visit me as much as possible' was the lowest of the 10 least important caring behaviours as ranked by nurse participants. This might be explained that nurses did not perceive this caring behaviour as important because excessive family visits cause inconvenience and discomfort to nurses during providing care to their patients in CCUs.

Comparison between patients' and nurses' perceptions towards nurse caring behaviours

Findings of this study showed that nurse participants rated all subscales of the CBA scale with higher mean scores than patient participants did. This might be due to the fact that patients did not value the outcomes of nurse caring behaviours as nurses did. The critical nature of the CADs may put patients at high levels of stress, and this might cause negative attitudes towards the behaviours of critical care nurses. However, only four of seven subscales of the CBA scale were significantly perceived as more important by nurse participants compared with patient participants. These subscales included Humanism/Faith–Hope/Sensitivity, Teaching/Learning, Human needs assistance and Existential/Phenomenological/Spiritual forces subscales.

The disagreement in perceptions between nurses and patients might lead to providing caring behaviours that are not of priority to patients. In turn, this might lead to patients' dissatisfaction. Therefore, nurses should be prepared to provide caring behaviours based on prioritised patients' needs.

Conclusion

Findings of this study supported the results of previous studies. The results of the present study revealed that patients with CADs perceived physically based and technical nursing behaviours as most important, whereas nurses perceived teaching nursing behaviours as more important than any other caring behaviours in CCUs. The findings of the study ensure that nurses should develop an effective

© 2013 John Wiley & Sons Ltd

care plan for patients with CADs based on their needs. Spiritual practices of patients should also be respected by nurses through providing them with all that they need to do their religious practices.

Relevance to clinical practice

Healthcare professionals especially nurses in practice should play a significant role and assert the importance of the physical and technical caring behaviours as perceived by Jordanian patients with CADs. Continuous assessment of patients is also important to monitor the progression of their status and to prevent any complications. Spiritual practices might have a role in relieving the psychological and emotional stress, which aroused during the disease process. Therefore, spiritual practices of patients should be respected by nurses through providing them with all that they need to do their religious practices, respecting the time at which patients do these spiritual practices and preparing appropriate environment with less interruption.

Limitation of this study include (1) the use of a convenience sample, which limits the generalisability of the findings, (2) the length of the CBA scale that needed prolonged time to be filled by either patients or nurses and (3) a measurement error could occur as a result of the different ways of administering the CBA scale.

Despite these limitations, teaching behaviours of nurses should be enhanced. It is recommended that nurse educators assure that their students can demonstrate all aspects of caring, which includes physical, emotional, psychological and cognitive. Nurse educators should also hold forums in which updated caring-focused studies are discussed. The results of such studies should be introduced to nursing students through their curricula.

It is also recommended that nursing administrators in hospitals develop procedures and protocols that focus on caring and integrate all of its aspects including physical, emotional, psychological and cognitive aspects of care. It is also paramount that nurse administrators help nurses, especially the newly employed ones, to develop their competencies and advance their knowledge through continuing education programmes. Nurse administrators could also conduct seminars in which nursing staff discuss newly published articles about caring.

Acknowledgement

The authors would like to acknowledge all nurses and patients who participated in this study.

Disclosure

The authors have confirmed that all authors meet the ICMJE criteria for authorship credit (www.icmje.org/ethical_1author.html), as follows: (1) substantial contributions to conception and design of, or acquisition of data or analysis and interpretation of data, (2) drafting the article or revising it critically for important intellectual content, and (3) final approval of the version to be published.

References

AbuAlrub R (2007) Nursing shortage in Jordan: what is the solution? *Journal of Professional Nursing* **23**, 117–120.

Baldursdottir G & Jonsdottir H (2002) The importance of nurse caring behaviors as perceived by patients receiving care at an emergency department. *Heart and Lung* **31**, 67–75.

Brilowski G & Wendler M (2005) An evolutionary concept analysis of caring. *Journal of Advanced Nursing* **50**, 641–650.

Chang Y, Lin Y, Chang H & Lin CC (2005) Cancer patient and staff ratings of caring behaviors – relationship to level of pain intensity. *Cancer Nursing* **28**, 331–339.

Cronin S & Harrison B (1988) Importance of nurse caring behaviors as perceived by patients after myocardial infarction. *Heart and Lung* **17**, 374–380.

Gonzalez C, Carroll D, Elliott J, Fitzgerald P & Vallent H (2004) Visiting preferences of patients in the intensive care unit and in a complex care medical unit. *American Journal of Critical Care* **13**, 194–198.

Hinshaw A, Feetham S & Shaver J (1999) *Handbook of Clinical Nursing Research*, 1st edn. Sage Publications, Thousand Oaks, CA.

Khademian Z & Vizeshfar F (2008) Nursing students' perceptions of the importance of caring behaviors. *Journal of Advanced Nursing* **61**, 456–462.

Khraim F, Scherer Y, Dorn J & Carey M (2009) Predictors of decision delay to seeking health care among Jordanians with acute myocardial infarction. *Journal of Nursing Scholarship* **41**, 260–267.

Kimble L (2003) *Patients' Perceptions of Nurse Caring Behaviors in an Emergency Department*. Theses, Dissertations and Capstones. Paper 261.

Leininger M (1988) *Caring: An Essential Human Need*. Wayne State University Press, Detroit, MI.

O'Connell E & Landers M (2008) The importance of critical care nurses' caring behaviors as perceived by nurses and relatives. *Intensive and Critical Care Nursing* **24**, 349–358.

Omari FH (2009) Perceived and unmet needs of adult Jordanian family members of patients in ICUs. *Journal of Nursing Scholarship* **41**, 28–34.

© 2013 John Wiley & Sons Ltd

Omari FH (2010) *Self-Perceived Needs of Adult Jordanian Patients in ICU*. LAP Lambert Academic Publishing AG & Co, Saarbrucken.

Parker M (2001) *Nursing Theories and Nursing Practice*. F.A. Company, Philadelphia, PA.

Rafi F, Hajinezhad ME & Haghani H (2006) Nurse caring in Iran and its relationship with patient satisfaction. *The Australian Journal of Advanced Nursing* **26**, 75–84.

Rosenthal K (1992) Coronary care patients' and nurses' perceptions of important nurse caring behaviors. *Heart and Lung* **21**, 536–539.

Smeltzer S & Bare B (2003) *Medical Surgical Nursing*, 10th edn. Lippincott Williams & Wilkins, Philadelphia, PA.

South C (2007) *Cultures of the World: Jordan*, version 2. Marshall Cavendish Benchmark, Tarrytown, NY.

Watson WT, Marshall ES & Fosbinder D (1999) Elderly patients' perceptions of care in the emergency department. *Journal of Emergency Nursing* **25**, 88–92.

Watson R, Hoogbruin AL, Rumeu C, Beunza M, Barbarin B, Macdonald J & McCready T (2003) Differences and similarities in the perception of caring between Spanish and UK nurses. *Journal of Clinical Nursing* **12**, 85–92.

Woodward V (1997) Professional caring: a contradiction in terms? *Journal of Advanced Nursing* **26**, 999–1004.

World Health Organization (2006) *Mortality Country Fact Sheet*. Ministry of Health of Jordan in collaboration with the World Health Organization, Jordan.

Zamanzadeh V, Azimzadeh R, Rahmani I & Valizadeh L (2010) Oncology patients' and professional nurses' perceptions of important nurse caring behaviors. *BioMed Council Nursing* **9**, 10.

The Journal of Clinical Nursing (JCN) is an international, peer reviewed journal that aims to promote a high standard of clinically related scholarship which supports the practice and discipline of nursing.

For further information and full author guidelines, please visit JCN on the Wiley Online Library website: http://wileyonlinelibrary.com/journal/jocn

Reasons to submit your paper to JCN:

High-impact forum: one of the world's most cited nursing journals, with an impact factor of 1·316 – ranked 21/101 (Nursing (Social Science)) and 25/103 Nursing (Science) in the 2012 Journal Citation Reports® (Thomson Reuters, 2012).

One of the most read nursing journals in the world: over 1·9 million full text accesses in 2011 and accessible in over 8000 libraries worldwide (including over 3500 in developing countries with free or low cost access).

Early View: fully citable online publication ahead of inclusion in an issue.

Fast and easy online submission: online submission at http://mc.manuscriptcentral.com/jcnur.

Positive publishing experience: rapid double-blind peer review with constructive feedback.

Online Open: the option to make your article freely and openly accessible to non-subscribers upon publication in Wiley Online Library, as well as the option to deposit the article in your preferred archive.

© 2013 John Wiley & Sons Ltd