

“Research to Practice”: A Practical Program to Enhance the Use of Evidence-Based Practice at the Unit Level

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Purpose/Objectives: To assist clinical nurses in translating research into clinical practice.

Data Sources: City of Hope Quality-of-Life (QOL) Model to guide presentations and discussion, research utilization theories, and evidence-based practice literature.

Data Synthesis: Based on percentage of individual participant involvement, the four domains of QOL, and a knowledge survey.

Outcomes: Attendance, discussion, QOL domain ranking, satisfaction, and pre- and postknowledge scores. Attendance averaged 13 individuals; average discussion participation was 54%. The psychological QOL domain was most important (58%), and discussion averaged a score of 3 (1 = slow to 5 = lively). A one-point increase (scale 1–5) measured a change in knowledge.

Conclusions: The challenge for nursing assessment is to fully address patient issues in the psychological domain.

Implications for Nursing: A practical program can be formulated to bring evidence-based practice to the clinical setting.

Key Points . . .

- Oncology nurses attempting to shift evidence-based practice to guide clinical decision making may encounter major obstacles.
- A practical research outreach program to staff can enhance evidence-based practice.
- Nurses consistently identified psychological issues as the most important to present information about and discuss.

Increasing emphasis is being placed on finding evidence to guide, change, and implement nursing practice (Jassak, 2001). However, the attempt to shift to evidence-based practice (EBP) to guide clinical decision making encounters major obstacles when applied at the unit level (DiCenso, Cullum, & Ciliska, 1998; Gennaro, Hodnett, & Kearney, 2001; Lopez-Bushnell, 2002; McCaughan, Thompson, Cullum, Sheldon, & Thompson, 2002; Mulhall, 1998). This article discusses one institution's approach to bring EBP to the unit level using a method to educate unit nursing staff members and increase participation and critical thinking. This particular approach was spearheaded by an advanced practice nurse (APN) team.

Literature Review

What is EBP or evidence-based care? According to Mulhall (1998), evidence-based care concerns the incorporation of evidence from research, clinical expertise, and preferences into decisions about the health care of individual patients. Jassak (2001) described EBP as an approach to clinical decision making that can be used by all oncology nurses to improve patient care and outcomes. EBP is used to define clinical

practices and protocols using authoritative evidence derived from clinical research by categorizing “levels of evidence” into weight of importance that each study carries based on its methodology. Within day-to-day oncology nursing practice, EBP assists nurses to incorporate state-of-the-art treatment recommendations into patient care (Jassak).

Rutledge and Bookbinder (2002) described theories of knowledge utilization (diffusion and linkage) and its subfield, research utilization. APNs can serve as linkage agents to connect clinical staff to a wide range of research knowledge. In a descriptive exploratory study by Asselin (2001), the staff nurse's role in selecting and transferring new knowledge to practice is described. In the study, knowledge utilization originates with nurses who are active in selecting and using new knowledge from the literature. The author postulated that the

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development of unit-based resources and resource personnel, the use of innovative ways to bring new knowledge to the unit, and the provision of formal classes to exchange ideas on how to transform knowledge into practice are all strategies to enhance research utilization. Asselin's view of knowledge utilization as an individualized process involving individuals, context, and knowledge makes the case for strengthening links between educator and unit-based education. Dooks (2001) recommended the promotion of research utilization to clinical staff by APNs. To move research into practice, Gennaro et al. (2001) listed eight steps (see Figure 1). The list illustrates the complexity of the process for changing clinical practice based on evidence and how such a process may be very difficult to incorporate into a staff nursing role.

Although research has been used to legitimize nursing as a profession and form a platform for nursing education, only a moderate proportion of clinical nurses uses research as a basis for practice (Mulhall, 1998). Several authors (DiCenso et al., 1998; Lopez-Bushnell, 2002; McCaughan et al., 2002; Mulhall) have identified barriers to and difficulties implementing EBP and research into the clinical setting (see Figure 2).

One strategy to overcome the barriers described by Rutledge and Bookbinder (2002) is through the use of linkage agents, such as APNs (see Figure 3). Acting as linkage agents, APNs can promulgate scientifically based recommendations to reduce cost and improve quality, documentation, and outcomes (Barnsteiner & Prevost, 2002; Bookbinder et al., 1996; Oermann & Floyd, 2002). EBP is here to stay; the challenge for nurses is how to break through the barriers and use linkage agents to evaluate research and translate it into bedside EBP with the goal of improving nursing practice.

Project Development

The idea of a practical research outreach to staff was originated in the nursing research department by three APN researchers who identified barriers early and devised strategies and goals to combat them. After the project goals were identified, three unit-based APNs joined the group to continue the process and further refine the barriers and goals. To assist with barrier identification, one of the APN researchers conducted a small-scale needs assessment that asked two questions.

1. What is the one thing you would like to see changed or addressed in clinical practice in the areas of symptom management and psychosocial spiritual care?
2. What kind of support or research do you need to accomplish this?

The sample included 19 nurses from various oncology inpatient units, intensive care, surgery, pediatrics, hematology,

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- Step 1: Gather and organize best-level evidence.
 Step 2: Collect facts to support plans as well as alternative ideas.
 Step 3: Format evidence for change in the most convincing way possible.
 Step 4: Adapt the specific practice change for your setting.
 Step 5: Demonstrate that the change is achieving desired goals.
 Step 6: Involve stakeholders.
 Step 7: Pilot test the change.
 Step 8: Publish experiences.
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Figure 1. Steps to Move Research Into Practice

Note. Based on information from Gennaro et al., 2001.

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- Time constraints
 - Limited access to the literature
 - Lack of confidence with research utilization skills such as training in information seeking and critical appraisal
 - Nurses who were not interested in or viewed scientific evidence with suspicion and skepticism
 - Work environment that does not value evidence-based practice, has minimal incentive for research activity, or places a greater emphasis on practical rather than intellectual knowledge
 - Research products such as new drugs and equipment that were too complex and scientific
 - Researchers who lacked credibility, evidenced by failure to offer the desired level of clinical direction
 - Limited authority or power to change practice based on findings
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Figure 2. Barriers to Implementing Evidence-Based Practice Into the Clinical Setting

Note. Based on information from DiCenso et al., 1998; Gennaro et al., 2001; Lopez-Bushnell, 2002; McCaughan et al., 2002; Mulhall, 1998.

bone marrow transplantation, medical oncology, and the outpatient clinic in the National Cancer Institute-designated comprehensive cancer center. Results indicated that desired areas of change were best-practice issues, pain management, end-of-life care, and family psychosocial spiritual support. The unit-based nurses identified the need to review standards, best practice, and the literature.

The next step was to identify barriers that prevented the all-embracing use of EBP at the institution. Comparing barriers in the institution to those reported in the literature (DiCenso et al., 1998; Gennaro et al., 2001; Lopez-Bushnell, 2002; McCaughan et al., 2002; Mulhall, 1998) revealed striking similarities. Time constraints were and continue to be a significant barrier to EBP for bedside nurses. The nurses described themselves as stressed, said they are extremely limited on time, and verbalized that computer searching was perceived as too time consuming. The second barrier, limited access to the literature, definitely applied to the authors' institution. The library is about a 10- to 15-minute walk, and few nurses have time to access its services. Also, nurses were not confident in computer-based literature searching skills, and assistance conducting searches was not easily available. The third barrier, lack of confidence with research utilization skills, was identified by the clinically based APNs on the team. Some of the staff seemed to have little knowledge about changing practice based on recent nursing findings. The fourth barrier, nurses who did not possess interest or viewed scientific evidence with suspicion and skepticism, was not identified in the institution. In contrast, the institution's nurses are exposed to a vibrant medical research environment and have great familiarity with medical research. However, they have less awareness of nursing research than medical research. The fifth barrier, a work environment that does not value EBP, has minimal incentive for research activity, or places value on practical rather than intellectual knowledge, was difficult to evaluate. Although much research is performed at the authors' institution, most is medical. An element exists of a limited value and incentive for embracing EBP in the nursing culture, probably as a result of the overwhelming number of medical protocols and studies done at the institution and the historical nursing culture in the organization. Unit-based educational activities in the past have centered on new products or drug information rather

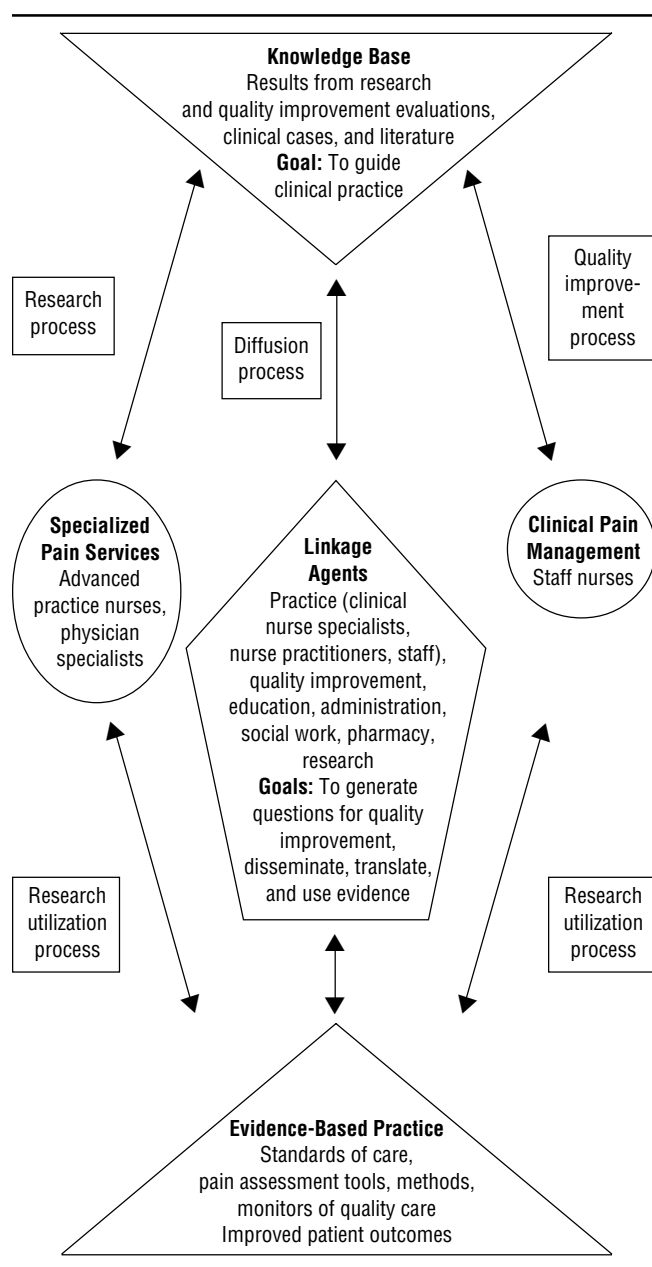


Figure 3. Institutional Change Model

Note. Based on information from Rutledge & Bookbinder, 2002.

than patient care and professional practice issues. In addition, recognition for clinical excellence at the unit level was lacking, probably because of short staffing and the “survivor” or “crisis” state on the units. The sixth barrier, research products that were too complex and scientific, did not seem to be an issue. The nurses were exposed to in-service classes on research products such as new drugs and equipment and expressed confidence with their knowledge. The seventh barrier, researchers who lacked credibility as evidenced by failure to offer the desired level of clinical direction, did apply to the institution in regard to nurse researcher visibility. A well-established, small nursing research department was present but was involved primarily with conducting outside-funded research projects. Resources provided for distribution of nursing research departmental publications, but unit-level

dissemination and discussion of research findings were not philosophically supported. The last barrier identified in the literature, limited authority or power to change practice based on findings, also applied at the institution, in part because nursing consultation for clinical issues was limited. The institution recently created unit-based positions for APNs; at the start of this project, the positions had been filled for less than a year.

Given the results of the needs assessment and the barriers identified, the APNs from the nursing research department proposed a project to assist unit staff. The allotted time to devote to the project of three or four hours per month was negotiated with the director of nursing research. The limitation was essential to provide time to carry out other APN research responsibilities. With these limits, the three researchers were to function as rotating consultants. The goal of the project was to provide a practical program of research outreach to the clinical settings. The project initially had a research outreach focus that, over a few months, evolved into an EBP focus after two members were exposed to EBP principles and recognized the excellent fit that EBP principles provided to the objectives and strategy of the team. The strategy identified was a one-hour, rotating, monthly program of case presentation and analysis to assist clinical nurses in translating research and ongoing knowledge into practice. The team believed that the case study approach would be the best way to facilitate critical thinking and participation (Tomey, 2003). Numerous subgoals also were identified to assist in pinpointing ways to address the barriers and guide outcomes (see Table 1). The name given to the program was “Research to Practice.”

The theoretical framework selected for the Research to Practice series was Padilla, Ferrell, Grant, and Rhiner’s (1990) Quality-of-Life (QOL) Model, which originated from research on QOL in patients with cancer who experienced pain and from survivors of bone marrow transplantation. Because all of the patients discussed were patients with cancer, the model was a good fit (see Figure 4). The model views QOL as a multidimensional construct, with four domains: (a) psychological well-being, (b) physical well-being, (c) social well-being, and (d) spiritual well-being. Each domain has multiple attributes (e.g., physical well-being encompasses nausea, constipation, appetite, sleep, aches and pains, and fatigue; spiritual well-being evokes notions of hopefulness, life purpose, spiritual change, religious activity, and uncertainty). According to Pedro (2001), a diagnosis of cancer is the stimulus for reappraisal of an individual’s satisfaction with his or her current level of physical, emotional, and social functioning and well-being. Cancer acts as a powerful stressor requiring additional physiologic and psychological energy to cope; therefore, clinicians must be able to identify those in greatest need of preventive, adaptive, or supportive services (relative to patient perceptions of unsatisfactory QOL) and intervene or make appropriate referrals.

The format for the project was discussed with the three new unit-based APNs, and they quickly came on board to enrich and facilitate a broad consultant group for each session. The unit-based APNs constructed the case study format to serve as a guide for assessment of the patient for presentation during the program (see Figure 5), compiled the continuing education unit paperwork, and formulated the mechanism for communication to staff. The APN team of three nurse researchers and

Table 1. Identified Goals for the Research to Practice Program

Focus	Goals
Institutional	Improve clinical practice by applying research to practice.
Unit-based (inpatient and ambulatory clinics)	Assist with translating research into practice. Obtain a broader view of oncology literature to include priorities outside the institution. Promote personal growth such as time management for the staff nurse. Promote professional growth for the staff nurse. Increase focus on clinical excellence. Increase morale and retention.
Department of nursing research	Promote the cycle of collegiality to reinforce the importance of research and involvement. Increase visibility with staff RNs and physicians by assisting with clinical excellence. Provide expertise for applying research to practice. Engender support of nursing research from other healthcare professionals. Reinforce collaboration with other healthcare professionals and their department research projects.
Research nurse and advanced practice nurse personal goals	Provide for personal growth of the advanced practice nurse. Increase job satisfaction. Reinforce clinical perspective. Find new ideas for research. Maintain primary job responsibilities.

three unit-based clinicians worked through the process of preparation and presentation and also identified the need to measure tangible outcomes.

The specifics of the project were outlined. Presentations would occur once a month on rotating units; however, nurses would be invited from all patient care areas. The unit-based APN on the assigned unit would select a patient case for discussion. Staff members also were asked to identify the most critical or challenging patient-care issues for the identified case. The team of six APNs met three days before a unit presentation to discuss the identified case and outline the relevant nursing issues using the QOL Model. Based on the relevant nursing issues, the team identified a minimum of one and a maximum of three patient care or practice issues for review during the session. The team assigned roles to each APN member to perform routine duties such as facilitation, refreshments, lesson plan and evaluation, presentations, and gathering of outcome data during the program. Incentives for staff included one continuing education (CE) credit hour and a meal.

An objective was to vary the meal, either breakfast or lunch, to reach different shifts. The format for the actual presentation was as follows. The main facilitator introduced the purpose of the presentation and the APN team. A staff nurse presented the case study. A five-minute presentation was given about EBP concepts and levels of evidence; three APNs presented for 10 minutes on relevant nursing issues using evidence-

based information from the literature, including the level of evidence. A 20- to 30-minute discussion followed. The team identified the discussion period as a priority to minimize the lecture content and encourage discussion, application of findings, and critical thinking.

At the conclusion of each presentation, the team of six APNs met immediately to evaluate each session according to outcomes (see Figure 6). One of the nurse researchers collected the data during the presentation and evaluation session. Staff was included from various departments such as nurses from other units, psychologists, physical therapists, occupational therapists, social workers, physicians, and administrators. Percentage of participation was calculated based on the total number of participants and the percentage of those who participated at least once. A pre- and postprogram confidence score also was obtained on the topics presented (see Figure 7). After the discussion, the APNs decided which QOL domain dominated the discussion. The discussion was characterized subjectively by the APN group using a consensus vote (1 = slow to 5 = lively). Nurse satisfaction and written evaluation questions were determined by two questions on the CE concept application regarding the satisfaction with the program and suggestions for improvement. Knowledge confidence scores were evaluated pre- and postdiscussion to determine whether any change occurred in the confidence level of the participants. Unit-specific suggestions also were made for each unit-based APN to follow up on relevant clinical issues. For examples of such issues, see Figure 8.

Results

Conception to actual implementation took three months, and the program has been in place for three years. A retreat to evaluate outcomes and further clarify goals was conducted

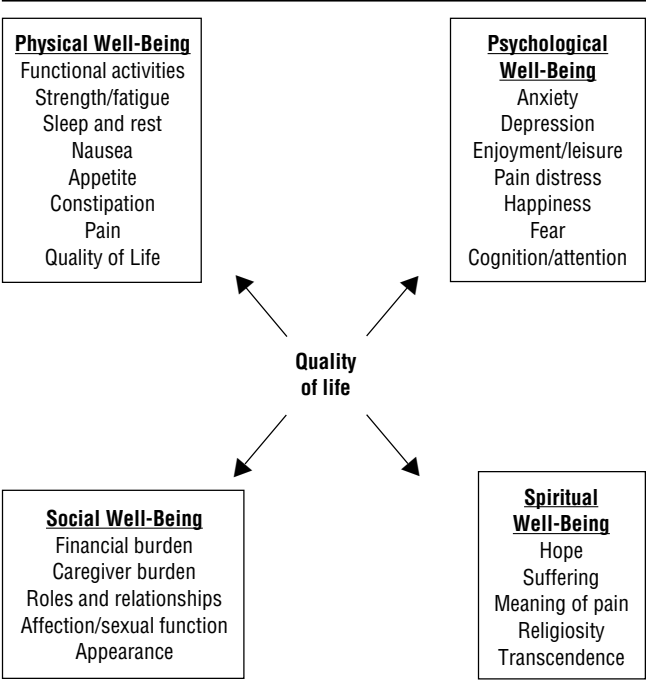


Figure 4. Quality-of-Life Model

Note. Based on information from Padilla et al., 1990.

Initials of patient:
 Age:
 Gender:
 Diagnosis:
 Status of disease (remission, relapse, end-stage, other):
 Reason for admission:
 Pertinent past medical history:
 Pertinent current medical history:
 Pertinent drugs/ongoing treatment:
 What is the main nursing problem with this patient?
 Are there potential complications that could be avoided or mitigated by preventive measures?

What criteria led you to select this patient? (Check all that apply.)

Psychological Well-Being

- ☐ Psychological issues
- ☐ Anxiety
- ☐ Depression
- ☐ Anger
- ☐ Substance abuse
- ☐ Enjoyment/leisure
- ☐ Pain distress
- ☐ Happiness
- ☐ Fear
- ☐ Cognition/attention
- ☐ Other _____

Physical Well-Being and Symptom Management

- ☐ Functional ability
- ☐ Sleep and rest
- ☐ Strength/fatigue
- ☐ Nausea
- ☐ Appetite
- ☐ Constipation
- ☐ Pain
- ☐ Other _____

Social History:

Married?
 Support systems?
 Primary caregiver?
 Relationship to patient:
 Relationship to staff:
 What kind of information, support, or discussion do you need to better take care of this patient?

Spiritual Well-Being

- ☐ Spiritual issues
- ☐ Suffering
- ☐ Meaning of pain
- ☐ Religiosity
- ☐ Transcendence
- ☐ Address patient needs
- ☐ Faith or beliefs
- ☐ Community
- ☐ Importance/influence
- ☐ Other _____

Social Well-Being

- ☐ Caregiver burden
- ☐ Roles/relationships
- ☐ Affection
- ☐ Sexual function
- ☐ Appearance
- ☐ Other _____

Figure 5. Case Study Format

after one year and included the six APNs, the director of nursing research, and the director of nursing.

The data discussed in this section were collected over the first 13 months of the project (see Table 2). The tool to measure confidence in knowledge pre- and postprogram was introduced after the first three months to better capture data to assess the knowledge gained.

During the initial months, attendance was modest; however, it increased as the project continued. Over time, the number of disciplines represented increased as nurses from different units and ancillary departments were invited to attend, perhaps as a result of the popularity of the format. Participation also increased over the months along with liveliness of discussion.

Ranking of dimensions of the QOL Model conducted by the APN team after each program indicated that the psychological domain was the most important (58%) to staff to obtain

- Attendance
- Number of disciplines and units represented
- Percentage of participation
- Discussion level
- Unit staff satisfaction
- Written evaluation questions
- Ranking of importance of quality-of-life domains
- Confidence scores (pre- and postprogram)
- Unit-specific suggestions

Figure 6. Research to Practice Outcomes

research-based information and dominated the discussion period, the social domain ranked second in importance (42%), the spiritual domain was third most important (33%), and the physical domain was least important (25%) (see Table 3). Psychological and social domains were chosen as most important to discuss either with or without another domain. Each domain achieved primary importance during at least one month, but combinations occurred as well. See Table 4 for a list of topics discussed and QOL dimensions.

Discussion

Jassak (2001) described EBP as an approach to clinical decision making and improvement of patient care and outcomes. This evolving program was an attempt by one institution to tailor this approach by introducing EBP at the unit level. This was done by presenting EBP principles, reviewing research articles and topics, and discussing application of EBP principles to clinical patient cases. The results indicated some interesting findings. The average attendance in 13 months was 13 at each presentation, an extremely high number for the authors' institution at the unit level. Various departments attended, thereby increasing the number of participants and broadening the expertise of the nurses who attended. For example, nurses from a surgical unit presented wound care issues to the entire group. In turn, wound management issues then were applied to possible graft-versus-host disease strategies for the bone marrow transplant nurses who attended.

Participation was more than 50%, and liveliness of discussion increased over the months, which was encouraging. Once the nurses understood that the program was not all didactic but

Sample Questions Asked Before and After Presentation

1. How would you rate your confidence in your ability to assess a bone marrow transplant recipient experiencing complications (e.g., veno-occlusive disease, sepsis, renal failure) who requires long-term, high-frequency oscillator ventilation?
2. How would you rate your confidence in your ability to handle a family in crisis?
3. How would you rate your confidence in your personal knowledge of assessing and intervening in spiritual distress?

Scoring Key

0	1	2	3	4	5
No confidence	Minor confidence	Moderate confidence	Average confidence	Major confidence	Extreme confidence

Figure 7. Confidence in Skills and Knowledge

1. Consider a different time or process for a sleepy night shift.
2. Measure for a potential increase in multidisciplinary patient care conferences after the program.
3. Measure for an increase in referrals to social workers, chaplains, and psychologists.
4. Improve continuity of care among units and research nurses.
5. Increase the incidence of spiritual assessments.
6. Increase information to nurses about new drugs and protocols.
7. Further discuss cues for assessment of patients in psychosocial or spiritual distress or crisis.
8. Consider how to best meet the different needs of the outpatient nurses.
9. Improve visibility and awareness of referral staff such as social workers, chaplains, and psychologists.
10. Improve shift-to-shift communication regarding patient and family coping.
11. Improve cultural competence.

Figure 8. Issues Identified in the Debriefing Sessions

involved scheduled time for discussion, participation, and exchange of ideas, they were excited to contribute. Stetler, Corrigan, Sander-Buscemi, and Burns (1999), in their evidence-based framework, stated that critical thinking and reflective practice are integral parts of a nurse's use of evidence. In this program, the discussion section of the program was deemed the most important by the APN team. This reflects the need to provide an environment that stimulates critical thinking, which is defined as the ability to recognize a problem, find a solution, sift through assumptions, formulate a hypothesis, draw conclusions, and judge validity (Watson & Glaser, 1964). Also, the staff at the institution traditionally is an older, committed, clinically experienced staff. Seeing an increase in confidence scores of almost one point on a scale of 1–5 was surprising.

Using the QOL Model, psychological well-being was ranked as the most important to obtain research-based information and dominated the discussion period, followed by social and spiri-

Table 2. Results

Session Date	Attendance	Departments (n)	Participation (%)	Liveliness of Discussion ^a	Confidence ^b
October 2001	22	3	50	3.0	–
November 2001	11	1	25	1.0	–
December 2001	15	3	30	3.5	–
January 2002	15	3	35	2.0	+0.700
February 2002 ^c	16	3	–	–	–
March 2002	9	3	56	4.0	+0.875
April 2002	7	4	71	3.0	+0.833
May 2002	8	3	43	4.0	+1.000
June 2002	6	2	67	4.0	+0.670
July 2002	11	4	82	4.0	+0.800
August 2002	21	6	38	4.0	+1.130
September 2002	15	6	66	4.0	+0.530
October 2002	14	5	86	4.0	+1.330
Average	13	3	54	3.4	+0.874

^a Liveliness is based on a scale of 1–5 (1 = slow to 5 = lively).

^b This number reflects an increase of confidence scores from pre- to postprogram on a five-point scale.

^c This session was cut short because of unforeseen circumstances in the clinical setting; therefore, the only variables collected during this program were attendance and the number of departments that was represented.

Table 3. Priority Ranking of Importance Regarding Quality-of-Life Dimensions

Session Date	Physical	Psychological	Social	Spiritual
October 2001				x
November 2001	x			
December 2001		x		
January 2002				x
March 2002		x	x	x
April 2002		x	x	
May 2002		x	x	x
June 2002	x	x	x	
July 2002			x	
August 2002	x			
September 2002		x		
October 2002		x		
Totals ^a	3	7	5	4

^a At some sessions, more than one dimension assumed primary importance.

Note. February 2002 is not included; see footnote c in Table 2.

tual domains. This finding was consistent with the needs assessment performed before the initiation of the program, which identified the topics of most interest as end-of-life issues, family issues, and psychosocial spiritual support. Often, discussions involved the spectrum of psychosocial spiritual issues, ranking each of the domains as equally dominant. For example, in May 2002, all three domains were highly important to the nurses in the clinics who struggled with psychosocial and spiritual assessment and perceived a lack of related resources in a fast-paced outpatient environment. Clearly, most nurses enjoyed discussing psychosocial and spiritual issues, expressing their feelings of being ill prepared for problems, finding resources for difficult times, and identifying family issues that were challenging. Family assessment and families in crisis were identified as the priority concern in the social domain on four separate occasions. An example of this was March 2002, when the pediatric staff discussed a patient's parents who were missionaries in a foreign country and had to leave the mission field to find treatment for their child with cancer in the United States. The family and spiritual crisis that resulted challenged the staff. Many nurses expressed feeling uncomfortable with spiritual assessment and found the content helpful. The three times the physical domain was ranked as most important were twice on the same unit (surgical unit) and once in the intensive care unit. Whether these nurses felt more comfortable with physical issues or whether the cases themselves tended toward extreme physical problems such as pain, wound management, and care of the intubated patient is unclear.

This program clearly is in the initial stages of adapting evidence-based knowledge to the clinical setting and establishing what Stetler et al. (1998) called a culture of EBP. Nevertheless, after three years of the program, the staff members on each unit have been exposed to the concept of EBP; participated in discussion, hopefully increasing critical thinking; and become active participants who actually present new content for discussion. This progression of the staff to presentation and discussion has been facilitated by the APNs, who have served as agents to link EBP and quality patient outcomes at the bedside. The nursing administration and the director of nursing research demonstrated a commitment to the program, which was essential for ongoing development. Cooke and Grant (2002) clearly stated that the

Table 4. Topics Discussed During Each Research to Practice Session, According to Quality-of-Life Domain

Session Date	Physical	Psychological	Social	Spiritual
October 2001	Graft-versus-host disease Sepsis	Depression Fatigue	—	Spiritual assessment
November 2001	Multiple myeloma Cancer pain	Assessment of depression	—	Pain and suffering linked to spirituality
December 2001	Graft-versus-host disease Photopheresis	Patient and family assessment ^a	Patient and family assessment ^a	Assessment tools for spirituality
January 2002	Hemorrhagic Cystitis	Management of depression in older adults	—	Judaism and spiritual assessment
March 2002	Acute leukemia in a Down syndrome baby	—	Family crisis theory	Support for missionary parents
April 2002	Recurrent Hodgkin disease	—	Family crisis theory	Spiritual distress
May 2002	Radiolabeled immunotherapy	Psychosocial distress ^a	Psychosocial distress ^a	Spiritual distress
June 2002	Care of the intubated patient	—	Family in crisis	Spirituality and ethics
July 2002	Myelofibrosis and acute myelocytic leukemia	—	Caregiver burden	Suffering and spirituality
August 2002	Stevens-Johnson Syndrome	Cultural issues with Mandarin Chinese patient	—	Buddhism
September 2002	Fatigue assessment (FACT-An Scale)	Coping with comorbid disease	—	—
October 2002	—	Adaptation to the stress of bone marrow transplantation	—	—

^a Some topics spanned more than one domain.

Note. February 2002 is not included; see footnote c in Table 2.

first step in the process of getting support for EBP is to assess resources, and administrative support can be a key to success.

In phase II, the program was launched again after 13 months with four new goals: to further improve critical thinking, increase the use of EBP principles, include empowerment of staff to begin to present topics and articles, and use the QOL Model. The authors have begun to guard the discussion time over all other activities, finding it to be the most valuable tool in the program. The team includes a brief lecture (five minutes) with each program on EBP principles. The team encourages staff to begin to present because peer modeling can be highly effective in increasing professionalism. The team has encouraged the nursing staff to assess patients using the four QOL domains and even has hopes that this conceptual model will affect the charting of nurses in clinical areas. Phase II is now in progress.

Evaluation

To evaluate this process during the first year, two mechanisms were used: staff evaluation and APN group evaluation.

Staff evaluation after the first year of the program was positive. For example, staff discussed how it was helpful to “delve more in-depth into a patient’s particular needs so that treatment could be more specific and individualized.” Another staff member discussed the “practical application and synthesis of research” and “getting access to pertinent research papers” as the best aspects of the program.

Also, as a group, the six APNs along with the director of nursing research and nursing administration met for a retreat to evaluate the process, brainstorm, redefine goals, and change the process according to new goals for phase II. Clearly, the program evolved far beyond what any individual member of the team could have expected. The project started as a research outreach program and evolved into an EBP program trying to link research to the clinical setting in a case study discussion format to encourage critical thinking and professionalism.

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References

- Asselin, M. (2001). Knowledge utilization among experienced staff nurses. *Journal for Nurses in Staff Development*, 17, 115–122.
- Barnsteiner, J., & Prevost, S. (2002). How to implement evidence-based practice. *Reflections on Nursing Leadership*, 28(2), 18–21.
- Bookbinder, M., Coyle, N., Kiss, M., Goldstein, M.L., Holritz, K., Thaler, H., et al. (1996). Implementing national standards for cancer pain management: Program model and evaluation. *Journal of Pain and Symptom Management*, 12, 334–347.
- Cooke, L., & Grant, M. (2002). Support for evidence-based practice. *Seminars in Oncology Nursing*, 18, 71–78.

- DiCenso, A., Cullum, N., & Ciliska, D. (1998). Implementing evidence-based nursing: Some misconceptions. *Evidence-Based Nursing*, 1(2), 38–39.
- Dooks, P. (2001). Diffusion of pain management research into nursing practice. *Cancer Nursing*, 24, 99–103.
- Gennaro, S., Hodnett, E., & Kearney, M. (2001). Making evidence-based practice a reality in your institution. *American Journal of Maternal Child Nursing*, 26, 236–244.
- Jassak, P.F. (2001). Introduction: Evidence-based oncology nursing practice: Improving patient outcomes in the next millennium. *Oncology Nursing Forum*, 28(2, Suppl. 3–4), 23–24.
- Lopez-Bushnell, K. (2002). Get research-ready. *Nursing Management*, 33(11), 41–44.
- McCaughan, D., Thompson, C., Cullum, N., Sheldon, T.A., & Thompson, D.R. (2002). Acute care nurses' perceptions of barriers to using research information in clinical decision-making. *Journal of Advanced Nursing*, 39, 46–60.
- Mulhall, A. (1998). EBN notebook. Nursing, research, and the evidence. *Evidence-Based Nursing*, 1(1), 4–6.
- Oermann, M.H., & Floyd, J.A. (2002). Outcomes research: An essential component of the advanced practice nurse role. *Clinical Nurse Specialist*, 16, 140–144, 145–146.
- Padilla, G.V., Ferrell, B., Grant, M.M., & Rhiner, M. (1990). Defining the content domain of quality of life for cancer patients with pain. *Cancer Nursing*, 13, 108–115.
- Pedro, L.W. (2001). Quality of life for long-term survivors of cancer: Influencing variables. *Cancer Nursing*, 24, 1–11.
- Rutledge, D.N., & Bookbinder, M. (2002). Processes and outcomes of evidence-based practice. *Seminars in Oncology Nursing*, 18, 3–10.
- Stetler, C.B., Brunell, M., Giuliano, K.K., Morsi, D., Prince, L., & Newell-Stokes, V. (1998). Evidence-based practice and the role of nursing leadership. *Journal of Nursing Administration*, 28(7–8), 45–53.
- Stetler, C.B., Corrigan, B., Sander-Buscemi, K., & Burns, M. (1999). Integration of evidence into practice and the change process: Fall prevention program as a model. *Outcomes Management for Nursing Practice*, 3, 102–111.
- Tomey, A.M. (2003). Learning with cases. *Journal of Continuing Education in Nursing*, 34, 34–38.
- Watson, G., & Glaser, E. (1964). *Watson-Glaser critical thinking appraisal manual*. New York: Harcourt, Brace World.

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