

Happenings

Developing Synergy to Enhance the Impact of Nursing Intervention Research on Patient Health

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Introduction

The challenge of nursing intervention research is to conduct studies that are both methodologically sound and clinically relevant. A forum where nurse researchers, students, and clinicians can gain knowledge and network around this goal is crucial to research success. The Quebec Interuniversity Nursing Intervention Research Group/Groupe de recherche interuniversitaire en interventions en sciences infirmières du Québec (GRIISIQ; www.griisiq.ca) is a unique Canadian entity in this regard. Founded in 2003, GRIISIQ is involved exclusively in developing and evaluating nursing interventions and measuring their patient outcomes. It is funded principally by Fonds de recherche en santé du Québec (FRSQ), with additional contributions by the participating universities. It serves as an infrastructure to bring together nurses, researchers, students, and clinicians from Université de Montréal, McGill University, Université de Sherbrooke, and Université Laval.

The purpose of this article is to describe the GRIISIQ nursing intervention research group — its goals, strategies, research productivity, and role in knowledge exchange.

History of GRIISIQ

The seeds of GRIISIQ were planted in 2002, with the impetus of a group of Quebec nurses to advance the field of nursing research beyond description and fact-finding, to interventions with a direct impact on patient health. While there were other areas of excellent nursing research, such as health services research, there were no groups focused specifically on interventions with patient outcomes.

A letter submitted to FRSQ pointed out the need for the development and evaluation of such interventions, for the training of researchers in this field, and for a focus on life transitions as an important point of intervention. A life transition can be any of a variety of changes in the life of a person or a family, including a change in the site or the level of care, a developmental transition such as a birth or death, or a change in health status such as the worsening of a condition or the need for intensified treatment.

In 2003, by virtue of a partnership between Université de Montréal and McGill University, Quebec's first nursing research group was formed, with support from FRSQ and the Newton Foundation. For its first 2 years, the group, initially known as GRISIM (Groupe de recherche interuniversitaire en sciences infirmières de Montréal), focused on fostering alliance between the two academic sites — each with its own research culture, expertise, and linguistic traditions. With time, it began to function as a whole, with trainees benefiting from balanced and complementary input from the two sites.

In 2007 the group expanded to include the other Quebec universities with doctoral programs in nursing — Université de Sherbrooke and Université Laval — and underwent a name change. Currently its membership comprises 21 regular researchers, eight emerging researchers, four associate researchers, seven adjunct researchers, 24 funded students, 20 clinicians, and six clinical decision-makers.

A Unique Approach to Nursing Intervention Research and Its Patient Outcomes

GRIISQ's mission is to develop cutting-edge research on nursing interventions and their patient outcomes. Overall, the group's objectives are to (a) create and consolidate a critical mass of nurse scientists with an interest in intervention research, (b) develop and evaluate innovative nursing interventions in the context of today's health-care system, (c) generate evidence-based knowledge and promote a culture of evidence-based nursing practice, and (d) facilitate the exchange of knowledge between clinicians and researchers. In the long term, GRIISQ is intended to serve as an international authority on nursing intervention research, through collaborative efforts and the creation of a bank of tested interventions.

Multiple Approaches to Research

GRIISQ's research encompasses a wide range of clinical populations, and it uses theoretical frameworks that are drawn mostly from the nursing sciences but also from related disciplines such as psychology, edu-

cation, and epidemiology. For every study, interuniversity collaboration and/or collaboration with health-care agencies is emphasized. Studies focus on the development of innovative interventions, refinement of existing interventions, or adaptation of interventions to other clinical populations or health-care settings. GRIISIQ members also conduct qualitative studies aimed at intervention development — for example, the exploration of needs. There is also a strong emphasis on randomized controlled trials, feasibility studies, pilot studies, and the development of indicators that are sensitive to nursing interventions. The following are but a few examples of such studies: a sensory minimization intervention to promote physiological stability and minimize the pain response of preterm infants; a psycho-educational intervention for caregivers of individuals with early-stage Alzheimer's disease; a computer tailored intervention to optimize adherence to antiretroviral treatment in people with HIV; and validation of a pain-assessment measure in critically ill or unconscious patients.

Creating Synergy for More Comprehensive Research

While nursing researchers tend to focus narrowly on the specific populations and issues of interest, GRIISIQ strives for collaboration across a diverse range of expertise and experience. To facilitate collaborative opportunities between members, the group functions in four research teams comprising a mix of researchers, clinicians, and graduate students from the four participating universities. The resulting heterogeneity serves to strengthen the scientific foundation that is relevant to all nursing intervention research. The generic results can then be applied to specific clinical issues or populations.

The four teams explore different but complementary themes. Team 1 focuses on the development of nursing interventions, Team 2 on the evaluation of interventions, Team 3 on knowledge exchange throughout the research process, with appropriate knowledge uptake as the final step. Team 4 is dedicated to research design and the delivery of complex nursing interventions in clinical environments. Each team strives to meet annual scientific productivity goals through the publication of educational and research materials, the organization of internal scientific activities, participation in knowledge-exchange activities, and applications for research grants.

Strategies to Enhance Research-Driven Nursing Practice

GRIISIQ uses many approaches to advance its research agenda and strategically direct nursing practice towards improved patient care. Both

within and beyond their team work, GRIISIQ researchers continue to develop comprehensive and innovative research intervention programs aimed at making an impact on patient health. Investments in infrastructure, student training, partnership collaboration, continuing education for clinicians, and public awareness all contribute to new knowledge that advances clinical practice.

Providing Infrastructure Support

GRIISIQ offers multiple sources of support to researchers, enabling them to become competitive and to undertake complex research studies. Financial support comes from a comprehensive grant and fellowship program that, in addition to funding research, enables members to attend continuing education seminars or present their findings in the international arena. Statistical/methodological consultants help members to select appropriate study designs, determine optimal sample sizes, plan data analyses, and interpret results. Professional writing consultations with a medical journalist, a translator, and an editor allow members to target their manuscripts for the appropriate journals. The provision of office space, computers, and Web-conferencing facilities allows for efficient meetings. In addition, GRIISIQ hosts its own workshops and seminars, to enable its members to interact with other experts in the field of nursing intervention research.

Training the Next Generation of Academic and Clinical Scientists

Today's students are tomorrow's leaders. Therefore, in response to the enormous need for highly educated nurses, GRIISIQ has invested much of its resources in fostering the careers of young researchers, training them to use research as a basis for influencing future practice and policies. By offering a competitive grant and fellowship program, GRIISIQ attracts the brightest students from the province of Quebec and elsewhere and helps them to move forward in their careers. Within GRIISIQ these students have an opportunity to bolster their network, implement their findings in a clinical setting, submit grant proposals that prepare them for the reality of high academic expectations, and publish early in their career. In terms of their contribution to nursing knowledge, GRIISIQ trainees are well schooled in various methods of intervention research so that they will be generators of knowledge as well as consumers of knowledge.

To date, GRIISIQ has provided funding for a host of student studies at the graduate level, including 14 doctoral, two postdoctoral, and six master's level studies, and has awarded 16 doctoral, eight master's, and two postdoctoral fellowships. It has awarded seven undergraduate fellow-

ships to fast-track students towards a research career, as well as 13 travel grants to enable students to present their work to national or international audiences or to obtain specialized training in their field.

Consolidating Key Partnerships

When the group was formed, it consisted almost exclusively of nurse researchers from Université de Montréal and McGill. By evolving from GRISIM to GRIISIQ and adding Sherbrooke and Laval, the group has increased its academic partnerships, and its membership count and financial capacity have also grown significantly. In addition to its ongoing collaboration with the Canadian Nursing Foundation, GRIISIQ has recently diversified its research partnerships, securing a partnership with the Quebec Nursing Research Foundation (FRESIQ) for the funding of pilot studies and clinical research studies. GRIISIQ is in the process of forming partnerships with other research groups, with a view to broadening the spectrum for research outcomes and diversifying future audiences. Particularly important — and unusual for a nursing research group — is the inclusion of clinical partners. Since its founding, GRIISIQ has more than doubled its clinician membership and has increased the number of clinical decision-makers on its Scientific Evaluation Committee and its Board of Directors. This participation is central to the development of GRIISIQ, as these partners are both liaisons for knowledge about current health issues that can be addressed in GRIISIQ's research and facilitators for the implementation of GRIISIQ-funded studies in their institutions.

Fostering the Emergence of Studies by Clinicians

GRIISIQ was created in response to an obvious need for the fostering of evidence-based practice in nursing. In this regard, the development of a research-based culture in clinical arenas and consultation with clinical experts with respect to research orientation remain its top priorities.

Clinicians play an active role in bridging the research and clinical communities. Therefore, GRIISIQ has responded to the needs of its clinician membership by facilitating the active involvement of clinicians in research activities in their clinical milieus. While clinicians are ultimately involved in the implementation of nursing intervention research, many would like to be more actively involved in intervention research. To this end, GRIISIQ has developed a special program to enable clinicians to reconnect with research and to become familiar with the research process. The program consists of a series of four half-day workshops hosted by a nurse scientist and using GRIISIQ research studies as examples. The purpose is to enable clinicians to “touch base” with research

and gain experience with various research tools — the ultimate goal being generation of their own studies. This approach also facilitates the integration of research-related knowledge in their day-to-day professional activities. Themes in this program include: learning how to formulate a clear and pertinent research question from a clinical issue that the clinician has experienced; identifying the facilitating factors and potential obstacles in launching a research study; locating the scientific literature pertinent to the research question or a particular clinical issue; becoming knowledgeable about the different types of studies and their associated research methodologies in order to judiciously choose the appropriate method; and learning about the different elements involved in writing a clear and articulate grant proposal.

GRIISIQ encourages clinicians to team up with other group members to take advantage of its new clinical research grant competition. The program targets clinical nurses who wish to work with GRIISIQ researchers, either as principal investigators or as collaborators on a specific project. A nurse clinician has already teamed up with two GRIISIQ researchers from Université de Montréal and the McGill University Health Centre to act as the principal investigator on a GRIISIQ-FRESIQ study evaluating an educational intervention on women's self-efficacy and anxiety before surgery for breast cancer.

Conclusion

In conclusion, GRIISIQ's collective efforts by nursing intervention researchers are greater than the sum of its parts. The group's international symposium, to be held in Montreal in 2011, is expected to attract the most visionary and talented minds. These research scholars will come to exchange innovative ideas in a forum that will vector nursing intervention research to the next level, making it an important resource for all clinical practice and patient-centred care initiatives. A future goal is to increase public awareness about nursing intervention research and how the public might ultimately benefit from it.

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