A Model for Change to Evidence-Based Practice

Mary Ann Rosswurm, June H. Larrabee

**Purpose:** To describe a model that guides nurses and other healthcare professionals through a systematic process for the change to evidence-based practice. The tremendous increases in clinical research and accessibility to research findings have prepared the way for the paradigm shift from traditional and intuition-driven practice to evidence-based practice. Although several models have emerged to guide practitioners in research utilization, practitioners continue to have difficulty synthesizing empirical and contextual evidence and integrating evidence-based changes into practice.

**Organizing Framework:** The model is based on theoretical and research literature related to evidence-based practice, research utilization, standardized language, and change theory. In this model, practitioners are guided through the entire process of developing and integrating an evidence-based practice change. The model supports evidence-based practice changes derived from a combination of quantitative and qualitative data, clinical expertise, and contextual evidence.

**Methods:** The model was developed using sources identified on searches of Medline, CINAHL, and systematic reviews available on the Internet. Review topics were focused on evidence-based medicine and nursing, research utilization, and change process. Other sources included clinical expertise and quality-improvement information.

**Conclusions:** Practitioners need skills and resources to appraise, synthesize, and diffuse the best evidence into practice. Patient outcomes must reflect discipline-specific and interdisciplinary accountabilities. Collaboration between researchers and practitioners within and among disciplines will enhance the diffusion of evidence-based practice innovations.

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(Key Words: evidence-based practice, research utilization)

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Dramatic changes in health care and the growth of integrated delivery systems have intensified practitioners' efforts to access new information about more efficacious approaches that enhance discipline-specific and interdisciplinary contributions to patient outcomes. In the new healthcare environment, practitioners can no longer rely solely on clinical experience, pathophysiologic rationale, and opinion-based processes (Ellrodt et al., 1997; Feinstein & Horwitz, 1997). Practitioners also must learn to search the research literature, critically appraise research findings, and synthesize empirical and contextually relevant evidence. Practitioners need to question their current practices and find better alternatives (Barnsteiner, 1996).

Critical thinking skills and evidence-based methods for making clinical decisions are essential for maximizing the quality and cost-effectiveness of care (Kessenich, Guyatt, & DiCenso, 1997; Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996). The President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry (1998, p. 169) reported that improving the quality of health care "requires a commitment to delivering health care based on sound scientific evidence and continuously innovating new, effective health care practices and preventive approaches." Evidence-based practice is the integration of "individual clinical expertise with the best available external clinical evidence from systematic research" (Sackett et al., 1996, p.71). The combined results from clinically relevant research, clinical expertise, and patient preferences produces the best evidence for ensuring effective, individualized patient care (Mulhall, 1998; Sackett & Rosenberg, 1995). Evidence-based practice is more likely to occur in practice settings that value the use of new knowledge and provide resources to access that knowledge.

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Several national and international initiatives have been developed to facilitate evidence-based practice. In the past three decades there has been a tremendous increase in the number of clinical research studies, particularly studies using such methodologies as randomized clinical trials, meta-analysis, and study of patient outcomes. These research studies are the basis for the paradigm shift from the tradition and intuition-driven practice of physicians, nurses, and other health professionals, to the new paradigm of evidence-based practice. Researchers have sought to decrease gaps between the conduct of research and the use of research in practice settings. Many researchers are mentoring practitioners with the critique and synthesis of research and the development of guidelines for evidence-based practice. Although several models have been developed to guide practitioners in the research utilization process (Goode & Piedalue, 1999; Horsley, Crane, Crabtree, & Wood, 1983; Rosswurm, 1992; Stetler, 1994; Titler et al., 1994; White, Leske, & Pearcy, 1995), practitioners continue to have difficulty with synthesizing empirical and contextual evidence and with integrating evidence-based changes into practice (Camilletti & Huffman, 1998; Mackey, 1998).

The evidence-based model described in this article is derived from theoretical and research literature related to evidence-based practice, research utilization, and change theory. The model guides practitioners through the entire process of changing to evidence-based practice, beginning with the assessment of the need for the change and ending with the integration of an evidence-based protocol (Figure 1). The authors developed and tested the usefulness of the model as they mentored nurses in defining and integrating evidence-based practice protocols at a regional medical center. The model might also be used in primary care or other settings in addition to acute inpatient units. A description of the model follows, along with an example of how nurses applied the model to implement an evidence-based protocol for hospitalized patients with acute confusion.

**Overview of the Model**

**Step 1: Assess Need for Change in Practice**
Practitioners' interest in a potential change in practice may be stimulated by awareness of patient preferences and dissatisfaction, quality improvement data, practitioner queries, evaluation data, or new research data. In Step 1, practitioners collect internal data and compare it with external data. When data indicate a problem with an aspect of practice, practitioners can assemble a team of stakeholders to participate in discussing and more clearly identifying the problem. Stakeholders may include discipline-specific or multidisciplinary practitioners, administrators, and patients who have a stake in the practice (Sprecht, Bergquist, & Frantz, 1995; Steelman, 1995). Group success can be enhanced by use of group-process techniques, such as structured brainstorming, flow-charts, and multi-voting (Brassard & Ritter, 1994; McLaughlin & Kaluzny, 1999). Practitioners review the evidence using sources such as quality improvement (QI) and risk management (RM) data, utilization data, staff performance surveys, customer satisfaction surveys, agency resources, and strategic priorities.

After examining internal data, practitioners assess the need for a change in practice by comparing internal data with external data in benchmarking databases. Benchmarking entails collecting comparable performance data and "sharing of performance information to identify operational and clinical practices that lead to the best outcomes" (Czarnecki, 1996, p. 2). Healthcare organizations have recently begun mandatory external benchmarking using indicators from one of over 200 JCAHO-approved performance measurement systems (Joint Commission on Accreditation of Healthcare Organizations, 1999). Comparison of internal and external data may substantiate current practice or support the need for a change in practice. If data are inadequate, collecting additional internal data to identify the problem may be necessary (Titler et al., 1994). The Table highlights Step 1 processes of the model that nurses used in the example of a change in practice for

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**Figure 1. A model for evidence-based practice.**
Table. Application of the Model: Evidence-based Protocol for Patients with Acute Confusion

Step 1. Assess need for a change
- Discussed clinical problem of acute confusion with nurse managers and nurses
- Reviewed QI & RM data on associated adverse events, i.e., falls, restraints
- Derived from data that patients > 65 years comprised more than 50% of hospital population and were at highest risk for confusion and adverse events
- Assessed nursing knowledge about delirium in elderly patients
- Compared internal data with external data from similar medical centers
- Identified from findings the need to improve nursing staff's knowledge and care of elderly patients at risk for developing confusion during hospitalization

Step 2. Link problem with interventions and outcomes
- Linked acute confusion with the NIC intervention of delirium management
- Included delirium management activities in an acute-confusion protocol
- Identified outcomes of cognitive orientation and safety as measured by a confusion scale, fall rates, and restraints

Step 3. Synthesize best evidence
- Reviewed literature focused on delirium management and safety
- Included nurses in critiquing research literature using worksheets
- Synthesized quantitative research evidence
- Combined quantitative research evidence with qualitative data, clinical judgment and contextual data
- Assessed system feasibility, patients' benefits, and risks of protocol

Step 4. Design a change in practice
- Included nurses from pilot study units in drafting the evidence-based protocol
- Prepared forms for pilot study and its evaluation with input from unit nurses
- Identified tools for measuring outcomes of cognitive orientation, fall rates, and use of restraints
- Educated all nurses on the pilot study units in use of the evidence-based protocol

Step 5: Implement and evaluate the practice change
- Implemented the pilot study on the two selected hospital units
- Monitored use of the protocol throughout the pilot period
- Collected data and analyzed findings
- Recommended adoption of protocol with minor revisions

Step 6. Integrate and maintain the practice change
- Met with staff nurses on pilot study unit to review revisions
- Presented evidence-based protocol to standards and practice council
- Communicated information to administration and collaborating practitioners
- Conducted inservice education for all nursing staff about the protocol
- Planned ongoing monitoring of outcomes on all units

patients with acute confusion. Stakeholders included nurse managers and staff nurses concerned about the care of confused patients. They collected and analyzed internal and external data related to confusion. Identifying that a problem in caring for confused patients existed in their hospital, they committed to developing an evidence-based change.

Step 2: Link Problem with Interventions and Outcomes
Practitioners need to define the problem using the language of standardized classifications and then link the problem with classification of interventions and outcomes. Classification systems help to define the concepts of a science and organize the knowledge (McCloskey, 1995). They also facilitate communications among practitioners, provide standards for determining the effectiveness and cost of care, and identify needed resources (Maas & Johnson, 1998). National databases have primarily consisted of medical classifications, such as the International Classification of Diseases (ICD), the Diagnostic and Statistical Manual of Mental Disorders (DSM), and the Current Procedural Terminology (CPT) (McCloskey, 1995). Patient outcomes often are linked to episodic physician interventions, although multiple providers deliver health care across a continuum of care. To verify specific accountabilities for cost effectiveness and quality of care, longitudinal measurements of multiple disciplines are needed (Maas & Johnson, 1998).

Standardized nursing languages are being refined to provide nursing data elements for automated patient records (Johnson & Maas, 1997; McCloskey & Bulecheck, 1999; North American Nursing Diagnosis Association, 1999; Saba & McCormick, 1996). Nursing Outcomes Classification (NOC) and Nursing Interventions Classifications (NIC) facilitate the linkages of outcomes and interventions appropriate for identified nursing diagnoses (Johnson & Maas, 1997).

In Step 2 of the practice change for patients with confusion (Table), the nurses referred to NIC and NOC. They linked acute confusion with the intervention of delirium management and tentatively selected several nursing activities listed under delirium management. The nursing activities served as process indicators during the quality monitoring process in Step 5. The nurses selected outcomes of cognitive orientation and safety. These outcomes were measured by a confusion rating scale, fall rates, and use of restraints. The selection of potential interventions and patient outcomes are based primarily on clinical judgment (Johnson & Maas, 1998) and system priorities and resources.

Step 3: Synthesize Best Evidence
In Step 3 of the model, selected interventions and outcomes are refined. The best research evidence is synthesized and combined with clinical judgment and contextual data. The problem, potential interventions, and desired outcomes become the major variables for reviewing the research literature. Steps taken before conducting the literature search include clarifying the specific topic and identifying criteria for including a reference in the review (Slavin, 1995). In the critical appraisal of the literature, practitioners evaluate the strengths and weaknesses of studies and identify gaps and conflicts in the available knowledge. The use of a structured critique worksheet facilitates the recording of the major components of each critique and organizes information for the synthesis of the evidence. An example of such a worksheet appears in Figure 2. The last section of the worksheet contains a rating scale for the quality of evidence, as well as questions about the benefits and feasibility of using the research findings. This evidence rating scale was adapted from the rating scale used in AHCPR research reviews (United States Preventive Services Task Force, 1989).

Numerous electronic databases are available for literature searches. Medline is the largest biomedical, electronic database, referencing over 4,000 journals. It can be accessed without additional cost through the Internet Grateful Med website (U.S. National Library
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<th>Design</th>
<th>Major Findings and Limitations</th>
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<td>b. One randomized controlled trial</td>
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<td>#3</td>
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<td>III. Comparative, correlational, and other descriptive studies</td>
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<td>Location:</td>
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</table>

![Figure 2. Worksheet for critique.](image)

Systematic literature reviews are available on the Internet. The Cochrane Library is one example of a proprietary resource for systematic reviews of research about health care interventions. It is accessible on-line (The Cochrane Collaboration, 1998). Other systematic reviews completed by independent researchers are in other Internet resources such as MEDLINE, CINAHL, the On-line Journal of Knowledge Synthesis in Nursing, and Best Evidence. The AHCPD evidence-based practice guidelines are also available on-line to practitioners (Agency for Health Care Policy and Research, 1999). Their rigorous, evidence-based approach has made the AHCPD guidelines the "gold standard."

The purpose of the synthesis of the research studies is to determine whether the strength of the evidence supports a change in practice. The results of studies can be pooled only if the studies are similar in design. In the absence of strong evidence, practitioners need to weigh benefit to risk factors. They also need to consider the feasibility of implementing the findings in their own practice setting. The synthesis only brings together the existing evidence. It cannot create new evidence or knowledge. Thus, if most of the evidence is weak, additional research may be needed before making decisions to change practice or policies. If the research synthesis indicates sufficient research evidence to support a change in practice with desirable benefits and minimal risks, practitioners can proceed in designing the change.

In the example of the protocol for acute confusion (Table), the nurses, with guidance from nurse researchers employed by the hospital, completed a thorough literature search of quantitative and qualitative studies focused on delirium and patient safety. They critiqued the research and synthesized evidence of quantitative studies. This evidence was combined with qualitative findings, clinical judgment, and contextual data. Based on this evidence, they decided to develop and pilot test a protocol that was feasible for nursing staff to implement and offered maximum benefit with minimal risk to patients.

**Step 4: Design a Change in Practice**

After synthesizing the best evidence, practitioners describe the process variables or detailed sequence of care activities in the change in practice, usually in the format of a protocol, procedure, or standard (Specht et al., 1995; Steelman, 1995). The practice environment, its resources, and feedback from stakeholders are essential considerations when designing a change. Decreasing complexity of the protocol increases the likelihood of its acceptance. Only activities addressed in the evidence base are included in the protocol (Horsley et al., 1983, p. 42). Likewise, the protocol is designed to guide care only for
populations similar to those in the evidence base. The evidence base is used to guide practitioners in identifying anticipated discipline-sensitive and interdisciplinary patient outcomes of the practice change. Those outcomes are clearly delineated as desired outcomes or reduction in undesired outcomes. The more relevant the outcomes are to the organization, the more likely the practice will be accepted.

If the change in practice affects a standard of care in a large hospital, a pilot demonstration of the change on one or two units is advised. The pilot test allows practitioners to influence adaptation of the change to fit their practice needs (The President’s Advisory Commission on Consumer Protection and Quality in the Health Care Industry, 1998), giving practitioners a sense of ownership of the change process and contributing to smoother integration of the change. The plan for the pilot delineates necessary structural components for implementation, that is, equipment, documentation forms, personnel, other resources, and associated costs. Successful implementation partially depends on suitability of the new practice for the particular health care site (Cipperley, Butcher, & Hayes, 1995; Cook, Greengold, Ellrodt, & Weingarten, 1997) and on obtaining administrative support when costs will increase (Horsley et al., 1983).

The plan for the pilot test also includes the timing and delegation of specific activities for obtaining agency approvals, preparing the test sites, and evaluating the results. The evaluation plan for the pilot test includes a study of quality improvement (QI) with process and outcome indicators and surveys of patient satisfaction and staff responses to the change in practice. Some indicators will be identical to those in existing QI data to provide for pre- and post-implementation comparisons. The indicators pertain to activities specified in the protocol, resources needed to follow the protocol, anticipated patient outcomes, and associated costs. Practitioners prepare the QI data-collection instrument and surveys, specifying data sources and acceptable samples. Data collectors are trained in use of the QI data-collection instrument, and interrater reliability is established. Clinically significant indicators are selected and are planned for data analysis procedures.

In the example of confusion in hospitalized elderly patients (Table), nurses from the two units participated in designing the protocol and planning for its implementation and evaluation. The project team identified cognitive orientation and safety as target patient outcomes. They selected nursing activities for delirium management that were supported by the evidence base. Information about the pilot test was communicated to collaborative practice groups and administrators for their review and approval. Nursing staff on the two test units had inservice training to implement the protocol. A 2-month implementation period followed.

**Step 5: Implementing and Evaluating Change in Practice**

Implementation of the pilot study will be more successful if the coordinator of the pilot study closely monitors the process and is available to staff on the pilot study units to answer questions. Follow-up reinforcement of the practice change by the coordinator is essential. After the protocol has been in use for the designated time, patient and staff surveys and QI study are conducted. Then, data are analyzed and displayed in charts or bar graphs to facilitate data interpretation. Following analysis, practitioners interpret the results by deciding whether there were differences in the indicators before and after the pilot study. Were the necessary structural variables provided? Do the data indicate that the new protocol was implemented as intended (McCollum, 1995; Specht et al., 1995; Steelman, 1995)? If yes, what effect did the new protocol have on patient outcomes? An inappropriately implemented protocol, because of misunderstanding or lack of endorsement, can do more harm than good (Cook et al., 1997; Ellrodt et al., 1997). When considering the results, practitioners must remember that outcomes can be affected by numerous factors other than the intervention, such as characteristics of patients, staff, interpersonal aspect of care, and the setting (Sidani & Braden, 1998). QI studies are not designed to control for all these influences but can give an indication of the protocol's effectiveness in a particular setting. In addition to QI data, practitioners evaluate the results of staff opinion surveys at participating sites (McCollum, 1995). Endorsement by respected peers is essential for successful implementation of the change in practice (Cook et al., 1997; Specht et al., 1995).

The decision to adopt, adopt, or reject the change is based on feedback from staff on the pilot units, managers, and pilot coordinators, QI and survey data, cost data, and recommendations from stakeholders. Feasibility, benefits, and risks are considered when evaluating the data. Personnel opinions of the implemented change provide information about acceptability or the need for modifications (McCollum, 1995). QI and cost data indicate whether the care and outcomes improved at a reasonable cost to the system. Based on all the evaluation data, practitioners make recommendations to adopt, adopt, or reject the change in practice (McCollum, 1995; Specht et al., 1995; Steelman, 1995).

In the example of confusion in hospitalized elderly patients (Table), two nurses from each unit served as pilot-study coordinators. They monitored the 2-month implementation process and obtained informal staff nurse feedback. The unit coordinators participated in collecting and analyzing the QI data. All project activities progressed as planned.

**Step 6: Integrate and Maintain Change in Practice**

If the results of the pilot study support integration of the new practice into standards of care, change strategies are initiated. Even the smallest change has a domino effect and people affected by the change often perceive it as disruptive. Practitioners who are change agents need to consider the cultural climate of the organization as they attempt to integrate practice innovations. For example, impediments to change are greatest in large bureaucratic organizations where changes are made by the top-down method (Bennis, 1993). Change is more likely to be accepted when people participate in making the change (Rogers, 1995). The evidence-based model described in this article encourages participation of stakeholders throughout the various steps of the model. The results of the pilot study enhance stakeholder confidence in the effectiveness of the change and the feasibility of making the change in their environment. Administrators and practitioners prefer concise summaries of recommendations, supporting evidence, and anticipated benefits (Ellrodt et al., 1997). Ongoing communication with stakeholders is vital to the acceptance of change. Adherence to the details of the organization's operations and approval processes ensures a smooth and speedy integration of the change into the organization's standards of care. Informal leaders need to participate in the diffusion process. Continuing education and staff-inservice education facilitate changes in practitioners' behavior and reinforce implementation of the new evidence-based practice.
Maintaining the change is ensured by providing practitioners with the necessary resources to implement the change, by monitoring the process and outcomes, and by rewarding quality performance with incentives (Greco & Eisenberg, 1993). In the integration and maintenance of the protocol for confused patients (Table), specific actions were implemented to enhance communication, education, and monitoring of the change. The initial meetings were with the staff nurses on the pilot units to obtain their feedback about feasibility, benefits, and needed revisions. The revised protocol was then presented to the standards of practice council for approval. Concise written and oral presentations were prepared for administrators and collaborative practice groups. Inservice sessions about the new protocol were presented to nursing staff on all hospital units. Nurses decided to conduct periodic QI monitoring of the implementation and outcomes.

Conclusions

The momentum is escalating in support of evidence-based practice that will improve the quality of patient care and enhance clinical judgment. Practitioners must know how to obtain, interpret, and integrate the best available research evidence with patient data and clinical observations. The evidence-based model described in this article was derived from theoretical and research literature. The model was successfully applied by nurses who were implementing change to evidence-based nursing practice. It may serve as a useful framework for other practitioners seeking to change to evidence-based practice in a variety of settings.

Patient outcomes must reflect discipline-specific and interdisciplinary accountabilities. Nurses’ contributions to patient outcomes will be measured when nurses consistently use standardized language in defining patient problems, interventions, and outcomes. Practitioners need time and support to access databases and synthesize the best evidence for making changes in practice. Administrators must provide the infrastructure for evidence-based practice to develop and diffuse throughout an organization. Collaboration between researchers and practitioners within and among disciplines should enhance the diffusion of practice innovations.

References

Foot Acupressure and Massage for Patients with Alzheimer's Disease and Related Dementias
Judith A. Sutherland, Juliann Reakes, Cynthia Bridges

Touch and massage have been basic therapeutic modalities of nursing care since the inception of modern American nursing during the Civil War (Alcott, 1863). Full back and foot massage were often part of daily nursing care. Recent scientific advances substantiating relationships among neurochemistry, mood states and positive effects derived from acupressure and massage have generated renewed interest in these modalities (Sher, 1998; Field, 1995). Patients with Alzheimer’s disease (AD) and related dementias present unique symptoms requiring intensive nursing care because of persistent wandering behaviors that have consequences for the patient’s sleep-wake cycle (Snyder, Egan, & Burns, 1995). The purpose of our small study, completed in late 1997, was to determine the effects of foot acupressure and massage on wandering, pulse, respirations, and quiet time behaviors in patients with AD and other dementias.

A quasi-experimental design with purposive sampling and random assignment of patients to experimental (n=5) and control (n=5) groups was used. Patients were institutional residents of a behavioral management unit in an AD specialty care center. Participants met the following criteria for inclusion: (a) required assistance with activities of daily living; (b) had varying degrees of behavioral problems; (c) had verbal behaviors that were disruptive; (d) were independent with locomotion; (e) exhibited varying degrees of wandering or other disruptive behaviors, and (f) had been residents of the unit for at least 3 months.

Narrative data on patient behaviors were collected immediately before and during treatment in a log kept by the nurse-massage therapist. A Behavioral Documentation Instrument (BDI) was developed by the researchers with validation by an expert panel and used to obtain pre-test measures for both groups on wandering, pulse, respirations, and quiet-time behaviors. Inter-rater reliability was established on the BDI by obtaining an index of equivalence. Pre-test measures taken for 5 days on both groups revealed higher means for the experimental group on wandering, pulse, and respirations combined with a lower quiet-time mean. This disparity between the two groups is discussed below. Foot acupressure and massage were applied to the experimental group for 5 minutes on each foot during the 10-day treatment period. Treatment consisted of massage therapy with long, smooth, rhythmical strokes (effleurage) of the entire foot and ankle and acupressure using clockwise massage of four acupressure points on the foot believed to promote relaxation and sleep through the stimulation of endorphins.

Measures of the dependent variables of wandering, pulse, respirations, and quiet-time for both groups were taken every 2 hours and recorded for the 10-day treatment period and for 3 days after treatment. Scores were then calculated for each variable to determine differences between treatment and baseline data for both groups with t-tests performed on the groups’ mean change scores.

Experimental group post-treatment means showed a surprising decrease in wandering, pulse, and respirations and an increase in

Table

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<td>Seeking behavior characterized by verbal and physical movement, looking for something not available</td>
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<td>14:00</td>
<td>B</td>
<td>Task-like behavior characterized by busyness as if completing a work activity</td>
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<td>16:00</td>
<td>C</td>
<td>Fleeting behavior characterized by rapid movement from one stimulus to another, easily distracted</td>
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<tr>
<td>18:00</td>
<td>D</td>
<td>Intrusive behavior characterized by aimless movement into another person’s room or belongings</td>
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<tr>
<td>20:00</td>
<td>E</td>
<td>Inefficient ambulation characterized by repetitive walking in a path, pacing, or walking to several points</td>
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Instructions: Document code letter of behavior every 2 hours and initial
quiet-time following the treatment. These change scores, however, were not statistically significant by t-test, although the wandering mean narrowly missed the p<.05 level. Because the experimental group had a much higher mean for wandering at pre-test, more than double the mean of the control group, nearly achieving statistical significance on this variable may be of some clinical merit. There was a concomitant increase in the control group's means on wandering, pulse, and respirations during the period treatment was provided to the experimental group. These changes may have been because of the presence of the nurse-therapist in the milieu because both groups of patients wandered freely in the day room while treatments were done. Thomas (1997) found that wanderers had significant social-seeking personality correlates that differentiated them from non-wanderers. Seeking engagement with the nurse-therapist might have accounted for increases in the three variables for the control group.

Analysis of the narrative data resulted in identification of five positive and four negative behaviors before and during the treatment sessions. These behaviors and their frequencies were: compliance (f = 48), quietness (f = 17), smile (f = 6), calmness (f = 4), sleep (f = 4), babbling during treatment (f = 4), complaining of soreness (f = 3), being unable to sit (f = 2), and striking lightly at the nurse (f = 1). These findings indicate the importance of human contact and touch for this group of patients.

Limitations of the study were the small sample size and unequal group means on the dependent variables at baseline. Why the two groups differed, despite meeting sampling criteria and random assignment to the experimental group is not known. In the future investigators should incorporate sample matching on baseline measures or use the patient as his or her own control. Despite these discrepancies, some treatment effect appeared to occur from our nursing intervention. Acupressure and massage are nontoxic and non-invasive, combining nurse presence and touch. Use of these treatments for patient satisfaction and comfort appears warranted.

References

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- Description of the Topic
  - What is the proposed name for the monograph?
  - Briefly, but specifically, what is the definition of the topic, the purpose for writing about the topic, and its philosophical or conceptual basis?
  - What are the goals for writing this monograph? Will it inform, expand, change or correct current thinking?
- Intended Audience
  - Who will be interested in this monograph?
  - For clinical audiences, what specific type of clinician would be interested and why? i.e., staff nurse, advanced practice nurse, administrator, or researcher.
- Sample Audience
  - What academic level and course(s) would use the monograph and why?
- Scope and Approach
  - What are other existing publications on the same topic? How will this monograph be unique and different?

- What approach will be used in developing the monograph? For example, will it be historical, anecdotal, research-based, etc.
- How many chapters will the monograph contain? i.e., chapter titles and numbers.
- What will the table of contents contain? Provide a specific topic outline for each chapter.
- What is the estimated length of the monograph? (Two double-spaced pages of 12-point type manuscript usually equal one printed page.)
- How many and what kind of diagrams or photographs, if any, will be included?

Sample Chapter

One sample chapter should be submitted as part of the proposal. A sample chapter provides the Monograph Editor with a sample of the author/editor's writing style and how well the topic is being covered. A sample chapter also shows how the intended audience will be reached and how goals of the monograph are being met.

PROPOSAL REVIEW & MANUSCRIPT DEVELOPMENT

Peer reviewers will evaluate the proposal to determine suitability for publication by Center Nursing Press. In keeping with usual book publication practices, the identity of the monograph author/editor will be disclosed to reviewers, but the reviewers' identities will not be known to the monograph author/editor.

The author/editor of an accepted monograph will work closely with the Monograph Editor to develop the manuscript as suggested by the reviewers. Because this may require revisions and rewriting, the decision to write a monograph demands a commitment to scholarly preparation and hard work.

TO SUBMIT A PROPOSAL

Please submit the following:
- Two copies of the entire proposal (prospectus and sample chapter).
- Brief bio of the author/editor, including educational preparation, current position and institution, and prior publications (no more than 2 pages).
- If the monograph will include contributors, submit their names, credentials, institutional affiliation and position, and the names of chapter(s) each contributor will write.
- A proposal in a language other than English will be accepted.

Send to: Dr. Fay L. Bower; Monographs Editor; 1457 Indian Head Circle; Clayton, CA 94517; fbower@hk.netcom.com