

การรับรู้ของผู้ป่วยต่อพฤติกรรมการดูแล
และการจัดการความปวดหลังผ่าตัดของพยาบาล
ในหอผู้ป่วยศัลยกรรมของโรงพยาบาลแห่งชาติจิกมี

ดอจี วังชุก ทิมพู-ภูฏาน

Patients' Perceptions of Nurses' Caring Behaviors
and Post-operative Pain Management on the Surgical Wards
of Jigme Dorji Wangchuk National Referral Hospital in Bhutan

กฤษณะ ซิงห์ มอนเกอร์ MNS.(หลักสูตรนานาชาติ)* บำเพ็ญจิต แสงชาติ ปส.ด.**

Krishna Singh Monger MNS.(International Program)* Bumpenchit Sangchart Ph.D.**

บทคัดย่อ:

การศึกษาเชิงพรรณนาครั้งนี้ เพื่อศึกษาการรับรู้ของผู้ป่วยต่อพฤติกรรมการดูแลของพยาบาลที่ผู้ป่วยรับรู้ว่ามี
ความสำคัญมากที่สุดและน้อยที่สุดและการพยาบาลในการจัดการความปวดหลังผ่าตัดของผู้ป่วยในหอผู้ป่วยศัลยกรรม
ใช้ทฤษฎีการดูแลของวัตสันเป็นกรอบแนวคิดในการศึกษา กลุ่มตัวอย่างได้จากการสุ่มแบบแบ่งชั้นจากประชากรซึ่งเป็น
ผู้ป่วยที่เข้าพักรักษาในหอผู้ป่วยศัลยกรรม ศัลยกรรมกระดูกและข้อ และสูติกรรมของโรงพยาบาลแห่งชาติจิกมี ดอจี
วังชุก ทิมพู-ภูฏาน จำนวน 246 คน เครื่องมือในการวิจัยผ่านการตรวจสอบความตรงและความเชื่อมั่นจากผู้ทรง
คุณวุฒิ วิเคราะห์ข้อมูลด้วยสถิติเชิงพรรณนา คือ การทดสอบความแปรปรวน และการหาสหสัมพันธ์ของเพียร์สัน
ผลการศึกษา พบว่า พฤติกรรมการดูแลของพยาบาลที่ผู้ป่วยรับรู้ว่ามีค่ามากที่สุดคือ การให้การรักษาระยะ
ให้ยาตรงเวลา และให้ความสำคัญน้อยที่สุด คือ การพูดคุยเรื่องทั่วไปเกี่ยวกับชีวิตของผู้ป่วย และพยาบาลมีความรู้ไม่
เพียงพอในการจัดการความปวด และพบว่าชาติพันธุ์และการศึกษามีผลต่อการรับรู้พฤติกรรมการดูแลของพยาบาล
แตกต่างกันอย่างมีนัยสำคัญทางสถิติ ($p < 0.05$) และผลของการหาสหสัมพันธ์ของเพียร์สัน พบว่า การรับรู้ของผู้ป่วย
ต่อพฤติกรรมการดูแลของพยาบาลมีความสัมพันธ์ทางบวกกับการรับรู้ของผู้ป่วยต่อการจัดการความปวดหลังผ่าตัด
ของพยาบาล ($r = 0.143, p < 0.05$)

คำสำคัญ : การรับรู้ของผู้ป่วย พฤติกรรมการดูแลของพยาบาล การจัดการความปวดหลังการผ่าตัด

Abstract:

The objective of this cross-sectional descriptive study was to examine which nurses' caring behaviors
were perceived as most and least important in caring for and nursing care on post-operative pain management
on surgical wards. Watson's theory of caring was used as a theoretic framework for this study. Stratified random
sampling was employed to recruit 246 subjects who were admitted post-operatively to the surgical, orthopedics or
obstetrics wards of Jigme Dorji Wangchuk National Referral Hospital (JDWRH) in Bhutan. Questionnaires were

* Student, Master of Nursing Science (International Program), Faculty of Nursing, Khon Kaen University

** Associate Professor, Faculty of Nursing, Khon Kaen University

analyzed for content validity and reliability. Data was analyzed using descriptive statistics, Analysis of Variance (ANOVA), and Pearson's correlation coefficient. Results show that "Give me treatments and medications on time" was rated as the most important nurses' caring behavior and "Talk to me about my life outside of the hospital" was the least important nurses' caring behavior. The 'post-operative pain management' tool results revealed that nurses had insufficient knowledge in this area of patient care. The ANOVA test revealed that there were statistically significant differences in perceptions of nurses' caring behaviors among different ethnic groups and education levels ($p < 0.05$), and Pearson's correlation coefficient showed patients' perceptions of nurses' caring behaviors had significant positive correlation with patients' perceptions of post-operative pain management ($r = 0.143$, $p < 0.05$).

keywords: patients' perceptions, nurses' caring behavior, post-operative pain management.

Background and significance

Post-operative pain remains a major problem in surgical patients. It continues to be a problem in many countries despite the availability of effective analgesics, new technologies for drug administration, and clinical practice guidelines for pain assessment and management.^{1,2} Still, it is evident in the literature that post-operative pain management on many surgical wards is inadequate.³ NieMi-Murola, Poyhia, OnKinen, Rhen, MaKela, NieMi,⁴ and Erniyati,⁵ studied patients' perceptions of nurses' caring behaviors on post-operative pain management and results showed that nurses were failing to accurately assess and evaluate post-operative pain. Patients' satisfaction with nurses' caring behavior is the difference between the patients' perceptions of care received compared to the care expected.⁶

In Bhutan, the health of the population has improved significantly in all aspects. In spite of all this not much progress has been in the area of research, especially in nursing, so it is necessary to make such studies and to follow evidence based practices. Departments of health have realized the importance and seriousness of nurses' caring behavior and post-operative pain management. Concerns about poor

nursing care attitude among health care workers toward patients are increasing in Bhutan because the perception the health care professionals are increasingly in conflict, with distancing themselves from patients, as evidenced from the word of mouth from the patients, parents and from national newspaper forum.⁷ Why is there was much concern of patients' perception of poor nurses' caring behavior and attitude? Is it because of poor knowledge about nursing care on post-operative pain management or because they don't have adequate experience working with post-operative patients or because of barriers to post-operative pain management? Though there is lack of study in Bhutan to support this phenomenon, is well supported from studies done in other countries.⁸ so, it was necessary to do a study on nurses' caring behavior and post-operative pain management in Bhutan.

Therefore, it is important to identify which nurses' caring behaviors are perceived as most and least important in caring for and managing pain for post-operative patients on surgical wards. Results of this study could provide baseline data used for improving nursing care services for post-operative patients in this setting. Since patients have great concern for nurses' caring behaviors and attitudes, it is necessary to improve

nursing care services on the surgical wards of JDWNRH in Bhutan, and thus the present study was proposed.

Research questions

1. Which nurses' caring behaviors are perceived by patients as the most and least important in caring for post-operative patients' on the surgical wards of JDWNRH in Bhutan?
2. What are patients' perceptions of nursing care for post-operative pain management on the surgical wards of JDWNRH in Bhutan?
3. What are the differences in mean scores of patients' perceptions towards nurses' caring behaviors and selected demographic factors (age, gender, education and ethnicity)?

Objectives of the study

1. To identify which nurse caring behaviors are perceived as the most and least important caring by post-operative patients in the surgical ward at JDWNRH of Bhutan.
2. To identify patients' perception of nursing care on post-operative pain management in the surgical ward at JDWNRH of Bhutan.
3. To compare the mean scores of patients' perceptions of nurses' caring behaviors and selected demographic factors.

Theoretical framework

The theoretical framework was derived from literature review. The "post-operative patients' perceptions of nurses' caring behaviors" assessment tool was an adaptation of⁹ theory of transpersonal caring and the ten 'carative' factors-caritas process. Subsequently, Cronin and Harrison,¹⁰ grouped the patients' perceptions of nurses' caring behaviors into

seven subscales that encompass all ten 'carative' factors based on Watson's theory.¹¹ Further, the same theoretical framework was utilized to study the correlation between the nurses' caring behaviors and pain management since it covered the broad aspects of nursing 'carative' factors and correlated with scientific-humanistic framework.⁷ The premise of patients' perceptions of nurses' caring behaviors and nursing care for post-operative pain management was conceptualized, synthesized and constructed through the nursing process, and was divided into two parts: assessment-evaluation and pain intervention.⁵

Methods

A cross-sectional descriptive survey study design was used for the research, with a 61-item questionnaire designed on the basis of Cronin and Harrison's Caring Behaviors assessment tool, which reflected the 10 'carative' factors of Watson's theory, and 36 items of nursing care for post-operative pain management questionnaire was given to post-operative patients to identify which nurse caring behaviors were perceived as most caring by post-operative patients and the perception of nursing care on post-operative pain management in surgical, orthopedics and obstetrics ward at a JDWNRH of Bhutan.

Population and sample

The population consisted of all patients admitted to the surgical, orthopedics and obstetrics wards of JDWNRH in Bhutan from 15 February to 31 March 2011, during the 24 to 48 hour period after surgery. These three wards were selected because the large numbers of post-operative patients admitted there. Stratified random sampling with proportional allocation was used to determine the sample size. The sample size

was calculated based on Lwanga & Lemeshow's.¹² The sample included 246 post-operative patients from surgical, orthopedics and obstetrics wards and was the size required when the alpha was taken as 0.05 and power of 0.80.¹³

Excluded from this study were: post-operative patients with coma or mental health disorders; generally ill-looking or disoriented patients; post-operative patients transferred from other hospitals; those having pain from other complications such as surgical wound infections, bleeding or fever during the research study period; and anyone who participated in the pilot study.

Instrumentation

The self-administered questionnaire (the rating of the questionnaire done by patients itself) was composed of three sections: 1) A demographic data form; 2) the patients' perceptions of nurses' caring behaviors (NCB) assessment tool; and 3) the Patients' Perceptions of Nursing Care for Post-operative Pain Management (NC-PPM) questionnaire which was divided into 2 parts: pain assessment-evaluation and pain intervention.

To measure patients' perceptions of nurses' caring behaviors in this study, an assessment tool as developed by Cronin & Harrison,¹⁰ was used. The instrument was reviewed by two Thai and three Bhutanese experts to establish its content validity. A pilot study was done and reliability (Cronbach's alpha) for the seven subscales ranged from 0.66 to 0.90, and 0.90 for the total scale. The researcher modified the instrument to suit the situation in Bhutan after consultation with the experts. Items were rated on a 5-point Likert scale, ranging from little importance '1' to very much importance '5', to reflect the degree of each nursing behavior.

The second part of the instrument was slightly modified and divided into two parts to assess patients' perceptions of pain assessment-evaluation and pain intervention for post-operative pain management, as adopted from previous study.⁵ It was designed to assess patients' perceptions of nursing care that nurses had 'performed' or 'not performed' to alleviate their pain during the first 24-48 hour period after surgery. It consisted of 36 items: 18 items related to pain assessment-evaluation and 18 items related to pain intervention. Each item was paired with "Yes" or "No" response options. Responses indicating 'performed nursing actions' were given a score of '1', and 'not performed nursing actions' were given a score of '0'. Therefore, the highest possible score was 36, and the lowest possible score was 0. The instrument was reviewed by two Thai and three Bhutanese experts to establish its content validity, and internal consistency was analyzed by using Kuder Richardson 21 (KR-21).¹⁴ The coefficient of reliability for the entire NC-PPM scale was 0.80, 0.70 for pain assessment-evaluation, and 0.75 for pain intervention. The questionnaires were not translated in to Bhutanese language since the English language is the medium of instruction in Bhutan and the inclusion criteria was followed that patients could read and write English language.

Ethical considerations

Approval to conduct this study was granted by the Institutional Review Board of Khon Kaen University and the Research Ethical Board of Bhutan under the Ministry of Health prior to any mass data collection. Subjects were assured that the information collected would be used judiciously, and confidentiality of the data would be maintained to protect subjects'

personal information. Participation in the study was on a voluntary basis and subjects could decline or refuse to answer if they were not comfortable with any items. Their participation in the study would have no risk or harmful impacts to their medical care. Subjects were allowed as much time as they needed to finish filling out the forms. Strong assurance was given that the information would be maintained strictly confidential and anonymous, and that the medical staff would not have access to the answers. They were also advised that their care would not be compromised in any way if they dropped out of the study or refused to participate.

Data collection procedures

Patients who met the inclusion criteria were approached by the researcher and given verbal and written information about the study. If they expressed a desire to participate in the study, they were given a questionnaire and consent form to sign. The purpose of the study, and how the outcomes can help improve nursing services in the future, was explained to the subjects during the 24–48 hour period after their surgery. The researcher tried to meet with patients between 2:00 pm to 5:30 pm because during this time there were fewer nursing care procedures, doctors' rounds and other ward activities. The researcher was always nearby the participants if any doubts on the questionnaires needed to be clarified by the researcher on the spot. If any missing data were found the researcher re-conformed participants response before leaving the bed but their willingness to give information and privacy was maintained.

Demographic information on age, gender, ethnicity and education was collected as well. When the forms were completed the researcher collected them for data analysis.

Data analysis

Data was analyzed using Statistical Package for Social Science (SPSS) programme version 17.0. Normality tests were done and all of the quantitative data were found to be normally distributed. Therefore, parametric test with descriptive statistics such as mean, standard deviation (SD), frequency, percentage, ANOVA, LSD and Pearson's correlation coefficient were employed to examine response to the NCB and NC-PPM. All items were then grouped into subscales and the overall mean for each individual was calculated for each subscale. Overall item means for each of the subscales were also calculated to determine the rank distribution of the subscales. The level of significance (α) was set at $p < 0.05$.

Results

The majority of patients 62.2% ($n = 153$) were female and only 37.8% ($n = 93$) were male. Most patients 36.6% ($n = 90$) were between 18–29 years of age. The mean age of the patients was 38.2 years ($SD = 15.8$). The surgical ward provided 42.0% ($n = 103$) of the total number of patients, 33% ($n = 82$) were from the obstetrics ward and the fewest (25.0%, $n = 61$) were from the orthopedics ward. Most respondents (42.3%, $n = 104$) completed secondary education, and 7.3%, ($n = 8$) completed only primary education. Ethnicity was mainly Lhotsham (30.1%, $n = 74$). The patients underwent a variety of surgical procedures on the orthopedics, obstetrics and general surgery wards.

Mean score and standard deviation were calculated for each of the 61 items in the nurses' caring behaviors assessment tool. Summaries of the 10 most important and 10 least important behaviors are listed in Tables III and IV. Means ranged from a high of 4.36

for the most important item (“Give me treatments and medications on time”) to a low of 2.28 for the least important item (“Talk to me about my life outside of the hospital”).)

The subscale rating, as shown in Table II, demonstrates that “Human needs assistance” was the most important subscale and “Helping trust” was the least important among the seven subscales. The overall perception level of post-operative patients on the three wards showed a somewhat important or moderate level of perception of nurses’ caring behavior, with mean score of 3.37 and SD of 1.14 for the total nurses’ caring behaviors (rating scale range = 1–5).

The total mean score for the second scale, nursing care for post-operative pain management (NC-PPM), was 0.56 (out of 36 items) and SD = 0.46, and overall perception level was moderate (Table I). Of the 18 nursing actions under the pain assessment-evaluation subscale, only one action, “Use observation to determine pain”, was perceived by a high number of patients as ‘performed by nurses’ (mean = 0.82, SD = 0.38). The nursing action “Use pain scale to describe pain intensity” received the lowest score (mean = 0.33, SD = 0.47). Of the 18 nursing actions under pain intervention, only 3 actions were perceived by a high number of patients as ‘performed by nurses’. They were “Help when needed” (mean = 0.86, SD =

0.35), “Teach to support pain area” (mean = 0.78, SD = 0.42), and “Take care of surgical wound and its drainage” (mean = 0.76, SD = 0.43). Also, 2 nursing actions of the NC-PPM in pain intervention were perceived by a small number of patients as ‘not performed’ by nurses. They were “Help to position comfortably” (mean = 0.18, SD = 0.30) and “Help to have adequate sleep” (mean = 0.24, SD = 0.21).

The ANOVA test revealed that there was a statistically significant difference in patients’ perceptions of nurses’ caring behaviors among different ethnic groups and education levels ($p < 0.05$). Post-hoc analysis with the least significant difference (LSD) test revealed that those subjects who had higher education levels perceived nursing care services to be more and of higher quality as opposed to perceptions of lower education groups ($p < 0.001$). Similarly, the Bonferroni test for ethnicity revealed that Lhotsham subjects had higher perception scores on nurses’ caring behaviors than Ngalong subjects (mean difference = 32.97, $p < 0.05$).

Pearson’s correlation coefficient showed “patients’ perceptions of nurses’ caring behaviors” had significant positive correlation with the “patients’ perceptions of post-operative pain management” ($r = 0.143$, $p < 0.05$), as shown in Table V.

Table I: Rating for the post-operative pain management subscales (n = 246)

Item no	Subscales	No of items	Mean	SD	Level
1	Pain assessment-evaluation	18	0.57	0.47	Moderate
2	Pain intervention	18	0.54	0.44	Moderate
Total		36	0.55	0.45	Moderate

Table II: Rating for the nurses' caring behaviors assessment subscale (n = 246)

Rank	Subscales	No. of items	Mean	SD
1	Human needs assistance	9	3.7	1.0
2	Supportive/protective/corrective	12	3.53	1.33
3	Existential/phenomenological spiritual	3	3.43	1.06
4	Humanism/faith/hope/sensitivity	16	3.33	1.16
5	Expression of positive/negative feelings	4	3.33	1.02
6	Teaching/learning	8	3.30	1.27
7	Helping/trust	9	2.9	1.17
Total		61	3.37	1.14

Table III: Means and standard deviations (SD) for the 10 most important nurses' caring behaviors (n = 246)

Nurses' caring behaviors	Mean	SD
1 Give me treatments and medications on time.	4.36	0.74
2 Know how to handle equipment.	4.33	0.89
3 Know how to give injections.	4.22	0.91
4 Give me pain medication when I need it.	4.12	0.86
5 Encourage me to do what I can do for relieving the pain.	4.10	2.85
6 Explain safety precautions to me and my family.	4.01	0.96
7 Leave my bed neat after caring for me.	3.86	1.01
8 Keep my family informed of my progress.	3.94	1.01
9 Know when it is necessary to call the doctor.	3.77	1.08
10 Offer things to make me more comfortable.	3.67	1.09

Table IV: Means and standard deviations (SD) for the 10 least important nurses' caring behaviors (n = 246)

Nurses' caring behaviors		Mean	SD
1	Talk to me about my life outside the hospital.	2.28	1.14
2	Introduce themselves to me.	2.37	1.30
3	Come to my bed side just to check on me.	2.83	1.19
4	Accept my feelings without judging them.	2.91	1.08
5	Treat me with respect.	2.92	1.19
6	Help me plan for my discharge from the hospital.	2.93	1.32
7	Answer quickly when I call for them.	2.99	1.30
8	Praise my efforts.	3.02	1.17
9	Are cheerful.	3.05	1.34
10	Understand when I need to be alone.	3.07	1.05

Table V: Comparison of Pearson's correlation coefficient between "patients' perceptions of nurses' caring behaviors" and "patients' perceptions of post-operative pain management" among post-operative patients (n = 246)

Variable	Pearson's correlation coefficient(r)
Overall patients' perceptions of post-operative pain management	
Overall patients' perceptions of nurses' caring behaviors	0.143*

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

Discussion

The dimensions of nurses' caring behaviors were analyzed by using frequency, mean, SD, and patients' level of perceptions of nurses' caring behaviors. The overall nurses' caring behavior on the wards (total of 61 items) was perceived by the majority of patients as only somewhat important (mean = 3.37, SD = 1.14). These findings suggest that nurses need to better recognize the importance of caring behavior and put this caring behavior into practice. Thus, it is seen that

improvements are required across all seven dimensions of caring behaviors. Examining individual items in the list of nurses' caring behaviors also reveals which aspects of nursing care were perceived as the least 'performed'.

In this study it was found that the "Human needs assistance" subscale (Table II) was the most important among the seven subscales. It contained 9 items, 5 of which belong to the ten most important nurses' caring behaviors found in this study. The caring

behavior statement “Give me treatments and medications on time,” was the most important single item statement that was perceived by the majority of patients as caring. The caring behavior statement “Talk to me about my life outside the hospital” was perceived by the majority of patients as being least important. The statement “Give me treatments and medications on time” means that the patients were getting their pain management medications promptly or whenever they requested them from nursing staff. This was deemed important since there were no resident doctors in the setting and the doctors usually prescribed pain medications on a ‘prn’ system. These results were consistent with previous studies.

The statements “Know how to handle equipment”, “Know how to give injections”, “Keep my family informed of my progress”, and “Know when it is necessary to call the doctor” (Table III) were ranked as second, third, eighth and ninth respectively in the list of top ten most important nurses’ caring behaviors identified by the patients, and this was consistent with previous studies.¹⁵ This suggests that it was the technological (or skilled) caring behaviors of nurses’ that are considered most important by the patients who participated in this study. This is not surprising as it is the “action process” or the things that nurses do that are most evident to post-operative patients. These results are congruent with previous studies of Beeby,¹⁶ and Harbaugh et al¹⁷ supports nursing technology for caring to maintain patient’s physiological stability. Previous studies that investigated the perceptions of parents of critically ill children also demonstrated that parents most highly valued the constant technological monitoring of their children.¹⁷ This perhaps indicates that the attention to and/or monitoring of patients helps meet their expectations, giving a greater perception of being cared for in the hospital and of meeting patients’ needs.

The prominence of assistance to fulfill human needs in these findings indicates that Bhutanese nurses must display a moral sense of caring through actions that are taken to respond to the uniqueness of each individual’s desires and unmet physical needs through timely monitoring of each patient’s condition. Larson,¹⁸ Mullins,¹⁹ and Manogin, Bechtel & Rami,²⁰ also support the belief that caring is, therefore, not just something the nurse reveals after finishing basic nursing care, but rather that quality nursing practice, caring and competence necessarily coexist. The nurse helps patients to fulfill their requirements for health assistance with basic needs by a caring consciousness to align mind, body and spirit.

The second subscale of “Helping/trust” received the lowest ranking (7th position) by patients in this study with mean score = 2.9 and SD = 1.17 (Table II). The caring behaviors “Talk to me about my life outside the hospital”, “Introduce themselves to me”, and “Come to my bed side just to check on me” were perceived as least important (Table IV), which reflects poorly on the nurse’s role as caregiver. None of the items of the subscale “Helping/trust” (which has 9 items – 2 items were dropped from the 11 items of Chronin and Harrison) were rated as very important. These results point to the fact that post-operative patients perceived that it is less important to make them feel cared for in this area. A possible explanation may be that nurses didn’t fulfill their promises to the patients and they were, therefore, perceived poorly in this area.

These findings further support the premise that basic needs must be satisfied before attention can be given to higher order needs.²¹ For example, individuals with enough self-care capabilities to care for themselves at home may not have the same sense of urgency for physical care as individuals in

post-operative settings, and they may better appreciate extra things done for them by the nurse. On the other hand, this study shows there is a lack of good nurse-patient relationship and communication. Millard et al,²² stated that participating in effective nurse-patient communication and relationship, such as paying attention and providing appropriate feedback, is important for patients' perceptions. These factors are important if closeness is to be sustained and for early recovery.²³

The low ranking in this area may be better explained by considering the NCB assessment tool in conjunction with Maslow's Hierarchy of Needs. It is well established that maintaining patients' physiological stability is a higher priority of nursing care during the post-operative period as opposed to meeting higher needs such as establishing nurse-patient relationship. These items certainly are important because they also yield relatively high scores. However, after meeting all the priorities of the patients' needs, other expectations of nursing care may follow.

Post-operative patients' perceptions of pain assessment-evaluation were moderate (mean = 0.57, SD = 0.47) as shown in (Table I). Out of 18 nursing actions under pain assessment-evaluation only 1 nursing action, "Nurses use observation to determine pain" (mean = 0.82, SD = 0.38), was perceived as 'performed' by the majority of patients. The findings of this study are based on information from patients' rating scores from the questionnaires and it is found that only one nursing action of pain assessment-evaluation was perceived by the majority of post-operative patients as performed. This indicates that the majority of patients received little or no feedback or information on pain assessment-evaluation from the nurses. It also suggests that pain and pain management components have not been adequately covered in basic nursing care,

indicating that most pain assessment-evaluation was not performed adequately by nurses. This was mainly due to inadequate knowledge of pain management and pain assessment-evaluation.^{24, 25}

The "patients' perceptions of nursing care for pain intervention" tool contained 18 nursing actions. The overall mean score for patients under this concept was 0.54 with a standard deviation of 0.44, rated as moderate (Table I). Through these results the differences, especially in the nursing intervention area, can be logically explained by the fact that there is a deficit of nursing knowledge about the content of nursing interventions. This study indicated that there were only three nursing actions that were perceived by a high number of patients as 'performed by nurses'. These include "Help when needed" (mean = 0.86, SD = 0.35), "Teach to support pain area" (mean = 0.78, SD = 0.42), and "Take care of surgical wound and its drainage" (mean = 0.76, SD = 0.43). In this study the giving of information to patients regarding pre and post-operative care was not a priority. However, this information should be given prior to surgery! Previous studies found that patients who received pre-operative nursing intervention for pain had lower levels of post-operative anxiety, more positive post-operative pain attitude, and lower levels of post-operative pain than those who did not receive such intervention.²⁶

While giving care the nurses need to know the various backgrounds, ethnicity, spiritual beliefs, education levels and other factors affecting the patients' expectations and perceptions of nursing care. Previous studies showed that certain demographic factors can also affect patients' perceptions of nursing care of post-operative pain management.²⁷ This study revealed a statistically significant difference in perceptions of nurses' caring behaviors among

different ethnic groups and education levels ($p < 0.05$). Post-hoc analysis reveals that higher education levels result in higher expectations of nursing care. Previous studies showed that those with higher education levels have more information and higher perceptions of satisfaction with nursing care. Those with lower levels of education desire to know about social services and have lower perceptions of satisfaction with nursing care.²⁸ Similarly, the Bonferroni test for ethnicity revealed that Lhotsham subjects had higher perception scores on nurses' caring behaviors than Ngalong subjects. A possible explanation for this could be that most of the Lhosum patients in this study came from more distant rural areas, and most were never previously admitted to this hospital. Therefore, they were not familiar with this hospital or its personnel, had more social services needs and, as a result, they perceived things differently. Similarly studies conducted in the United States and the United Kingdom consistently showed that groups of rural ethnic patients evaluate their care more negatively than do urban patients, even after analysis has been adjusted for potential confounders.²⁹ Pearson's correlation coefficient was used to test the relationship between "patients' perceptions of nurses' caring behaviors" and "patients' perceptions of post-operative pain management" (Table V). Results indicated that nursing care of post-operative pain was not at an optimal level, though there was a statistically significant positive relationship between the two variables ($r = 0.143$, $p = 0.05$). This supports the findings of Duffy,³⁰ who reported that the more nurses were considered to be caring, the greater were patients' perceptions of and satisfaction with nursing care. Stalling,³¹ also examined the relationship between nurses' caring behaviors and patients' perceptions and satisfaction. Stalling's study also found a strong correlation

($r = 0.73$, $p < 0.001$) between these two variables. A possible reason for low patients' perceptions in nurses' caring behaviors might be that there were fewer nurses with increasing numbers of post-operative patients, and they were not getting equal opportunities for nursing care.

Severe staff shortages and heavy workloads are common occurrences at JDWNRH in Bhutan. Nurses in Bhutan feel that there is a staffing crisis, and that this poor staffing results in decreased quality of care leading to dissatisfaction and patients' perceptions of low caring behavior. Wolf et al,³² considers that reductions in nursing personnel and time for nursing care compromise the patient's sense that nurses do not voluntarily return to the bedside unless a treatment or procedure motivates them to do so.

Implications and Recommendations

The results show that staffs need to be aware of the patient needs, during their interactions with the patients, and to validate the effect their intended caring has upon patients. By so doing and in conjunction with further refinement of the concept of the caring in studies such as this, the practical aim of making patients feel cared for can eventually be achieved in nursing practice. From the study, the nurse-patient relationships were not prioritized, but building of good interpersonal relationship among the patients can enhance the better understanding and create good nursing care and positive outcome of pain management. Nurses can assess and plan adequately for that pain in order to minimize post-operative discomfort. Findings from this study also provide validated evidence for nursing knowledge about the nurses' caring behavior and post-operative pain management.

This is an essential step to close the gap between the nurse's and the patient's perceptions' of caring thus providing for a more therapeutic environment in which to provide nursing care. Caring is an integral component of nursing and studies on caring should be at the forefront from the study.

Conclusion

The current study looked at "post-operative patients' perceptions of nurses' caring behaviors" and "post-operative pain management". It was seen that patients perceived that caring was not up to the optimal level and not meeting their expectations of being cared for. Overall, considering the nurses' caring behaviors items, the item "Give me treatments and medications on time" was valued as the single most important nurses' caring behavior (this was listed under subscale "Human needs assistance"). Behavior item "Talk to me about my life outside the hospital" was the least important nurses' caring behavior statement identified in this study, listed under the subscale of "Helping trust".

The subscales "Pain assessment-evaluation" and "Pain intervention" were rated moderate by the majority of post-operative patients. Only 1 of the 18 nursing actions under the subscale "pain assessment-evaluation" and 3 of the 18 nursing actions under "pain intervention" received a high rating by the majority of patients.

These results will be used to design and carry out suitable awareness and educational programmes aimed at improving clinical care and research in the country. Education programmes for staff should reflect these influences to ensure the optimum delivery of nurses' caring behavior and post-operative pain management. The study provides information about current nursing issues that have arisen as a result of nurse-patient interactions and reflects the need for

patient-centered health care reform initiatives. It is now time for the staff to validate the perceptions of the patients' needs and their intended caring behavior with the post-operative pain management knowledge which is intended to make the patients feel cared for and about. Further exploration in different clinical settings is needed in order to understand Bhutanese culture-based on nursing care.

Acknowledgement

The researchers would like to thank all of the post-operative patients in Bhutan for their cooperation and contributions in this study. We thank the Royal Government of Bhutan for encouragement, assistance, and financial support to make this study possible.

References:

1. Manias E. Pain and anxiety management in the postoperative gastro-surgical setting. *J Adv Nurs* 2003;41 (6):585-94.
2. Zeitz KM, McCutcheon HHI. Observations and vital signs: ritual or vital for the monitoring of postoperative patients. *Appl Nurs Res* 2006; 194:204-11.
3. Bell F. A review of the literature on the attitudes of nurses to acute pain management. *J Ortho Nurs* 2000; 4:64-70.
4. NieMi-Murola L, Poyhia R, OnKinen K, Rhen B, MaKela A, NieMi TT. Patient satisfaction with Postoperative Pain Management-Effect of Preoperative Factors. *Pain Manage Nurse* 2007; 8(3): 122-9.
5. Erniyati. Nurses' Caring Behaviors Perceived by Nurses and Patients with Postoperative Pain in Medan, Indonesia. Master's thesis, Prince of Songkla University, Hat Yai, Thailand; 2002.

6. Aiello A, Garman A, Morris BS. Patient satisfaction with nursing care: A multilevel analysis. *J Qual Manag in Health Care* ; 12 (3):187-91.
7. Kuensel Forum. Retrieved on 17th September 2010/ available from <http://www.kuenselonline.com/2010/modules.php?name=Forums>.
8. Kloppe H, Andersson H, Minkkinen M, Ohlsson C. Strategies in assessing postoperative pain a South African study. *Inten Criti Care Nurs* 2006; 22: 12-21.
9. Watson J. *Nursing: The Philosophy and Science of Caring*. USA: Little Brown; 1979.
10. Cronin SN, Harrison B. Importance of nurse caring behaviors as perceived by patients after myocardial infarction. *Heart Lung* 1998; 17:374-80.
11. Watson J. New dimensions of human caring theory. *Nurs Sci Q* 1988;1(4):175-81.
12. Polit DF, Hungler BP. *Nursing Research: Principles and Methods*. 6th ed. Philadelphia: J. B. Lippincott ; 1999.
13. Lawanga SK, Lemeshow S. *Sample size determination in health studies a practical manual*,. Geneva: World Health Organization 1991; 3: 80 - 100.
14. Waltz CF, Strickland OL, Lenz ER. *Measurement in Nursing Research*. 2nd ed. Philadelphia: F.A. Davis;1991.
15. Baldursdottir G, Jonsdottir H. The importance of nurse caring behaviors as perceived by patients receiving care at an emergency department. *Heart Lung* 2002; 31: 67- 70.
16. Beeby JP. Intensive care nurses' experiences of caring Part2. *Intensive and Crit Care Nurs* 2000; 16:151-63.
17. Harbaugh BL, Tomlinson PS, Kirshbaum M. Parents' perceptions of nurses' care giving behaviors in the pediatric intensive care unit. *Issues Compare Ped Nurs* 2004; 27:163-78.
18. Larson PJ, Ferketich SL. Patients' satisfaction with nurses' caring during hospitalization. *Western J Nurs Res* 1993; 15:690-707.
19. Mullins I. Nurse caring behaviors for persons with acquired immunodeficiency syndrome /human immunodeficiency virus. *Appl Nurs Res* 1996; 9:18-23.
20. Manogin TW, Bechtel GA, Rami JS. Caring behaviors by nurses: women's perceptions during child birth. *J Gyne Neo Nurs* 2000; 29:153-6.
21. Boykin A, Schoenhofer S. *Nursing as caring: A model for transforming Practice*. The Pain Clinic Manual. 3rd ed. Philadelphia: Lippincott Lea & Febiger ; 2001.
22. Millard L, Hallett C, Luker K. Nurse-patient interaction and decision-making in care: patient involvement in community nursing. *J Adv Nurs* 2006;55: 142-50.
23. Caris-verhallen WMC, de Grijter IM, Kerkstra A, Bensing JM. Factors related to nurse communication with elderly people. *J Adv Nurs* 1999; 30: 1106-17.
24. McKinlay A, Cowan S. Student nurses' attitudes towards working with older patients. *J of Adv Nurs* 2003; 43(3): 298-309.
25. Russell C, Kilburn E, Conn V, Libbus M, Ashbaugh C. Medication-taking beliefs of adult renal transplant recipients. *Clin Nurs Spec* 2003; 17(4): 200-10.
26. Ling LY, Wang RH. Abdominal surgery, pain and anxiety: preoperative nursing intervention. *J Adv Nurs* 2005; 51: 252-60.

27. Skrzypczak M, Laski P, Czerniak U, Kycler W. Do chronological age and selected socio-demographic factors affect quality of life in females with breast cancer. *Anthropological review* 2009; 72:31-44.
28. Squiers L, Rutten LJ, Treiman K., Bright MA, Hesse B. Cancer patients' information needs across the cancer care continuum: evidence from the cancer information service. *J Health Com* 2005; 10:15-34.
29. Taira D, Safran D, Seto T, Rogers W, Inui T, Montgomery J. Do patient assessments of care differ by patient ethnicity? *Health Survey Res* 2001; 36:1059-71.
30. Duffy J. An analysis of the relationship among nurse caring behavior and selected outcomes of care in hospitalized medical and surgical patients. *J Inter Nurs* 1990; 15: 467-88.
31. Stallins M. Patient satisfaction and caring behaviors of the emergency department nurse. *International Nursing Journal* 1996; 12: 203-19.
32. Wolf Z, Colahan M, Costello A, Warwick F, Ambrose M, Giardino E. Relationship between nurse caring and patient satisfaction. *Medsurg Nurs* 1998; 7(2): 99-110.