Happenings

Resources to Facilitate Research in Advanced Practice Nursing

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The Canadian Health Services Research Foundation/Canadian Institutes of Health Research (CHSRF/CIHR) Chair in Advanced Practice Nursing (APN) is held by Dr. Alba DiCenso. The Chair Program in APN has a 10-year mandate to increase the number of nurse researchers in Canada conducting policy-relevant research related to APN. The Chair Program facilitates the conduct and uptake of APN-related research through the education and mentoring of researchers and linkages with decision-maker partners. Central to its activities are partnerships with decision-making organizations that both advise on the relevance of projects for their decision-making needs and disseminate the evidence that is generated (Bryant-Lukosius, Vohra, & DiCenso, 2009).

The Chair Program has produced a number of resources to support the conduct and application of APN-related research. The following resources will be briefly described below: (1) Participatory, Evidence-Based, Patient-Centred Process for APN Role Development, Implementation, and Evaluation (PEPPA framework); (2) graduate course on APN research methods; (3) workshop on evidence-informed decision-making; (4) toolkit on APN data collection; (5) database on APN literature; and (6) policy briefs to disseminate research findings. Many of these resources can be freely accessed via the Chair Program Web site (http://www.apn-nursingchair.mcmaster.ca).

PEPPA Framework

The PEPPA framework was created to provide a guide for APN researchers, health-care providers, administrators, and policy-makers in optimally developing and implementing APN roles (Bryant-Lukosius & DiCenso, 2004).

The framework comprises a nine-step process (see Figure 1). Steps 1 to 6 focus on establishing role structures. This includes health-care decision-making and planning around the need to develop and implement a
new model of care that may require an APN role. Step 7 concerns role processes and entails initiating the implementation plan and introducing the APN role. Steps 8 and 9 include the short- and long-term evaluations of the APN role and the new model of care to assess progress and sustainability in achieving predetermined goals and outcomes. A core component of this step-by-step approach is the collective involvement of key stakeholders, including patients, in the planning and evaluation process (Bryant-Lukosius & DiCenso, 2004).

The PEPPA framework has been used to guide systematic programs of research focused on the nurse practitioner (NP) role in long-term-care (Donald et al., 2009; McAiney et al., 2008) and specialty settings (McNamara, Giguère, St-Louis, & Boileau, 2009), APN roles in oncology (Bryant-Lukosius et al., 2007; Martelli-Reid et al., 2007), and advanced physiotherapist roles (Robarts, Kennedy, MacLeod, Findlay, & Gollish, 2008). It is being used by regional health authorities to implement new NP roles (Advanced Practice Nursing Steering Committee, Winnipeg Health Authority, 2005; Sawchenko, 2007) and to develop policies to support the implementation of clinical nurse specialist (CNS) roles (Avery, Hill-Carroll, Todoruk-Orchard, & DeLeon-Demare, 2006). For more information about the framework, visit http://www.apnnursingchair.mcmaster.ca/peppa.html.

**Graduate Course on APN Research Methods**

Every spring since 2003, the Chair Program has offered a distance graduate course titled Research Issues in the Introduction and Evaluation of Advanced Practice Nursing Roles that is open to graduate students, practising advanced practice nurses, nurse managers, and other health-care decision-makers involved in the development of APN roles. In the course, students from across Canada examine definitions and models of advanced nursing practice, learn the research designs and methods for applying each step of the PEPPA framework in the introduction and evaluation of new APN roles, examine strategies for developing effective partnerships with decision-makers, and learn how to write an APN-related research proposal. The course combines face-to-face and distance education modalities and is taught in a small group using problem-based learning. At the end of the course, each student defends a peer- and faculty-reviewed APN-focused research proposal. More information can be found at http://www.apnnursingchair.mcmaster.ca/education_learning.html.

**Workshop on Evidence-Informed Decision-Making**

The Evidence-Informed Decision Making Workshop is a 1-week intensive course offered annually by the Canadian Centre for Evidence-Based
Figure 1  The PEPPA Framework: A Participatory, Evidence-Based, Patient-Centred Process for Advanced Practice Nursing Role Development, Implementation, and Evaluation

1. Define patient population and describe current model of care

2. Identify stakeholders and recruit participants

3. Determine need for a new model of care

4. Identify priority problems and goals to improve model of care

5. Define new model of care and APN role
   - Stakeholder consensus about the “fit” between goals, new model of care, and APN roles

6. Plan implementation strategies
   - Identify outcomes, outline evaluation plan, and collect baseline data
   - Identify role facilitators and barriers (stakeholder awareness of role; APN education; administrative support and resources; regulatory mechanisms, policies, and procedures)

7. Plan implementation strategies

8. Evaluate APN role and new model of care

9. Long-term monitoring of the APN role and model of care

ROLE OF NURSING PROFESSION AND APN COMMUNITY
- Define basic, expanded, specialized and advanced nursing roles and scope of practice
- Define standards of care and APN role competencies
- Define a model of advanced practice
- Establish APN education programs
- Evaluate APN outcomes

Provide education, resources, and supports
Develop APN role policies and protocols
Begin role development and implementation
Nursing at McMaster University. Evidence-informed decision-making (EIDM) is the purposeful and systematic use of the best available evidence to inform the assessment of various options and related decision-making in practice, program development, and policy-making. One of the small groups is APN-focused. It comprises advanced practice nurses, educators, administrators, and policy-makers seeking to expand their EIDM skills specifically related to the development, implementation, and evaluation of APN roles. This workshop helps participants to hone their skills in searching for and accessing evidence and critically appraising its relevance and quality; interpreting and applying the evidence; and identifying strategies for implementing evidence-informed decisions. For further information, visit http://www.apnnursingchair.mcmaster.ca/education_learning.html or http://ccebn.mcmaster.ca.

**Toolkit on APN Data Collection**

The APN Data Collection Toolkit is a free Web-based, publicly accessible compendium of instruments used in APN research designed to assist researchers and decision-makers who develop, implement, and/or evaluate APN roles. The goal of the toolkit is to allow decision-makers to quickly access APN-related data-collection instruments, assist researchers in designing APN studies, and help students in planning their own APN research. The toolkit assembles both qualitative and quantitative instruments that have been used to collect data in APN-related studies, including instruments that may be useful in answering questions that are clinically focused or that relate to health services (Bryant-Lukosius, Vohra, & DiCenso, 2009; Vohra & Bryant-Lukosius, 2009).

The instruments are organized according to the steps in the PEPPA framework. Information listed on the Web site includes a summary of psychometric properties, other APN studies that have used the instrument, author contact information, and, where available, the instrument in PDF form. New summaries are continually added as they are completed; an example of an instrument summary is presented in Figure 2. The toolkit can be freely accessed at http://apntoolkit.mcmaster.ca.

**Database on APN Literature**

The APN Literature Database is associated with McMaster University’s Health Information Research Unit. It is a freely available, Web-based keyword-searchable database of published papers and grey literature related to the development, implementation, and evaluation of APN roles. The database was designed for practitioners, decision-makers, policy-makers, managers, researchers, and graduate students who need to quickly locate literature related to APN roles. It includes APN-based primary
studies, literature reviews, policy documents, and theoretical and practice-based papers. The search is updated every 4 months, with new results uploaded to the database. The database is searchable using keywords, authors, and/or year of publication and can be freely accessed at http://plus.mcmaster.ca/searchapn/QuickSearch.aspx.

| **Figure 2** Sample APN Toolkit Entry – Instrument to Measure Practice Patterns of Nurse Practitioners in Long-Term Care Related to Pain Management |
|------------------|----------------------------------------------------------------------------------------------------------------------------------|
| **Contact Information** | Please see website for details. |
| **Price and Availability** | Contact author for permission to use. Visit APN Toolkit website to view instrument. |
| **Brief Description of Instrument** | Examines the practice patterns of NPs in long-term care with a focus on pain management. Checklist of what activities are currently preformed by the NP in regards to pain management, and what activities NP should be performing. Identifies barriers to and facilitators of NP role implementation in pain management (open ended response). |
| **Administration Time** | 15–20 minutes. |
| **Scale Format** | Primarily yes/no, short answer, open-ended. |
| **Administration Technique** | Self-administered questionnaire. |
| **Scoring and Interpretation** | Counts/frequencies. Content analysis of open-ended responses. Item frequencies reported in citation. |
| **Content and Face Validity** | Items based on results of literature review and review of similar instruments. Reviewed by NPs, representatives of nursing and physician organizations for face and content validity. |
Policy Briefs

An important knowledge translation strategy for disseminating research findings is the creation of policy briefs. These targeted one-page plain language summaries of policy-relevant APN research are developed for each student thesis project as well as for all APN research projects produced through the Chair Program. A feature of the policy briefs is a highlight of the main issue leading to, and the purpose of, the current research followed by a brief description of its methods, findings, and implications. Each policy brief ends with its most visible feature, the Bottom Line, which is a one-sentence summary of the impact of the research. Policy briefs are a quick and easy way to disseminate research findings to policy-makers, decision-makers, and fellow researchers. To see an example of a policy brief, visit http://www.apnnursingchair.mcmaster.ca/whatsnew.html.

Conclusion

Over the last 8 years the CHSRF/CIHR Chair Program in APN has developed a wide range of freely accessible evidence-based resources to assist advanced practice nurses, novice and seasoned researchers, and health-care decision-makers in systematically developing, implementing, and evaluating APN roles. National long-term research funding has been key to the development of these resources that support practice- and policy-relevant APN research in Canada and internationally.

References


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