

Fourth Annual Research/Research Utilization Conference

co-sponsored by

*the Capital Alliance on Research & Research Utilization**

and the Institute for Health Care Education

CALL FOR ABSTRACTS • CALL FOR ABSTRACTS • CALL FOR ABSTRACTS

For Concurrent Sessions & Poster Presentations

Enhancing Healthcare Outcomes Through Nursing Research

• CALL FOR ABSTRACTS •

Friday, October 13, 2000

Hartford Hospital, Hartford, Connecticut

Keynote Speaker April Hazard Vallerand, RN, Ph.D.

*Assistant Professor, Adult Health Administration, College of Nursing,
Wayne State University, Detroit Michigan*

Luncheon Speaker Sean Clarke, RN, Ph.D., CRNP

*Postdoctoral Fellow, Center for Healthcare Outcomes & Policy Research,
University of Pennsylvania School of Nursing*

Deadline for Submissions

May 19, 2000

We invite proposals to present:

- *integrative research reviews that focus on clinical practice problems*
- *evaluation of changes in practice*
- *development or use of outcome measures to monitor practice*
- *general research/research projects in process that impact clinical practice*

For further information

call Deborah McDonald, RN at 860-486-3714 or Joan MacRae, RN at 860-545-2818

*Member organizations in the Capital Alliance on Research and Research Utilization include Hartford Hospital, MidState Medical Center, UCONN Health Center, Central Connecticut State University, St Joseph College, University of Connecticut and University of Hartford.

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Application Form for Concurrent Sessions & Poster Presentations

Enhancing Healthcare Outcomes Through Nursing Research

Name: _____ Title: _____

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Mailing Address: _____

Contact Person: _____

Telephone #: _____

e-mail _____

Fax #: _____

Title of Presentation: _____

Presentation Format: _____ Oral Presentation _____ Poster Presentation

Audio Visual Needs: _____ Overhead Projector _____ Slide Projector

Special Considerations: _____

SUBMIT APPLICATION FORM AND ABSTRACT (SINGLE PAGE) TO:

Deborah McDonald, RN, Ph.D.
School of Nursing U26
University of Connecticut
231 Glenbrook Road
Storrs, CT 06269
e-mail: dmcdonal@uconnvm.uconn.edu
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OR

Janice Bartis, RN, MSN
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Hartford Hospital
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Hartford, CT 06102-5037
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ACKNOWLEDGEMENTS

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Special Thanks to Conference Planning Committee Members:

Janice Bartis, RN, Dawn Beland, RN, Laura Caramanica, RN, Joan MacRae, RN, Peg Moynihan, RN, Amy Schroder, RN, Lynn Satherlie, RN –Hartford Hospital

Ann Cinotti, RN & Terese Donovan, RN – UCONN Health Center

Kathleen Stolzenberger, RN – Middlesex Hospital

Linda Berger Spivack, RN – MidState Medical Center

Barbara Aronson, RN – Capital Community College

Nancy Organek, RN – Central CT State University

Virginia Knowlden, RN – Saint Joseph College

Deborah Dillon-McDonald, RN - University of Connecticut

Karen Breda, RN - University of Hartford

CONTACT HOURS: 5.7 CH for participants attending full day conference.

Hartford Hospital is approved as a provider of nursing continuing education by the Connecticut Nurses' Association. CNA is accredited as an approver of nursing continuing education by the Commission on Accreditation of the American Nurses Credentialing Center.

ENHANCING HEALTHCARE OUTCOMES THROUGH NURSING RESEARCH

Program Schedule

<p>7:30 AM Registration/Coffee & Danish ERC Lobby/ Heublein Hall</p>	<p>9:45 AM D1 ERC 218</p>	<p>Abstract Presentations (cont) Surgical Patients' Pain Descriptions & Short Form McGill Pain Questionnaire Responses Deborah Dillon-McDonald, RN, PhD & Constance Weiskopf, PhD, APRN</p>
<p>8:00 AM Welcome Joan MacRae, RNC, MS Co-Chair, Planning Committee</p>	<p>8:05 AM Opening Remarks/Introduction of Keynote Speaker Laura Caramanica, RN, PhD V.P. Nursing, Hartford Hospital</p>	<p>D2 ERC 218</p> <p>Voices from the Margin: CAN Role in Pain Management of Institutionalized Elders, Dorothy Varholak, RN, EdD & Janice Costello, BS, RN</p>
<p>8:15 AM Keynote Address: "Using Research to Change Practice: Pain Management" April H. Vallerand, RN, PhD ERC Heublein Hall</p>	<p>11:00 AM E1 ERC 221</p>	<p>Concurrent Abstract Presentations A Trip Down RU Lane: Lessons Learned, Janice Bartis, RN, MSN & Amy Schroder, RN, MSN</p>
<p>9:15 AM Coffee Break – Heublein Hall Poster Exhibits – Formal Lounge Book Exhibit - ERC Lobby</p>	<p>F1 ERC 216</p>	<p>Temporal Trends of Risk Factors Associated with LBW: National, State & Local- 1992-1996 Gloria Borders, RNC, MPH</p>
<p>9:45 AM Concurrent Abstract Presentations</p>	<p>G1 H. Hall</p>	<p>Meaning of Pt Education within Planetree Model from Perspective of Patient Rhea Sanford, RN, PhD</p>
<p>A1 Are Symptoms of Acute MI the Same For Men & Women? - ERC 221 Colleen Dewan, RN, MSN, CCRN</p>	<p>H1 ERC 218</p>	<p>Measurement of Asthma Outcomes in Inner-City Puerto Rican Adults: A Tool for Primary Care Lynn Satherlie, RN, MPH, PCC</p>
<p>A2 Diabetic Foot Screening by APRNs: Outcomes in a Community Wellness Center - ERC 221 Catherine Milne, MSN, APRN</p>	<p>11:30 AM</p>	<p>Poster Exhibit Viewing – Formal Lounge</p>
<p>B1 Validation of Quality of Hospice Care in A Nursing Home Setting Using the STAS© Tool - ERC 216 Elizabeth S. Syring, RN, MS, CRNH</p>	<p>11:50 PM</p>	<p>Buffet Luncheon – Heublein Hall</p>
<p>B2 Correlates of Depression in Nursing Home residents - ERC 216 Amy L. Kenefick, RN, PhD</p>	<p>12:45 PM</p>	<p>Plenary Address: "Hospital Restructuring, Pt & Nursing Outcomes: A Research Perspective" Sean Clarke, RN, PhD –Heublein Hall</p>
<p>C1 Predictors of Patient Recovery Following Traumatic Injury - ERC H. Hall Mary Louise Welch, RN, PhD</p>	<p>1:45 PM</p>	<p>Research Awards – Laura Caramanica Poster Awards – Ann Cinotti, RN. MSN</p>
<p>C2 Self-Efficacy in Women Following MI: Effects of Cognitive Interactive Nursing Intervention on Efficacy Enhancement Joanne Roy, RN, PhD - ERC H. Hall</p>		

1:50 PM Concurrent Skill Building Sessions

- A Poster Perfect! ERC 216**
Karyl Burns, RN, PhD
Director, Center for
Nursing Research, UCONN
- B. Applying Research Findings to Practice ERC 221**
Peg Moynihan, RN, MS
Director, Professional Practice
Hartford Hospital
- C. Evidence-based Practice: Implementation & Outcome Evaluation ERC 217**
Rose Maljanian, RN, MBA
Director, Outcomes research
Hartford Hospital
- D. Evaluating Types & Strength Of Research Findings H. Hall**
Deborah Dillon- McDonald, RN, PhD
Associate Professor, School of Nursing
University of Connecticut

**2:55 PM Book Raffle
Conference Wrap-Up / Evaluation
Heublein Hall**

**3:00 PM Issuing of Certificates of Completion
ERC Lobby**

**Poster Presentations: Formal Lounge
9:30 AM and 11:30 AM**

AIDS Related Nausea & Vomiting
E. Anderson, PhD, APRN, Margaret
Spencer, APRN & Stephanie Lennon, RN
University of Connecticut

Second Stage of Labor Management
Janice Bartis, RN, MSN & Amy Schroder,
RN, MSN, Hartford Hospital

**Family Presence in the Resuscitation
Room: Do Families Want to Be There?**
Sheri Blasco, RN, MS Candidate
Saint Joseph College

**Reducing Unnecessary Bloodwork in the
Neurosurgical ICU**
C. D'Angelo, RN, D. Vinci, PAA &
D. Beland, RN, MS, Hartford Hospital

**Phenomenological Study of Stem Cell
Transplantation for Acute Leukemia**
Ellen Pond Levine, RN, BS, Master's
Candidate, Saint Joseph College

Adolescence Self-Awareness
Sandra Palmer, RNC, Master's
Candidate, Saint Joseph College

Chest Pain Study
T. Sorvino, RNC, BSN & Denise
MacGregor, RN, BS, Middlesex Hospital

**Is There "Best Practice" Evidence Re
Oral Care for Intubated ICU Patients?**
Barbara Stone, RNC & Debra Benson,
RN, Middlesex Hospital

**Comparison of Effectiveness of Mid-
clavicular to SVC Placement of PICC
Catheters in an Adult Population**
Donna Woshinsky, MSN, CRNI
Assistant Professor, Springfield Tech College

KEYNOTE ADDRESS

Using Research to Change Practice in Pain Management

April Hazard Vallerand, PhD, RN
Wayne State University
College of Nursing
Detroit, Michigan

The Impact of Nursing Research on Pain Management

Foundations: Nursing research had a major impact on pain management prior to 1990

Programs of Research in the 1990's: Numerous nursing researchers are actively conducting research that continues to direct pain management practices

Nursing Contributions through Pain Research Prior to 1991

- Pain as a component of oncology nursing
- Pain assessment
- Nursing knowledge and attitudes regarding pain
- Pharmacologic interventions for pain
- Nursing models of pain intervention

(Ferrell, Rhiner, & Grant. 1991)

Pain as a Component of Oncology Nursing

- Pain as a priority for nursing care.
Patient as the expert in pain (McCaffery)
- Independent assessment &
interventions for pain (Jacox)
- Development of Symptom Distress
Scale (McCorkle)

Pain Assessment

- Pain in children (Hester; Eland)
- Cognitive, behavioral, & physiologic
responses to pain (Dalton)
- Pain in cancer patients (McGuire)
- Pain expression (Wilkie)
- Pain in the elderly (Ferrell)
- Correlations between patient &
professional assessment (Sheidler)

Nursing Knowledge and Attitudes Regarding Pain

- Nurses' perception of their pain
management skills (Dalton)
- Nursing faculty knowledge (Ferrell)
- Nurses' knowledge of opioids &
addiction (McCaffery)
- Nurses' ability to recognize safe
analgesic orders (Sheidler)
- Nursing students' knowledge of
assessment & opioids (Watt-Watson)

Pharmacologic Interventions for Pain

- Patterns of opioid use in terminal cancer patients (Coyle)
- IV methadone vs. morphine (Sheidler)
- Intrathecal morphine & implantable pumps for intractable pain (Paice)
- Non-drug interventions (Ferrell)
- ATC vs PRN dosing (McGuire)

Nursing Models of Pain Intervention

- Family needs with home PCA use (Rhiner)
- Pain management as a QA outcome (Ferrell)
- Cost comparisons of oral, parenteral, & intraspinal opioids (Williams)
- Ethical issues & clinical decisions by nurses, patients, & caregivers (Ferrell)

Programs of Nursing Research in the 1990's

Ward

- Research Program - Patient-related barriers to management of cancer pain
- Assessed patients' reluctance to report pain and use analgesics
- Developed Barriers Questionnaire
- Findings - Patients who were using less than adequate medication for pain reported more barriers

Ferrell

- Research Program - Pain and quality of life in patients with cancer
- Short acting vs. controlled-release morphine for cancer pain
- Assessed QOL, pain, functional status
- Findings - Improved pain management with controlled-release morphine

Miaskowski

- Research Program - Gender differences in analgesic responses
- Kappa vs mu opioids for acute pain
- Findings
 - No gender differences with mu opioid (morphine)
 - ↑ analgesic efficacy with kappa opioids (pentazocine) in women

McCaffery & Ferrell

- Research Program - Factors influencing nursing assessment of pain
- Explored
 - patient behaviors
 - age
 - vital signs
 - gender
- Findings - pain assessment education for nurses urgently needed

McCorkle

- Research Program - The impact of home care on patients with cancer
- Assessed symptom distress, mental health status, social dependency, and health perception
- Findings - Improved mental status and social dependency in patients receiving home care by advanced practice nurses

Grant

- Research Program - Unscheduled readmissions for uncontrolled symptoms
- Compared the cost of uncontrolled pain prior to & following an institutional commitment to pain improvement
- Cost savings = \$2,719,245/year
- Justified pain management resources and strategies

Jacox

- Research Program - Development of pain guidelines
- Co-chaired AHCPR acute & cancer pain panels to develop clinical practice guidelines
- APS guideline development grant
 - sickle cell pain guidelines
 - revised cancer pain guidelines
 - rheumatoid & osteoarthritis pain guidelines

Collaboration

- **Researchers** - have the research expertise
- **Clinicians** - have the clinical expertise and clinical questions
- Collaboration enhances research experience and outcomes

Developing a Program of Research

Thesis or Comps?

- *Differences in test performance and learner satisfaction among nurses with varying autonomy levels*
- Vallerand, A.H. (1988). Differences in test performance and learner satisfaction among nurses with varying autonomy levels. Journal of Continuing Education in Nursing, 19(5), 216-222.

"Program of Research"

- Start with a topic
- Make sure it's a topic you're **passionate** about
- Begin to formulate a question

Doctoral Study

- Predoctoral NRSA
 - Functional Status in Chronic Facial Pain
 - Functional Status in Chronic Pain
- Preliminary Studies
 - *The Development and Initial Validity of the Inventory of Functional Status - Chronic Pain (IFS-CP)*

Dissertation

- *The Development and Psychometric Testing of an Instrument to Measure the Functional Status of Women with Chronic Pain*
- Vallerand, A.H. (1998). Development and testing of the Inventory of Functional Status - Chronic Pain. Journal of Pain and Symptom Management, 15(6), 125-139.

Postdoctoral Study

- T32 - Psychosocial Oncology
 - Cancer
 - HIV
- Oncology Nursing Society's Research Short Course
 - *The Relationship of Pain to Functional Status and Quality of Life in Women with HIV/AIDS*

Quantitative to Qualitative Methodology

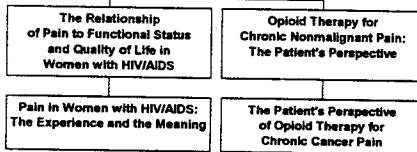
- Differences in women
 - chronic pain clinic population
 - HIV clinic population
- **The research question directs the methodology**
- *Pain in Women with HIV/AIDS: The Experience and the Meaning*

Clinical Questions Influence Research

- Pharmacologic management of pain
- The use of opioids to manage chronic nonmalignant pain
- *Opioid Therapy for Chronic Nonmalignant Pain: The Patient's Perspective*

The Development of a Program of Research

The Development & Psychometric Testing
of an Instrument to Measure
Functional Status in
Women with Chronic Pain



Finding a Framework

- Common theme
- Focus or underlying purpose
- **The maintenance and improvement of functional status in patients with chronic pain**

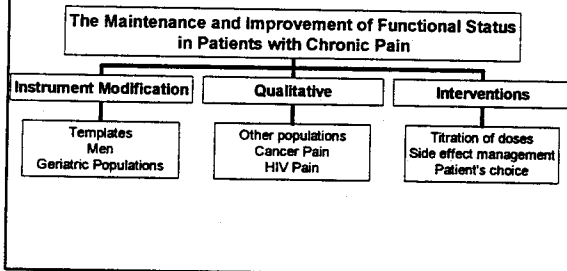
Identifying the Question

- Clinical practice
- Literature
- Research setting
- *Improving Symptom Management in Home Care Patients with Cancer Pain*
↓
- *Improving Cancer Pain Management in the Home*

Future Questions

- *Self Management of Pain in the Community*
- *The Effects of Patient's Choice of Treatment Modalities in the Management of Chronic Pain*

Future Directions



Requirements to Affect Change

Nurses must be:

- Expert in the content area
- Able to communicate expertise to:
 - physicians
 - pharmacists
 - patients
 - caregivers

Current Study

- Improving Cancer Pain Management in the Home
- Funded by the National Cancer Institute (K22)
- Controlled clinical trial
- 2-tiered educational intervention
- Mixed methodology

Hypotheses

- Nurses, patients, and caregivers receiving the intervention will report greater perceived control over patients' pain, greater knowledge & more positive attitude about pain management, and will have fewer perceived barriers to pain management
- Combined effects > additive of nurses + patient/caregiver

Specific Aims

- Test hypotheses
- Determine effectiveness of intervention
- Identify sociodemographic and health variables that moderate intervention effects
- Examine the relationships among nurse, patient, and caregiver outcomes

Improving Cancer Pain Management in the Home

- Sample
 - Home care nurses caring for patients with cancer pain
 - Patients with cancer pain
 - Caregivers of patients with cancer pain
- Longitudinal
 - Nurses - weeks 1 & 4; months 3 & 6
 - Patients - weekly x 4 weeks
 - Caregivers - weeks 5 & 8

Power Over Pain (POP)

- Intervention
 - Nurses
 - Basic pain management & communication skills
 - Advanced pain management & assertiveness skills
 - Patients & Caregivers
 - Pain management & communication

The Research Team

- Principal investigator - PhD prepared
- Project director - Doctoral student
- Research assistants
 - doctoral students
 - MSN oncology nurse
 - masters students
- Work study students
 - BSN students

Research is Everyone's Job

- Ask the clinical questions
- Collaborate with researchers
- Maintain knowledge of current literature
- Share findings with colleagues
- Utilize research findings to change practice

**CONCURRENT
ABSTRACT
PRESENTATIONS**

ARE SYMPTOMS OF ACUTE MYOCARDIAL INFARCTION THE SAME FOR MEN AND WOMEN?

Colleen R. Dewan, RN, MSN, CCRN
Clinical Administrator
Danbury Hospital

ABSTRACT

The purpose of this study was to determine the presenting symptoms of women experiencing an acute myocardial infarction (AMI) as well as delay times in relation to symptoms. The target population for this study consisted of females discharged from a community hospital in Connecticut with a diagnosis of AMI. A retrospective sample for female patients with the most recent 1-year period was evaluated, which totaled 119 charts. Every other chart was reviewed for a random sample of 59 female patients. An investigator-designed tool was used to collect data regarding admission symptomatology from the physician's history and physical and admission note, as well as use of hormone replacement therapy, comorbid conditions (e.g. diabetes, hypertension), and subsequent therapy (e.g. thrombolytic therapy, diagnostics, and coronary artery bypass).

The mean age of the group was 74 years. Approximately 80% of the group were from ages 60-90. Thirty-five women (59%) had hypertension as the most prominent pre-condition; both typical and atypical groups were similar.

Data were analyzed through descriptive statistics, including a chi-square test for independence to see if there was a correlation between experience of typical or atypical symptoms of AMI and delay time in seeking medical treatment. Subjects were separated into two groups: typical or atypical based on the definition of characteristics of typical and atypical angina pectoris in the Coronary Artery Surgery Study, CASS, (1994). There was no significant difference between the two groups. Thirty women (51%) reported typical symptoms with substernal chest pain or pressure being primary complaint. Twenty-nine (49%) reported experiencing atypical symptoms. These symptoms did not include any of the typical presentation. However, when the data were examined more closely, of those 30 women who reported typical symptoms, 100% reported some additional atypical symptoms. All 59 women complained of associated atypical symptoms. The most common atypical complaint was shortness of breath, which was noted in 32 women (54%).

Chi-square analysis revealed no association between time delay and having either typical or atypical symptoms. There was no information written regarding the time of onset of symptoms and the women's arrival to the hospital in 29% of the sample. Of the 42 women, with adequate information documented, 27 women (46%) delayed for more than four hours. In the atypical group, 48% arrived at the hospital greater than 4 hours from the time of onset of symptoms.

In conclusion, the symptoms women experience during an AMI are a combination of typical and atypical symptoms, and women, especially those with an increased risk (e.g. hypertension), need to be educated to pay particular attention to the development of chest pain, and/or shortness of breath and to be prompt in seeking medical treatment.

Title: Diabetic Foot Screening by Advanced Practice Nurses: Outcome in a Community Wellness Center

Problem: Amputation in diabetics increased in the last decade despite the U.S. Public Health Service Healthy People 2000 goal. ¹

Research Question: Can a screening and education program, with interventions based on the theory of self-efficacy and administered by APNs, impact outcome for community dwelling diabetics.

Summary: Two Advanced Practice Nurses, using the self-efficacy model, developed A diabetic foot-screening program at a hospital affiliated wellness center. During a 12-month pilot program, participants (N=161) were screened using American Diabetes Association recommendations² for loss of vascular, vibratory, motor and sensory integrity. Education regarding foot care and footwear was emphasized. Screening results were sent to primary care physician (78%), endocrinologist (26%) and/or podiatrist (32%). On initial assessment, 97.5% (n=157) had no prior testing for sensory or vibratory integrity and 48% (n=77) lived outside of the service area. Total cost of the program was approximately \$4000.00. Details of program implementation and additional recent data will be provided.

Analysis: Participants were stratified as low (n=100) or high risk (n=61) and return Schedule was designated by mail reminder system. Immediate referrals for acute ulceration (n=5) resulted in no amputation. 63% (n=101) were adherent to return schedule; 72% (n=72) demonstrated new self-care skills on return evaluation. Physician response to program was positive.

Conclusion: An APN developed foot screening program is a cost-effective method to Provide self-efficacy for diabetic patients and their physicians. A significant number of patients from areas not traditionally served by the center coupled with the lack of adherence to clinical practice standards in PCP offices indicates that this program increases opportunities to enhance self-efficacy and patient outcomes.

References

1. Department of Health and Human Services. Healthy People 2000, *National Promotion and Disease Prevention Objectives*. OHHS Publication Number 91-50212, 1997.
2. American Diabetes Association. Position statement: Foot care in patients with diabetes mellitus. *Diabetes Care*. 1995;18(suppl 1): S26-S27.

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Validation of the Quality of Hospice Care in the Nursing Home Setting Utilizing the STAS© Tool

Abstract

This prospective correlational study tested the Support Team Assessment Schedule (STAS©) to seek an internal clinical audit tool for community hospice programs that quantifies the care they provide to hospice patients who reside in skilled nursing facilities (SNF). Two community hospice programs that care for patients in 12 nursing homes were chosen and the tool was administered to 27 sets of hospice patient/family, hospice RN and SNF nurse. The STAS instrument focused on measuring the hospice teams' perceptions of the patients and families' levels of comfort and coping. Validation of the teams' STAS testing was performed by simultaneous testing of the patients, families, the hospice team and the nursing staff of the nursing homes. The STAS tool demonstrated moderate statistical correlation with the patient's perception of pain management and the SNF nurse, as well as moderate correlation between the hospice team and the SNF nurse's pain management perceptions. When considering the sum of the key domains (pain and symptom management, patient and family anxiety, communication between healthcare professionals and patient, communication among healthcare professionals and spiritual needs), moderate correlation was demonstrated between the SNF nurse and the patient and family. No STAS statistical correlation was found between the hospice team scores and the patients and families. The SNF nurses demonstrated greater correlation in assessing the perceptions of the hospice patients than the hospice team. The audit identified areas of education and collaboration needed to improve hospice care to the SNF population.

Elizabeth Sullivan Syring R.N., M.S., C.R.N.H.

Correlates of Depression in Nursing Home Residents

Amy Laufer Kenefick, PhD, RN
Assistant Professor
University of Connecticut

ABSTRACT

The purpose of this study was to explore a model of depression that includes age, gender, cognition, communication, functional status and pain. The conceptual model was derived from the review of literature and previously conducted pilot studies. A descriptive, correlational design was used. The instrument was the Minimum Data Set for Nursing Home Resident Assessment and Care Planning (MDS 2.0). The sample size was determined by power analysis on pilot studies. It included 111 predominantly female nursing home residents from Western Massachusetts. Most of the subjects were impaired in cognition, communication, and/or function. Many experienced moderate to severe depression, and/or moderate to severe pain.

Relationships between depression and the independent variables of age, cognition, communication, functional status, and pain are described. Significant models, which explain variation in depression, are identified. Findings demonstrate that depression in nursing home residents is associated with pain and cognitive impairment. Cognitive impairment and pain are strong predictors of depression, especially in those subjects who have cognitive or communication impairments. While depression does not correlate with functional status, it is associated with increased dependency among those who are the least functionally impaired. Models of depression in nursing home residents differ depending upon the type and severity of their impairments. Pain is an important factor in predicting depression among subjects with impaired communication. No significant associations between depression and either age or gender are identified.

Findings suggest that depression, pain, and cognitive impairment form an inter-related complex. Although this research does not establish causality, it is likely that adequate treatment of pain may be associated with decrease in symptoms of depression and cognitive impairment. Additionally, appropriate treatment of depression might be able to decrease the dependency of nursing home residents who are the least functionally impaired.

Predictors of Patient Recovery Following Traumatic Injury

Marylouise Welch, RN, PhD
Associate Professor
Saint Joseph College

ABSTRACT

Injury is the principal public health problem in America today. Because injuries from trauma create significant psychological, economic, and physical problems, it is important to identify and describe those events and processes that hinder and enhance recovery. Many trauma outcome studies have been restricted to survival and mortality rates and positive recovery has been defined by return to work. There have been few studies which evaluate the rate of recovery as defined by the informant and that have identified which variables significantly predict recovery.

The purpose of this prospective study was to describe the outcomes of trauma patients as described by the patients themselves and to identify which variables correlate with recovery.

The 41 informants who completed this study were asked to complete the Modified Barthel Index which assesses functional ability, the Impact of Events Scale which assesses psychological adaptation, and the Health Survey SF12 which assesses physical and mental health at six months post injury.

The data was analyzed with Pearson Moment Correlation and a stepwise regression. There was significant correlation between recovery and the Modified Barthel Index, the Impact of Events Scale, and the SF12 composite Health Survey. A stepwise regression was significant for the Modified Barthel Index and the Impact of Events Scale (PTSD). 58% of the variance was explained in the self-reported rate of recovery by the Modified Barthel Index and the Impact of Events Scale.

Is There "Best Practice" Evidence Regarding Oral Care for Intubated Patients?

A Research Utilization Project by Critical Care Staff Nurses

Barbara Stone, RN, CCRN
Debra Benson, RN

May 2000

It is a principle of critical care nursing to routinely provide oral care for intubated patients in order to improve comfort and reduce the risk of oral infection. There is research to support the fact that plaque accumulation from inadequate oral care creates an ideal medium for growth of microorganisms known to cause nosocomial infections. Critically ill patients who are intubated are especially at risk. However, there is wide variation in nursing practice regarding their oral care. This paper describes the experience of two critical care nurses who questioned "best practice" regarding oral care for this vulnerable population. Their research utilization project involved critique of eight primary source articles based on the Iowa Model for reviewing research literature. The staff nurse researchers draw conclusions about both the process and the outcomes of their investigation. Based on the problems they encountered as staff nurses in surveying and critiquing the literature, they offer concrete recommendations to guide other staff nurses embarking on similar research projects. Outcomes of their research proved inconclusive. They report lack of confidence in the comprehensiveness of the literature review. The researchers trace this to problems with the research question that was not clear and specific enough to efficiently direct their search. The paper concludes with plans to conduct a more focused review. This is necessary in order to validate their tentative conclusion that, currently, there is no valid "best practice" evidence regarding oral care of intubated patients.

Abstract

Valuable and extensive research into the recovery management of myocardial infarction patients has been conducted over the past 25 years. Innovative approaches to rehabilitation have been directed at enhancing patient function across the physiological, psychological, sociological, educational and vocational aspects of recovery. Planned outcomes within these innovative programs, however, have been generated from research on the recovery experiences of predominately middle-aged male patients. As a result, the unique recovery experiences and needs of women following myocardial infarction are not addressed in an effective and consistent manner.

One successful approach to improved rehabilitation postinfarction has been documented in recent research that utilizes Bandura's (1986) theory of self-efficacy as a framework. It upholds the premises that strategies may be employed to effectively help individuals mobilize cognitive resources that can increase one's level of confidence resulting in improved recovery outcomes. It is being proposed that the confidence of female patients may be enhanced if suggested lifestyle changes were to reflect the specific challenges of women postinfarction. A complementary interaction dimension is being proposed to enhance the notions set forth by the cognitively-processed interventions. A Nursing Model of Efficacy and Interaction, an integration of Bandura's Self-efficacy Theory and Symbolic Interaction provides the framework through which the following hypotheses were tested:

1. Women exposed to a cognitive model of intervention and those exposed to a cognitive-interactive model of intervention will have higher self-efficacy scores following treatment than women exposed to routine treatment, when pretreatment measures of self-efficacy are statistically controlled
2. Women exposed to a cognitive-interactive model of intervention will have higher self-efficacy scores following treatment than women in a cognitive model of intervention, when pretreatment measures of self-efficacy are statistically controlled.

A three group pretest-posttest control group design was used to test the hypothesis. Fifty-three women who experienced myocardial infarction agreed to participate in the study and were prerandomly assigned to one to the three treatment groups. Pre- and posttest measures were obtained from an instrument scale entitled Lifestyle Management Post-myocardial Infarction: A Self-efficacy Scale Packet for Women (LSM-PMI).

Results of Analysis of Covariance (ANCOVA) revealed that there were no statistically significant differences on efficacy scores among women exposed to the three models of intervention. Additionally, there were no statistically significant differences on efficacy scores of women exposed to the cognitive and routine protocols, or between women exposed to the cognitive and cognitive-interactive treatment protocols. However, women who were exposed to the cognitive-interactive model of intervention scored significantly higher on the posttreatment LSM-PMI than women who were exposed to routine treatment.

Surgical Patients' Pain Descriptions and Short Form McGill Pain Questionnaire Responses

Purpose: Clear pain descriptions by patients may foster more specific pain management efforts to reduce pain. Current acute pain assessment consists primarily of pain intensity. Pain descriptions by patients that also include sensory and affective components of pain might encourage more specific pain interventions. The purpose of this study was to examine the validity of the Short Form McGill Pain Questionnaire (SF-MPQ) by comparing spontaneous pain descriptions by postoperative patients to their subsequent responses to the SF-MPQ.

Aim: To test the validity of the sensory and affective scales of the SF-MPQ for adult postoperative patients.

Framework: Communication Accommodation Theory (CAT) addresses motivations and behaviors of people as they adjust their communication in response to others. Effective use of pain description language by patients when describing pain may enhance pain management.

Method: This instrumentation study was part of a survey study that examined how postoperative adults communicate their pain to their health care providers. The sample consisted of a purposive sample (n=30) of 10 African American, 10 Caucasian, and 10 Latinos, with blocking for gender. Participants were audiotape interviewed in their homes, usually within one week of their hospital discharge. During the interview they were asked to describe any physical pain that they had during their recent hospital stay. The SF-MPQ was administered immediately after the interview to measure their average postoperative pain while in the hospital. Transcripts from the interviews were checked for accuracy, and the pain descriptions were content analyzed by four raters.

Coding disagreements were resolved through discussion. Pain descriptions that emerged from the interviews were then compared to individual pain descriptions when responding to the SF-MPQ. The frequency for both actual SF-MPQ words and synonyms were calculated. Sensory and affective scores were compared to results from four previous studies using the SF-MPQ.

Results & Conclusions: Eighteen (60%) adults used either exact SF-MPQ sensory or affective words or synonyms to describe their postoperative pain. Thirteen (43.3%) used either exact sensory words from the SF-MPQ (n=7(23.3%)) or sensory synonyms (n=6(20.0%)). Sore was the most frequent synonym (n=4). No one used exact SF-MPQ affective pain descriptors, but 8 (26.7%) used affective synonyms, such as excruciating. Three adults used combinations of affective and sensory SF-MPQ words/synonyms. Mean scores for the sensory and affective SF-MPQ scales were 11.0 (SD=6.5) and 3.6 (SD=2.9), respectively, compared to previous studies of American postoperative patients, 11.7 (SD=7.2), and 3.7 (SD=3.5); French postoperative patients, 11.5 (SD=7.7) and 3.9 (SD=3.0); musculoskeletal injured patients, 11.1 (SD=8.7) and 4.6 (SD=3.7); and patients with labor pain, 13.4 (SD=7.8) and 3.9 (SD=3.9), respectively.

Implications: The majority of the postoperative patients spontaneously described their pain using exact words or synonyms from the SF-MPQ. The sensory and affective scale scores compared similarly to previous studies. The slightly lower scores and smaller standard deviation for the current postoperative patients may reflect improvements in pain management in the greater than 10 years between these studies. Together these results provide further evidence for the validity of the sensory and affective scales of the SF-MPQ when used with postoperative adults. Pain descriptions by patients that go beyond pain intensity descriptions may communicate more precise information about the pain, and lead to more effective pain interventions. Patients with difficulty describing their pain might be assisted by using the SF-MPQ.

Voices From The Margin:

The Certified Nurse's Aide Role in the Pain Management of Institutionalized Elders

Jean Wright, MSN
University of Hartford

By
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University of Hartford

Janice Costello, BS, RN
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Abstract

The purpose of the study was to discover dominant processes and themes of the CNA role regarding pain management of elder residents in an extended care facility. The objectives were to explore the personal thoughts, feelings, attitudes, interpretive capabilities and concerns of Certified Nurses Aides regarding their role in pain management and issues of the pain experience among their elderly patients.

A qualitative study design utilizing focus group discussion technique was used to obtain reality based, lived experience data from a convenience group of Nurse's Aides.

The study sample consisted of twenty-two volunteer nurse's aides employed at a large, multi-level extended care facility in Connecticut. These were divided into five small groups of from four to eight members. The median age was forty-six, and the average length of experience was thirteen years. All participants were currently certified in Connecticut.

Six general questions were asked of the participants: How do you know when patients have pain? What tells you when they are not in pain? What do you do when you recognize your patient is in pain? What are some of the things you do to ease pain? What do you do to make pain worse? What do you need to know to provide the best care for patients in pain? Quantitative demographic information was requested of each participant to assess naturally occurring randomization. This included age, length and type of service and training program. Four CNA participant co-facilitators were trained to conduct subsequent groups. This assisted subject comfort during discussions, reduced researcher interaction with subjects and allowed observation of the receptivity of participants to training in an advanced concept. Subjects were encouraged to voice opinions, thoughts and feelings openly while responses were tape-recorded. To ensure anonymity a non-contact secretary converted tapes into typed transcripts for researcher review and interactive researchers were not involved with subjects in any daily work capacity.

Study results revealed a pro-active, patient advocate worker group. They possessed excellent pain reporting and pain identification skills. Both accuracy and immediacy did not appear diminished, even when patients were severely demented or largely non-verbal. In addition Aide observations precisely followed American Pain Society and US Healthcare clinician guidelines in content and scope. This was considered important since diminished pain self-reports in confused patients represents a source of deficit pain management in elderly populations. CNA co-facilitators learned facilitation techniques with one instruction and were highly successful functioning in this capacity throughout the conduct of the study. The desire of this group to be recognized as a meaningful voice in the healthcare delivery system at their facility was significant, strong and clear. Implications of the study supported further role development studies with this staff in interdisciplinary approaches to developing pain management programs.

**Hartford Hospital
Women's Health Services Research Utilization Group
Urine Dipstick RU Project**

A Trip Down RU Lane: Lessons Learned

Introduction The Women's Health Services (WHS) RU Group would like to offer a breakout session which will provide an overview of the RU process, and use as an example a RU project carried out by our RU group in 1998. We believe that sharing our experience with this project will help to illuminate the Research Utilization Process for students, clinical nurses and novice nurse researchers. The end result of our project was that there was not a sufficient research base to justify a practice change. However, we learned a tremendous amount along the road to this discovery.

WHS RU Group membership includes staff RN's, PCC's, Managers, and Educators. The group's mission is to create an environment that values, encourages and supports nursing research and research utilization in Women's Health Services.

The WHS RU Group has four main objectives. They are to stimulate an interest in research and RU, foster questioning of current practice/rituals at the nursing unit level, provide education for staff nurses to understand the research process, develop nurses' skills in critiquing research literature and to assist with the application of findings to clinical practice.

Purpose of Current Project: To determine the value of dipstick urinalysis as a routine screening in asymptomatic, low-risk pregnant women, for predicting the subsequent development of pre-eclampsia, preterm labor, urinary tract infection, gestational diabetes and complications related to poor maternal nutrition.

Description of Practice Problem: As a group, we questioned the value of urine dipsticks as a routine, universal screening in the prenatal period. Universal screening involves:

1. Significant cost (annual cost of dipsticks themselves in WAHS approaches \$6,000.00).
2. Significant nursing and multi-skilled worker time (annual human resource cost for testing and quality checks in WAHS approaches \$10,000.00).
3. Increased staff exposure to body fluids (11,700 samples tested annually).
4. Decreased patient satisfaction related to providing samples at each visit.
5. Increased patient exposure to overtreatment with antibiotics for asymptomatic bacteremia.

Review of Literature: A thorough review of the literature was conducted. This involved mentoring of group members on the research process and critique methods. A consistent critique tool was used throughout the literature review. A summary of all studies reviewed was compiled in a grid format. This allowed the group to look across studies to determine relevance and evaluate scientific merit (reliability, validity and generalizability).

Evaluating Research for Use in Practice: In the next phase of the project, we attempted to determine both the risks and benefits associated with implementing a practice change. Since this particular clinical practice was not governed by public policy or an existing standard, we benchmarked practice at other hospitals. We surveyed comparable institutions within Hartford, Connecticut, the Northeast as well other geographic areas (midwest, southeast, southwest). Benchmarking efforts revealed that only one institution had eliminated the urine dipstick practice as a routine screening test.

Decision Point: Is There Sufficient Research Base to Support Practice Change:

Based on the review of literature, assessment of risk and benchmarking results, our group determined that there was an insufficient research base to support a practice change eliminating urine dipsticks.

Next Step: Conducting a Study?

Our group consulted Maternal Fetal Medicine, the MD Clinic Director and the Outcomes Measurement expert at our institution. We began work on the development of a data collection tool. At this point in the process, we were faced with significant physician resistance regarding this practice change. Given this resistance and the resources which would be required to complete the study (cost, time), the group met to determine our next step. When we returned to our original mission statement and goals, we realized that conducting a research study would not provide adequate education and involvement of staff nurses, as our group had hoped. Therefore, we elected to move on to another project, more within the boundary of nursing practice.

What If There Had Been Sufficient Research to Support Practice?

Had there been sufficient evidence to change practice, we would have moved forward in the following manner:

1. Define patient outcomes and obtain baseline measurement (incidence of eclampsia, morbidity and mortality of mothers and neonates).
2. Develop practice change protocol.
3. Provide necessary education or training.
4. Implement practice change protocol (involve multidisciplinary team members).
5. Evaluate practice by monitoring outcomes. Modify practice protocol as needed.

Lessons Learned:

1. Select practice issues within nursing practice boundary.
2. Involve multidisciplinary members from onset.
3. Be mindful of overall goals of your group.

**TEMPORAL TRENDS OF RISK FACTORS ASSOCIATED WITH LOW
BIRTH WEIGHT-NATIONAL, STATE AND LOCAL: 1992-1996**

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ABSTRACT

Objective: To describe the magnitude of the problem of low birthweight in the US and the state of Connecticut. To describe the temporal trends of selected risk factors associated with LBW at the national, state and local (tertiary NICU in CT) levels from 1992-96.

Methods: Retrospective, descriptive study utilizing birth certificate data from National Center for health Statistics (national, n=19,809,104); Annual Registration Reports for the State of Connecticut (state, n=228,870); NIS2 computerized database (local NICU, n=2175). Trends were determined from regression plots and p value<0.05 was considered significant.

Results: The birth rate decreased from 15.9% to 14.7% ($R^2=0.9727$; $p=0.0019$) at the national level and from 14.5% to 13.6% ($R^2=0.9474$; $p=0.0052$) at the state level. However, percent low birthweight increased from 7.1% to 7.4% ($R^2=0.9423$; $p=0.006$) at the national level and from 6.9% to 7.3% ($R^2=0.7812$; $p=0.0467$) at the state level. Significant changes in the risk factors at the national level were a decrease in percentage of black women giving birth ($R^2=0.9475$; $p=0.0052$), an increase in births to mothers ≥ 35 years ($R^2=0.9997$; $p\leq 0.0001$) and an increase in multiple births ($R^2=0.9576$; $p=0.0038$). Significant changes at the state level were an increase in births to unmarried women ($R^2=0.9453$; $p=0.0055$) and an increase in births to women ≥ 35 years ($R^2=0.9985$; $p\leq 0.0001$). Over the study period, there were no significant changes in the local high-risk population.

Conclusion: The emerging trends in the nation and the state of Connecticut are that more women are giving birth at an older age (≥ 35 yr) and more multiples are being born who are smaller but not necessarily preterm. There has been no significant impact of this on the demographics of our tertiary care referral NICU. The impact of these trends may however be significant for health planning and proper allocation of health care resources.

The Meaning of Patient Education within the Planetree Model, from the Perspective of the Patient

**Rhea C. Sanford, RN, PhD, CS
Director of case Management
John Dempsey Hospital**

ABSTRACT

The health care service industry has implemented significant changes in the delivery of care over the last decade. One outcome of these changes is more rapid movement of patients through the acute phases of care. How and when do patients acquire the education and skills they need to understand their acute health care situation and to effectively engage in acute care decisions?

The Planetree Model assumes that education is a cornerstone of patient care. This phenomenological study elicited a description of the meaning of education from patients who were hospitalized at a Planetree facility. Thirteen participants met the following criteria: 18 years of age or older; hospitalized for an acute, medical-surgical admission; and able to articulate the experience of education during their acute care stay. Purposeful sampling continued until data saturation was evident.

Data were collected through interviews, which were conducted 14 to 21 days after the participant's hospital discharge. Participants were asked to: "Please describe your experience with education or teaching during your hospital stay." Audiotapes of the interviews were transcribed verbatim and data were analyzed using Colaizzi's method.

Seven themes were derived from participant data. First, participants tried to sort out on their own what was happening. Participants then worked with care providers to determine a cause for the illness and an understanding of what happened. Understanding was facilitated by providers describing the care provided as they provided it, while also attending to the uniqueness of each participant. Participants relied on the expertise of providers; they also trusted themselves and their knowledge of their own bodies. Participants then dealt with the consequence of knowledge and their responsibility for care decisions and their future health. When the illness resolved, participants framed the experience within the context of their lives and focused on moving on.

This study adds to the body of knowledge about Planetree, and to nursing's knowledge about the meaning of patient education during an acute hospitalization. Findings lend direction to how nursing defines patient education, how nursing prepares nurses in patient education, and how nursing identifies research and practice opportunities in patient education.

Measurement Of Asthma Outcomes In Inner-City Puerto Rican Adults : A Tool For Primary Care

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Hartford Hospital, Hartford, CT.

Submitted for paper presentation

Introduction: Outpatient asthma management in a primarily inner-city Puerto Rican population is an enormous challenge. High re-admission rates and frequent emergency department (ED) visits pose a dilemma in the provision of care to this population and present a fiscal challenge in an era of capitated medicaid payments. The medical care in Hartford Hospital's four ambulatory clinics is provided by rotating medical residents (MD) and staff nurse practitioners (NP), and there is notable variability in both their therapeutic and educational approach to asthma. Continuity of care and consistency in following the established National Institutes of Health (NIH) guidelines for asthma is lacking. Although Hartford Hospital has a successful Asthma Control and Education Program (ACE) which was developed by Hartford Health officials and local providers, only 35% of the 813 patients referred to this program have elected to participate.

Objectives: In an effort to improve patient outcomes and care across the continuum, a one-page asthma tool, incorporating asthma practice guidelines, was developed. The tool was designed to assure standardization of care within, and throughout the four clinics, incorporate NIH guidelines, prompt the health care provider at each visit in assessment and treatment decisions, minimize health care costs, and collect data so that asthma outcome measures can be obtained and evaluated.

Process: A previously developed asthma critical pathway served as a springboard for this effort. A literature search was carried out with the help of the medical library coordinator and all pertinent medical and nursing articles were reviewed. Personal conversations and visits with successful national asthma experts also helped to determine what prompts were to be included in the practice guidelines. This extensive review revealed a wide variability in education programs for adults with asthma suggesting a lack of consensus on what works and what does not. Although it was identified that physicians vary markedly in their approaches to providing asthma education and care to their patients, there appears to be a lack of strategies or models to address this issue. No tool or pathway was uncovered in the literature search to address integrating the NIH asthma guidelines into direct patient care, although this lack of integration was identified as a problem. An additional gap in the asthma research base is the lack of quality studies specific to inner city, Puerto Rican women. More studies are needed to identify the most effective asthma management model for providing good patient outcomes. Critical elements of asthma management and, later, logistics of implementation were discussed in collaboration with medical, nursing and ancillary ambulatory care staff. This proactive approach was taken to address the concerns of staff who may be resistant to change and to make appropriate modifications. Extensive work with Hartford Hospital's Outcomes Measurement Team (OMT) helped clarify the salient outcomes/research questions and facilitated designing and formatting the tool for easy usability. A two part, carbonless form was chosen to provide one copy for data scanning and the other to remain a part of the medical record. An accompanying laminated guide, designed for the provider's reference during patient visits, includes a summary of the most recent NIH guidelines, pertinent aspects of the asthma assessment, common allergens/irritants, psychosocial considerations, topics to be included in asthma education and zone ranges. An inservice on the use of the tool was given by the appropriate medical attendings and nursing leaders to their respective staffs. The tool is currently being completed at each patient visit by the MD/NP and nurse, collected by the secretary and then sent to the OMT to be analyzed. Quarterly reports are being provided to the directors of the respective clinics to assist in the evaluation of current asthma practice and to guide future educational efforts to assure standardization of care. After 6 months of using this tool, feedback was obtained from the various providers in regards to the ease, usefulness and appropriateness of this tool.

Evaluation: An outcomes measurement project is underway to include the following: changes in asthma severity from baseline to follow-up; comparison of re-admissions and ED visits from 6 months prior to initial visit to follow-up; changes in smoking behaviors from baseline to follow-up; changes in medication prescribed based on severity rating; differences between MD and NP patient outcomes; and changes in a self-reported, general health status question. Preliminary data has been collected. As a result of the provider feedback, however, this tool is currently being revised to reflect a less time consuming form and will most likely measure slightly different outcomes.

AIDS Related Nausea and Vomiting

Problem Statement: Persons with AIDS commonly experience nausea and vomiting associated with pharmacological agents, disease progression, and opportunistic diseases. Protracted nausea and vomiting can debilitate people who are already physically and psychologically compromised. In addition, nausea/vomiting can lead to skipped doses of medication with resultant incomplete viral suppression and potential development of mutant viral strains (Bartlett, 1999). Likewise, the distress associated with nausea/vomiting can reduce treatment options and impact quality of life in persons with AIDS (Capili & Anastasi, 1998). In particular, no one has studied whether patients' cognitive representations of AIDS or nausea/vomiting influence their choice to adhere to medication regimens.

Question/Hypothesis: In AIDS patients: What are the incidence, intensity, severity, and duration of nausea and vomiting? Is there a correlation between nausea/vomiting and quality of life and/or mood disturbance? Do cognitive representations of AIDS influence patients' responses to nausea and vomiting?

Conceptual base/Literature review: Carver and Scheier (1981) hold that cognitive representations determine behavior. The Common Sense Model of Illness focuses on strategies individuals use to protect themselves from health threats (Leventhal, Leventhal, & Schaefer, 1992). Patients are viewed as active problem solvers whose behavior is a product of their cognitive and emotional responses. In an ongoing process, individuals transform internal (e.g. symptoms) or external (e.g. lab results) stimuli into cognitive representations of threat and/or emotional reaction. Both abstract and concrete processes influence illness representations. Leventhal and colleagues (1990) found that individuals with different cognitive representations of their hypertension had different levels of adherence to their therapeutic regimen.

Method/design: Study is descriptive, exploratory, cross-sectional, correlational, and qualitative.

Sample description: A convenience sample of 66 persons with a clinical diagnosis of AIDS will be recruited. To date 29 persons have been recruited. Inclusion criteria are: 18 years of age or older, able to communicate in English, and minimum score of 24 on Mini-Mental Status Exam.

Instruments/Data collection approach: CD4 and Viral Load laboratory values from participants' records. Instruments include Mini-Mental Status Exam, Demographic background, Morrow's assessment of Nausea and Vomiting (Morrow, 1984), Quality of Life (Ferrell, Wisdom, & Weszlin, 1989), and Profile of Moods States Short Form (McNair, Lorr, Droppleman, 1992). All instruments have well-established validity/reliability. A taped-recorded interview on cognitive representations and management of symptoms will provide qualitative data. A researcher approaches patients meeting inclusion criteria and provides them with information about the study. After participants sign a consent form, four paper and pencil questionnaires are administered and the interview is tape-recorded. Participants receive a stipend.

Procedures: University Institutional Review Board has approved the study. A long-term care facility and residence for AIDS patients have accepted the University's IRB approval.

Findings: Not completed

Women's Health Service Research Utilization Group
Second Stage of Labor Management
Abstract

Women's Health Services (WHS) RU Group membership includes staff RN's, PCC's, Managers, and Educators. The group's mission is to create an environment that values, encourages and supports nursing research and research utilization in Women's Health Services.

The WHS RU Group has four main objectives. They are to stimulate an interest in research and RU, foster questioning of current practice/rituals at the nursing unit level, provide education for staff nurses to understand the research process, develop nurses' skills in critiquing research literature and to assist with the application of findings to clinical practice.

RU Project

A Second Stage Labor Management Protocol was developed by the AWHONN Committee on Research in 1994. The protocol arose from a Research Utilization Project that involved 40 hospitals across the United States and Canada. The practice change protocol was developed from research-based knowledge.

The initial process of the WHS Second Stage of Labor Research Utilization Project was to collect pre-test data on current second stage of labor practices (upright versus recumbent positions for labor and delivery and pushing methods) here at Hartford Hospital. The data collected confirmed that traditional practices were being used by the majority of nurses rather than recent evidence based practice.

AWHONN's protocol for Second Stage of Labor was shared in an educational series to 34 nurses as well as the education being posted on the unit with accompanying research articles. Benefits and challenges to implementing the protocol were discussed at the educational sessions.

Findings

Several weeks following the education, a post test survey was done and data was compared to the pre-test survey results. The findings included:

- The types of deliveries were similar in the pre and post groups
- Using the exhalation method of pushing increased from 15% to 47% of the time, after the education
- Breath holding method decreased from 89% to 76% of the time, after the education
- More nurses reported using foot plates and leg support by the patient or coach as a position for delivery after the education but no decrease in the use of stirrups for delivery was noted

The use of an epidural was the number one reported influence on nursing practice, with physician preference and patient preference second and third respectively. Because of the number of women receiving epidural anesthesia (83%), implementation of the protocol recommendations was limited in relation to maternal positioning and timing of the onset of pushing.

Conclusions

Implementation of all recommendations made by AWHONN's RU Project was limited in our practice environment due to the high incidence of epidural anesthesia, which affects nurses' ability to alter maternal positioning and timing of pushing. Therefore, the WHS RU Group modified the AWHONN protocol and offered nurses recommendations for practice changes specific to our patient population. It was our intent that by modifying AWHONN's recommendations, nurses would be able to successfully implement these evidence-based practice changes.

Family Presence in the Resuscitation Room:
Do Families Want to be There?

by
Sheri M. Blasko

Abstract

This thesis, "Family Presence in the Resuscitation Room: Do Families Want to be There?" by Sheri Blasko, was completed in May, 2000 in preparation for completion of the Masters degree in Advanced Practice Nursing from St. Joseph College, West Hartford, Connecticut.

Many studies in recent years have appeared in the literature examining the highly debated issue of family presence in the resuscitation room. This began in response to the Foote Hospital's groundbreaking study revealing that family members wanted to be present during the resuscitation. Numerous research studies have followed, interviewing both health care professionals and family members. This research, ultimately lead the Emergency Nurses Association (ENA) to release a position statement supporting the idea in 1994. The purpose of this study was to explore and describe the values, beliefs and desires of family members regarding presence during the resuscitation of a loved one.

The convenience sample obtained through word of mouth included four families, ranging in age from 6 to 77, totaled 29 people. Using grounded theory research technique, unstructured interviews were conducted over a period of six months in 1999. The findings revealed that families did not have a clear understanding of cardiopulmonary resuscitation (CPR). There were two central categories that emerged from the data, that appeared to be a coping strategy for the families: to be present or not to be present during the resuscitation of a loved one. For each group there were three influencing perceptions that determined whether they would enter the room or not. For those who chose to be present, their first thought is the need to know what is going on. Once they were reassured by actually seeing their loved one, their focus shifted towards being with their loved one. Finally, by actually experiencing the death of a loved one, they experienced closure of the relationship and initiation of the grieving process. For those who chose not to be present, they were concerned that their presence would interfere with their loved one's care. They also believed that the patient was only technically alive and was not aware that anyone was in the room with them. By not being present in the resuscitation room, unwanted memories of their loved one were avoided.

An additional finding of the study, not expected by the researcher, was concerns of overwhelming and lasting guilt. All participants of both categories made these concerns. For the participants who choose to be present, they were concerned that due to overwhelming emotion they would not be able to enter. For the participants who choose not to be present, they were concerned that by simply being given the option they would have overwhelming and lasting guilt.

All of these choices lead to one of two decisions, to be present or not, which ultimately leads to positive or negative family adaptation. Therefore with the potential for negative family adaptation, institutions must develop protocols and assessment tools. To be utilized for evaluating whether families should be allowed in the resuscitation room. In conclusion this study supports either decision, to be present or not. As health care practitioners we must be aware that by simply presenting the option there is potential for both negative and positive consequences.

Abstract

The Lived Experience of Stem Cell Transplantation for Acute Leukemia

Eileen Pond Levine

2000

Virginia Knowlden, R.N., Ed.D.

Chair, Division of Nursing, Saint Joseph College

This descriptive phenomenological study explored the subjective experiences of two women (myself and a fellow patient) who received stem cell transplants in the Fall of 1998. Related allogeneic peripheral blood stem cell transplantation is the intravenous infusion of stem cells, from a related donor, following marrow ablative chemotherapy. It is an increasingly common therapy for life-threatening cancers. Nowhere in the literature is there a description that incorporates the clinical aspects of transplantation with daily life experiences. In some studies, researchers' assumptions conflicted with patient responses. This study was designed to provide nurses with basic factual knowledge of this procedure as well as some understanding of the experience.

Three overlapping themes emerged from this study: self-protection, body image, and progress. We actively protected ourselves by following the numerous rules designed to lower the risk of infection and bleeding. Our activities were restricted by WBC and platelet counts. Gloves and mask were required for many daily activities. The strict dietary restrictions, such as no raw, microwaved, or leftover food, presented logistical challenges. Written rules were frequently unclear so we protected ourselves by asking for clarification. In this way we were advocates for ourselves. Long-term, high dose prednisone caused distressing physical changes including facial bloating, weight gain and insomnia. We were physically limited by our leg weakness and lack of stamina. We accepted these changes as temporary and worked to reassume our roles. Milestones were simple events such as lifting the rule that did not allow us to touch our pets. Medication reductions provided evidence of progress that was extremely important for maintaining our positive attitude.

Abstract

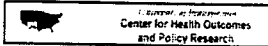
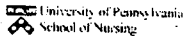
A phenomenological design was used to explore how religious influence affects adolescents' perceptions about relationships with the opposite sex and initiating sexual activity prior to marriage. Ten adolescents were interviewed. Using Colaizzi's phenomenological method for data collection, the interviews involved open-ended questions related to adolescents' perceptions regarding being a member of a religious establishment and how this aspect of their lives influences their self-esteem, decisions they make each day, and their views on intimate relationships and sexual activities. Peer experiences, adult role models, sense of religion, structured church activities, self-esteem and self-worth, self-regulation, direction, and friendship first were the eight major themes of experience identified, because they influenced the adolescents' views on life. Examples were given of how each theme affected the ten adolescents' perceptions on life and how each theme affected decisions about having sex. The results indicated that participants acquired a great deal of self-esteem and self-worth that was important for self-regulation and direction in their lives. The support received from the identified themes gave these adolescents insights and direction to make healthy choices regarding sexual relationships.

PLENARY ADDRESS

Nursing Practice Environments, Hospital Restructuring, and Patient and Nurse Outcomes: A Research Perspective

Sean Clarke, RN, PhD, CRNP, CS
Postdoctoral Research Fellow

Presentation at Hartford Hospital, Hartford, CT
Friday, October 13, 2000



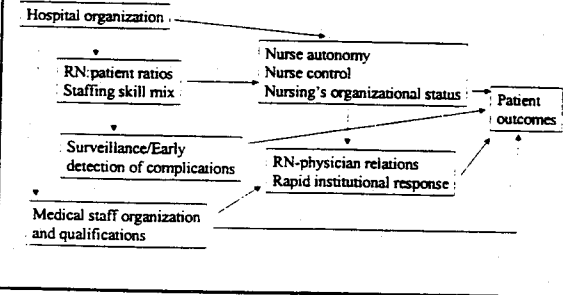
Presentation Outline

- Historical Perspective: Roots of a program of research on practice environments for nurses
- A framework for looking at how hospital organization, working climate and staffing relate to outcomes of care
- How we study nursing practice environments in hospitals at Penn's Center for Health Outcomes and Policy Research: Practical issues and problems

Presentation Outline (Part II)

- Research findings so far about what works in hospitals: What distinguishes "good" hospitals?: The magnet concept.
- Restructuring: Unanswered questions
- Conclusion: Implications for the clinical nurse, the nurse leader and the nurse researcher

Hospital Organization, Nurse Staffing, and Patient Outcomes



Why do this kind of research now?
 What motivates this research agenda?

- Widespread hospital "reengineering" and work redesign
- Changing hospital staffing patterns
- Absence of research on the impact of these changes on patient outcomes

Identifying Opportunities for Studying Organizational Outcomes

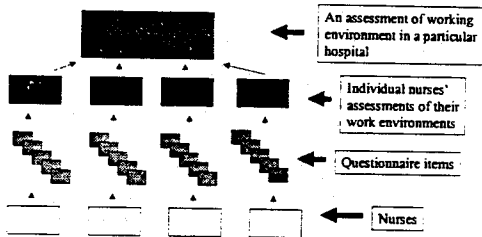
- Large-scale multiple site demonstrations
- Natural experiments
- Targets of opportunity
- Evaluating single-site models
- Jurisdiction-wide surveys of nurses (asking them about hospitals as well as themselves)

Organizational Factors of Interest

- Management style
- Leadership quality
- Organizational structure
- Opportunities for professional development
- Opportunities for professional practice

Measuring Organizational Characteristics by Aggregating Individual Subjects' Assessments

Individual scores are summed or averaged for each organization



Nursing Work Index—Revised (Aiken & Patrician, 2000) Examples of Items

	Present in my current position			
	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree
Each nursing unit determines its own policies and procedures	1	2	3	4
Patient care assignments that foster continuity of care, i.e. the same nurses care for the patient from one day to the next	1	2	3	4
Working with nurses who are clinically competent	1	2	3	4
Enough staff to get the work done	1	2	3	4

**Professional Autonomy Subscale
Sample Items**

- Freedom to make important patient care and work decisions
- Not having to do things against one's nursing judgement
- Nursing controls its own practice

Staffing

- How do we measure staffing?
- Institutional data about patient staffing
- Official statistics submitted to state regulation agencies & AHA: RNs, LPNs, UAPs
- Asking nurses about patient load on last shift
- Ratios: RN FTEs: ADC (average daily census), RN FTEs: AADC (adjusted for outpatient volume)

Outcomes: Why might staffing and organization be relevant?

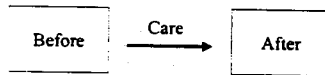
- Why should hospitals invest in staffing and creating a positive organizational climate?
- Why should clinicians care about positive nursing practice environments?

Nurse-Sensitive Outcomes

- Patient satisfaction with care
- Issues in measuring patient outcomes
- Mortality
- Complications
- Failure-to-rescue in hospitals
- Medical errors in hospitals

Outcomes as a Function of Inputs

Outcomes=f(baseline, patient clinical characteristics, patient demographic/ psychosocial characteristics, treatment, setting)



From Kane (1997)

Failure to Rescue: Background

- A good measure of hospital performance is more closely associated with provider characteristics and less closely associated with patient characteristics.
- Complication rates are closely associated with patient characteristics.
- Mortality rates are associated with both patient and provider characteristics
- Failure-to-rescue rates are more closely associated with provider characteristics and less closely related to patient characteristics

Silber et al., 1995

Failure Rate: Probability of death following a complication

“Complication” is defined as:

- an adverse condition not present on admission;
- 95% of patients who die have one of these adverse conditions preceding death; and
- 80-90% of hospitalized patients do not have one of these adverse conditions

Silber et al., 1995

Failure to Rescue: A Measure of Hospital Performance

- Data set: 73000 patients at 137 hospitals who underwent common surgical procedures
- Outcomes:
 - Complication rate (20.2%)
 - Failure to rescue rate (10.3%)
 - Death rate (2.1%)

Silber JI, Rosenbaum PR, Ross R. Journal of the American Statistical Association, 1995.

Correlations between Failure to Rescue and Selected Hospital Variables

- Ratio of RNs to Beds: -.45*
- Proportion of board-certified anesthesiologists on staff: -.40
- Teaching hospital: -.34

* p<.01

Medical Errors/Adverse Events in Hospitals

- Medication errors (omission, commission)
- Nosocomial infections (UTIs, respiratory infections, wound infections, CVC infections)
- Falls
- Decubitus ulcers/skin breakdown

Nurse Outcomes (Outcomes for Nurses)

- Job satisfaction
- Burnout
 - The Maslach Burnout Inventory (Maslach & Jackson, 1986)
- Needlestick injuries

Relationship Between Nurse Staffing and Selected Adverse Events Following Surgery (Kovner & Gergen, 1998)

- Significant inverse relationship between RN staffing levels and the following postoperative complications:
 - urinary tract infections
 - pneumonia
 - thrombosis
 - pulmonary compromise
- Estimated that one additional RN hour per patient day was associated with a 9% decrease in UTI and 8% decrease in pneumonia

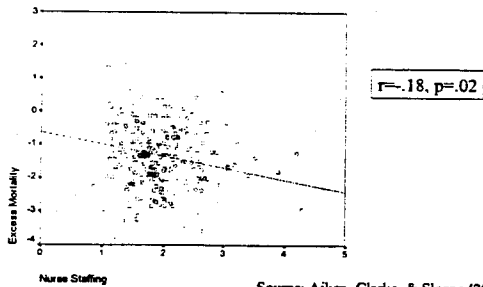
Blegen et al. (1998)

- Increasing a unit's total hours of care (RN, LPN, NA) is not associated with lower rates of adverse outcomes
- Increasing the proportion of RN hours of care is associated with lower rates of adverse outcomes:
 - medication errors
 - decubiti
 - patient complaints
 - patient falls

Explaining Differences in Death Rates in English Hospitals
(Jarman et al., BMJ, 1999)

- Staffing is an important determinant of mortality
- Number of MDs per 100 beds is inversely related to mortality
- Nursing skill-mix was significantly related to mortality--the higher the proportion of auxiliary nurses, the higher the mortality rates

Staffing Ratios (RN:ADC) and Excess Medicare Mortality in 1997 for 314 Nonfederal Medical-Surgical Hospitals



A. Hospital Outcomes Research Agenda

- Empirically testing how the organization and staffing of hospitals affect patient outcomes

Magnet Hospitals: Reputational Study

- Low turnover
- Low vacancy rates
- High job satisfaction

Characteristics of Magnet Hospitals

- Structural flatness
- Decentralized decision-making
- Self-governance
- Self-scheduling
- Nurse autonomy
- Nurse influence over policies and resources
- Support of education

ANCC Certification
(Aiken et al., 2000: AJN)

- ANCC certification provides a comparable and even superior means of selecting hospitals with strong professional practice environments compared with reputational nominations by experts

Aiken et al. (1994)

- 39 of the original 41 Kramer magnet hospitals (1 closed by 1988, 1 was a VA medical center)
- Comparison hospitals selected from 5052 nonmagnets that submitted data for the 1988 AHA Annual Survey
 - "propensity scoring" selects 5 comparable hospitals on size, structure, governance, physician staff, rural/urban location for each magnet (NOT nurse staffing)
- Outcome: Mortality in Medicare patients treated at these hospitals (HCFA datasets) in 1988

Aiken et al. (1994): Results

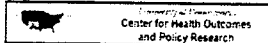
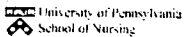
- 8% lower mortality in magnet hospitals
- 5% lower excess (actual-expected) mortality in magnet hospitals after control for hospital case-mix

**Bottom Line: Outcomes of Magnet Hospitals
as Observed in Our Research Thus Far**

- Lower Medicare mortality
- Lower AIDS mortality
- Shorter length of stay
- Higher patient satisfaction
- Lower rates of nurse burnout
- Lower rates of needlestick injuries
- Higher rates of nurse job satisfaction
- Higher nurse ratings of quality of care

**Staffing Levels, Organizational Climate and Hospital
Safety: The Case of Exposures to Bloodborne
Pathogens Among Hospital Nurses**

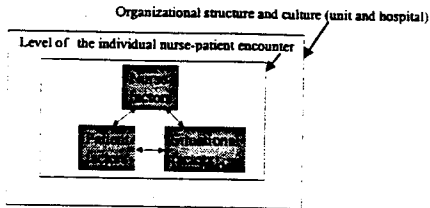
Sean Clarke, RN, PhD
Douglas Sloane, PhD
Linda H. Aiken, RN, PhD



Background

- Percutaneous injuries with used sharps:
 - risks of hepatitis B, C, and HIV transmission
 - 600,000 sharps injuries per year in U.S. health workers (1996 data; University of Virginia's Exposure Prevention Information Network (EPINet), 2000)
- A major occupational health concern for nurses (who incur 50% or more of these injuries)
- Currently 2 major "solutions"
 - Staff education about recapping, universal precautions,
 - Implementation of needleless/self-resheathing systems

Occupational Exposures to Bloodborne Pathogens: The Larger Context



Premise:

Injuries more likely if staffing/environment leads to rushing/disregard for safety

Background and Purpose

- A needlestick prevalence rate of 0.7-0.8 injuries/nurse-year was found in our 1991 data.
- We also showed that retrospective questions about needlestick injuries provide reliable estimates of prevalence (Aiken et al., 1997).
- **Study Purpose:** To explore possible relationships between needlestick injuries and near-misses with staffing levels and organizational climate in hospitals and on nursing units.

Samples

- **Study 1** (1991 survey): 732 nurses on 40 nursing units in 20 hospitals (AIDS study)
 - 920+ nurses completed 12,349 shift coupons (86% return rate) in prospective study
 - 1-month prevalence rates: 4.3/5.5% (needlestick); 23.7% (near-misses)
- **Study 2** (1998 survey): 2287 medical-surgical nurses in 22 hospitals (20 of which were "magnet" hospitals in the 1980's or 1990's)
 - 1-month prevalence rates: 1.2% (needlestick); 23.3% (near-misses)

Discussion

- Nonrandom distribution of needlestick and related injuries: clustered on nursing units and in hospitals
- Characteristics of hospitals and nursing units predicted risks of exposures for individual nurses ... Possibly related to rushing or safety-mindedness ...

Conclusion

- Assumption of IOM 1999 report To Err is Human is that better procedures and work systems will reduce adverse events but need to consider organizational context as well
- Needlesticks as a proxy for a broad range of safety and quality issues in hospitals
- Remedying problems with understaffing and poor morale could be one of the most important steps in building a safer health care system

Hospital Restructuring: Impacts on Nurse and Patient Outcomes

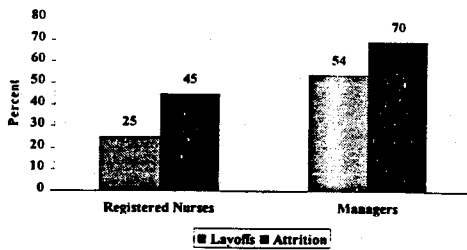
Some Trends in Hospital Care in the 1990s

- Reduced access to inpatient care
- Reduced length of stays
- Changes in management structure
- Changes in numbers and skill mix of caregivers

Boston College Surveys of Massachusetts Hospital Nurses

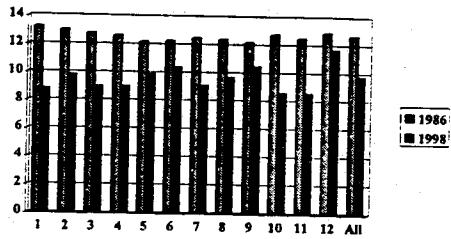
% Nurses Reporting	1989	1994
Cutting nursing positions	42	52
Using unlicensed assistants	24	70
"Unsafe" staffing levels	1	43

Percentages of Reengineered Hospitals with Positions Lost By Layoffs or Attrition 1996 Survey of Large U.S. Community Hospital CEOs



Aiken, Clarke, & Sloane (2000)

Resource Adequacy Scores (Possible Range 4-16) in 12 Reputational Magnet Hospitals Original Studied in 1986 and Resurveyed in 1998



CHOPR: Research Challenges

- Large numbers of organizations
- Empirical measures of practice context
- Better outcomes measures

The International Study

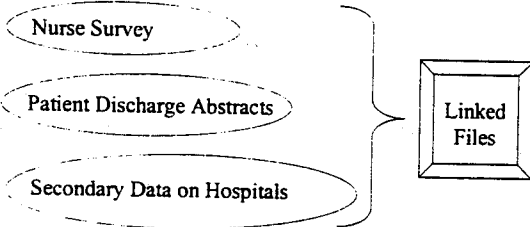
- Goal: Create an institution-specific database on organizational attributes across jurisdictions
- Method:
 - Sample from RN licensure lists
 - Mail survey to RNs at home addresses
 - Ask for name of organization where employed
 - Aggregate responses to organization level

Sites for International Study of Hospital Outcomes

- United States
 - University of Pennsylvania
- Ontario
 - University of Toronto
 - Mt. Sinai WHO Collaborating Centre
- British Columbia
 - University of British Columbia
- Alberta
 - University of Alberta
- Germany
 - Hannover Medical School
- England
 - London School of Hygiene and Tropical Medicine
- Scotland
 - Glasgow University
 - Nursing Initiative of Scotland

L. Aiken, University of Pennsylvania

International Hospital Outcomes Study: Data Sources



L. Aiken, University of Pennsylvania

Independent Variables: Hospital-Level Staffing and Organization

- Staffing: Average number of patients assigned to nurses on their last shift
- Organizational Support: Aggregate scores from a 10-item scale derived from Nursing Work Index*
- Scores quartiled within countries to account for differences in staffing patterns and organization.

*Aiken & Patrician. *Nurs Res.* 2000; 49: 146-152.

L. Aiken, University of Pennsylvania

Dependent Variables: Measured at the Nurse Level

- Nurse-assessed quality of care
- Frequency of adverse events
- Nurse reports of unfinished tasks
- Nurse willingness to recommend hospital to family members needing care
- Nurse job satisfaction and emotional exhaustion.

L. Aiken, University of Pennsylvania

Nurse Assessed Quality, Patient Mortality and Failure-to-Rescue

Nurse-assessed quality is related to, and is a reasonable proxy for, the patient outcomes we will ultimately consider.

Hospitals in which nurses report higher quality care tend to have lower mortality and failure-to-rescue rates.

L. Aiken, University of Pennsylvania

Relationships between Nurse Staffing, Organization and Nurse-Assessed Quality: Overall Findings

- Nurse staffing and organization have significant and similar effects on quality in all 5 sites.
- The best-organized hospitals are 3 times as likely to be providing excellent care as the worst-organized.

L. Aiken, University of Pennsylvania

Conclusions: Summary

- Organizational climate in hospitals, which is potentially modifiable, is undervalued but central to care outcomes.
- Higher nurse-to-patient ratios are associated with better outcomes.
- Poor organizational practice environments can negate the benefits of excellent staffing.

Conclusions: Implications for Clinicians, Leaders and Researchers

- Findings linking nurse staffing and organization of hospitals with outcomes are growing, yet much is still unknown
- Advance efforts to study the relationship between nursing and care outcomes: Many ways to do so
- Use formal and informal leadership channels to make decisions about the delivery of nursing care that take staffing and organizational support for clinicians into account

**POSTER
PRESENTATIONS**

Enhancing Healthcare Outcomes Through Nursing Research

Poster Presentation

Chest Pain Study

Middlesex Hospital

Terri Savino RNC, BSN Quality Improvement Coordinator

Denise MacGregor, RN, BS, CPHQ Supervisor, Quality Improvement

Content: This Chest Pain Study included 100 randomly selected patients that were discharged from the inpatient setting with the principle diagnosis of either chest pain or unstable angina in the months of June, July and August, 1999. This study was performed to determine, given minimal length-of-stay for chest pain patients to ruleout MI in a cost reduction environment, if patients received accurate diagnosis and adequate follow-up care. The process included medical record review and telephone interview with the patient and/or family member. We were interested in knowing if the patients were given an explanation for their chest pain and if the pain had resolved. We also wanted to know if they had received a stress test, either as an inpatient or an outpatient and if they followed up with their primary care physician and/or a cardiologist. We reviewed the number of patients that were transferred to a tertiary hospital for a cardiac cath, and how many of those required surgical intervention. We also assessed patient satisfaction with their care, readmission within 14 days and readmission with an MI. This storyboard depicts these pertinent study findings.

Is There "Best Practice" Evidence Regarding Oral Care for Intubated Patients?

A Research Utilization Project by Critical Care Staff Nurses

Barbara Stone, RN, CCRN
Debra Benson, RN

May 2000

It is a principle of critical care nursing to routinely provide oral care for intubated patients in order to improve comfort and reduce the risk of oral infection. There is research to support the fact that plaque accumulation from inadequate oral care creates an ideal medium for growth of microorganisms known to cause nosocomial infections. Critically ill patients who are intubated are especially at risk. However, there is wide variation in nursing practice regarding their oral care. This paper describes the experience of two critical care nurses who questioned "best practice" regarding oral care for this vulnerable population. Their research utilization project involved critique of eight primary source articles based on the Iowa Model for reviewing research literature. The staff nurse researchers draw conclusions about both the process and the outcomes of their investigation. Based on the problems they encountered as staff nurses in surveying and critiquing the literature, they offer concrete recommendations to guide other staff nurses embarking on similar research projects. Outcomes of their research proved inconclusive. They report lack of confidence in the comprehensiveness of the literature review. The researchers trace this to problems with the research question that was not clear and specific enough to efficiently direct their search. The paper concludes with plans to conduct a more focused review. This is necessary in order to validate their tentative conclusion that, currently, there is no valid "best practice" evidence regarding oral care of intubated patients.

A Comparison of the Effectiveness
of Midclavicular Placement to Superior Vena Cava Placement
of PICC Catheters in an Adult Population

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Hartford, CT 06102

MIDCLAVICULAR/PICC COMPARISON

Abstract

“A Comparison of the Effectiveness of Midclavicular Placement to Superior Vena Cava Placement of PICC Catheters in an Adult Population.”

This retrospective, comparative study of 423 midclavicular catheters and 662 peripherally inserted central catheters (PICCs) was conducted to examine the effectiveness of midclavicular catheters positioned in the subclavian, axillary, or innominate vein as compared to PICCs positioned in the superior vena cava. Outcome measures included completion of therapy, dwell time, and the complications of occlusion, phlebitis, infection, and accidental dislodgment as causes of premature catheter loss. Patient diagnosis, the type of intravenous therapy, and the brand of catheter were also considered in the data analysis. It was determined that there was no statistically significant difference between the PICC and midclavicular catheter groups for any of the outcome measures. Also, patient diagnosis, type of intravenous therapy, and catheter brand did not significantly influence the number and type of reasons for catheter removal between the PICC and midclavicular catheter groups.

ABSTRACT

Nurse Caring Behaviors: The Impact of a Staff Educational Program on Improving Patient Caring Behavior and Satisfaction Scores

At Hartford Hospital, we have measured patient satisfaction with caring by nurses and doctors for several years. Our experience has demonstrated that nurse caring is a significant factor affecting patients' overall perceptions of the health care they received and even has been implicated in patients' considering returning to Hartford Hospital for health care in the future. On Bliss 8, a general surgical patient care unit, patient satisfaction with nurse caring has been a quality improvement indicator for three years. Improvement efforts have included communication of primary nurse caregivers, implementing a program of customer service that encourages asking patients if they might need anything more and sending post-discharge cards to patients inquiring about them and offering a number to the unit to call with questions. Despite these efforts, Bliss 8's overall patient satisfaction response of "Always" to the statement, "The nurses were caring" has remained within an 80-85% range.

The unit's quality improvement team determined that more formal research was called for in attempt to learn from Bliss 8's patients the actual behaviors they considered as caring, or even non-caring. While a review of the literature revealed many works in defining caring according to nurses, only one work (Wolf, 1998) related nurse caring with patient satisfaction. The team has been in contact with Wolf and received from her the Caring Behaviors Inventory Tool (CBI). The CBI is a 42-item instrument with a 6-point item response scale ranging from "never" to "always". The instrument has undergone reliability and validity testing to include a factor analysis.

This study is using a quasi-experimental design employing a pre and post exposure analysis. The Nurse Caring Behaviors Inventory and 6 Hartford Hospital patient satisfaction survey questions described above were distributed to approximately 200 verbally consenting adult patients on their day of discharge from Bliss 8 during a six week period. Based on the work of Wolf et al, and the baseline CBI data, the team developed an educational improvement plan toward an ultimate goal of improving patient satisfaction with nurse caring on Bliss 8. The educational intervention on Caring Behaviors was delivered to staff nurses on Bliss 8 over the following four weeks. A post exposure data collection period of an additional 200 patients using the same data collection tools and methods is currently being collected over the next six weeks. This tight time frame was established to reduce uncontrolled variation in staff mix, patient populations and changes in the external environment that could contribute to unequivalent patient groups. Patients are provided a letter inviting them to participate in the study. They are given a survey that provides their patient account number but no name. They are also given an envelope to place the survey in which is sealed and mailed directly to outcomes research. Individual responses will not be disclosed to the caregivers.

Reducing Unnecessary Bloodwork in the Neurosurgical Intensive Care Unit (NSICU)

Charlene D'Angelo, RN, NSICU Staff Nurse
Diane Vinci, Patient Administrative Associate
Dawn Beland, RN, MS, CCRN, CS, Critical Care Educator
Hartford Hospital

Unnecessary bloodwork in critically ill patients can potentially reduce Hgb and circulating blood volume, require blood replacement, and increase cost of care. The goal of this project was twofold: 1) Increase nursing and medical staff awareness of unessential or redundant bloodwork and 2) Decrease the incidence of unnecessary and unordered bloodwork in the NSICU.

Using the IDEA Model of Quality Improvement, ten patient charts were reviewed and compared to physician's orders. The audits found blood drawn without orders, duplicate labs, and bloodwork continued long past medical need. Audit findings were aggressively communicated to nursing and medical staff through: inservices, reminder posters, protocol reference sheets, and medical staff memos.

A re-audit was done in November 1999. Seven patients were audited before additional actions were found to be necessary. At this point, the help of the medical director of the NSICU was enlisted. A third audit was conducted in February 2000. Nine patients were audited showing a decrease in unordered labs by 5%. While the goals of this QI project have been met, continued surveillance will be necessary to ensure lasting change for this collaborative effort.

Learning Outcomes Objectives:

1. Use the IDEA model as a template for quality improvement.
2. Evaluate current bloodwork practices in a Neurosurgical ICU.
3. Describe an action plan to reduce unnecessary bloodwork.

References:

Andrews, J.O. (1998). A QI project to reduce nosocomial blood loss. Dimensions of Critical Care Nursing, 17(2), 92-99.

Miller, K.H. (1999). Decreasing diagnostic blood loss for patients in critical care units. Dimensions of Critical Care Nursing, 18(1), 46-54.

Udeh, E.C., Gannon, R., and Rescorl, D. (1999). Infusion rate book: Adult IV medication. Hartford Hospital.