Research in Progress

Volume 9, Issue 3

Province-Wide Research Study Highlights Multi-Zone Collaboration Capacity

Heather Neville and co-investigators completed a prevalence study across 16 Nova Scotia hospitals surveying benzodiazepine (BZD) and sedative-hypnotic drug (SHD) use in the study "Benzodiazepine and Sedative-Hypnotic Drug Use in Nova Scotia Hospitals: A Point Prevalence Survey".

During May – August 2016, a prevalence study was conducted by reviewing the health records of adults admitted to hospitals with >30 acute care beds. The team set out to identify characteristics of drug use and possible targets for quality improvement in the use of BZD/SHD especially in older adults where the risk of falls, fractures and confusion is higher.

Success of the study was in part due to the availability of data from 16 hospitals under the new Nova Scotia Health Authority as well as one approval from the Research Ethics Board (REB) covering the whole province.

The study was funded by the Drug Evaluation Alliance of Nova Scotia (DEANS), NSHA Research as well as the NSHA Pharmacy Department. Dr. McGrath, Integrated Vice President, Research, Innovation and Knowledge Translation, was particularly interested in supporting a research project that spanned across the province. This collaboration was of interest to not only the investigators and funders but the participating hospital staff as well. Individual hospitals asked to be given a report of their BZD/SHD usage so they could track against province-wide data.

Across the province, 35% of hospitalized patients had been administered a BZD/SHD during the study. Zopiclone and trazodone were most commonly prescribed, just over half (55.7%) were initiated at home and the average age of patients was 70.3 years. Areas identified for quality improvement included decreasing use in older adults, preventing initiation in hospital and improving documentation of use.

"The fact that the REB was provincial streamlined our approval process; we appreciated making only one application."

This NSHA-wide research project helped to establish a collaborative network for province-wide research going forward.

Pharmacy Research Team: Left to right: Jennifer Pitman, Jennifer Isenor, Susan Bowles, Heather Neville (PI), Laura Minard, Melissa Gehrig, Mia Losier. Not pictured: Ellen Penny.

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nova scotia health authority
Research Services

RMU: Providing Answers

Do you have questions? The Research Methods Unit's has answers!

This issue's answer provided by: Daniela Meier, RMU Manager- daniela.meier@nshealth.ca

How do I develop a good quantitative research question in clinical and health research?

The development of a researchable question is considered one of the more challenging tasks a researcher encounters when beginning a project. A research question provides the foundation of a study as it guides and centres the project by defining the area of interest that will be addressed. It encompasses uncertainty about a specific problem that can be challenged, examined and analyzed to provide useful information. The success of a research project relies on the ability of researchers to formulate appropriate research questions based on their ongoing research and/or daily clinical practice. Therefore, the question must be clear, focused and synthesize multiple sources to present a unique argument. Ideally, a hypothesis rather than data drives the development of any research question and should be developed before the start of a study as its methodology is determined by that question.

So, what is the best way to formulate a good research question? Start by choosing a general topic of interest/concern and conduct preliminary research on this topic in current periodicals and journals, draw from your previous research, speak to colleagues, mentors, patients, or attend conferences to see what research has already been done in this area. This search will also help you assess what types of questions the topic generates. A comprehensive systematic review on the topic is key to evaluating the existing literature.

The next step is to narrow the broad research topic into a more manageable research problem by considering the following questions:

Is the topic relevant? Is the problem important enough to warrant extensive research? Will the results address the problem?

From there, the specific research problem is refined into a researchable question that includes measurable objectives. Two essential frameworks have been developed to help guide researchers in this task. The FINER criteria (Hulley et al.(2007)[1] are more general criteria and consider broader aspects that can help develop a successful research study. According to FINER, a good research question must specify the population of interest, be of interest to the scientific community and (ideally) the public, has clinical relevance and will further current knowledge in the field.

Daniela Meier, RMU Manager

The PICO framework (1995)[2] has been developed for evidence-based practice to frame and answer a clinical or health care related question. PICO helps identify the four essential parts of a well-built research question: patient problem or population (P), intervention (I), comparison group (C), and outcome(s) (O).

In conclusion, researchers are well advised to focus resources and time on the development of a good research question, in order to avoid the common pitfalls of a poorly designed research question. They may include: the question is too broad, not interesting or novel; there are not enough participants/patients to answer the question; study is too expensive to answer the question. Your research question will provide the foundation for your hypothesis and objectives, determine your study design and, consequently, establish the chances of finding clinical relevance and prospects for publication.

[1] Hulley S, Cummings S, Browner W, et al. Designing clinical research. 3rd ed. Philadelphia (PA): Lippincott Williams and Wilkins; 2007

[2] Richardson, W.S., Wilson, M.C., Nishikawa, J. & Hayward, R.S. A. (1995). The well-built clinical question: A key to evidence-based decisions ACP JournalClub, 123, A12-13.

Researcher Profile

Christiana MacDougall Fleming is a Registered Social Worker currently practicing in Amherst, Nova Scotia at Cumberland Mental Health Services (NSHA) as Adult Team Coordinator & Clinical Therapist and is on track to complete her dissertation research at Memorial University by the end of 2016. She received funding from the NSHA Research Fund in 2016 and is actively recruiting in New Brunswick as well as the Central and Northern Zones of NSHA.

Christiana MacDougall Fleming, MSW, PhD Candidate Memorial University

What is your current research project?:
"*A Social Work Exploration of Distress in Childbirth*" I am researching birth stories using a feminist narrative approach. I believe that this qualitative approach is underrepresented and I am happy that NSHA is adding another type of information to inform decision making. I am exploring how informed consent decisions happen (in the heat of the moment), ideas of "goodness" and how birth experiences are connected to those general ideas, how language changes our childbirth experiences and what system barriers create distress.

How did you become interested in your research topic? I have always been interested in women's mental health and how normal life events become pathologolized; events get attached to ideas of illness. I've had children myself and anecdotally heard of times where childbirth has been attached to illness. I started to explore the area and realized there was a gap in literature.

What has been unexpected about your findings so far? Breastfeeding. I thought that delivery/labour would be the central point but it turns out breastfeeding is dominating the conversation not only in a physical sense but also in terms of the ideas of "goodness".

What's innovative about your research? I am the first social worker looking at this topic from a social work perspective, and also using the feminist narrative approach is relatively uncommon.

What unique tools/methods do you use to do your research? I started with 'What are women's adverse affects with childbirth?', gathered stories and built from there. I am using feminist narrative inquiry and analysis, a narrative approach through a feminist lens. Interviews are recorded and then transcribed. I do a short analysis that I send back to the participants outlining their stories, my ideas and some of the common themes from the project.

One word that best describes how you work: Collaboratively

What technology can't you live without?: iPhone 5S, Macbook Pro, iPAD. My kids often joke that I have more spreadsheets (I use Excel) than anything else. I am also a big list maker. I love Wunderlist and I use Twitter to stay current, follow feminist blogs and keep my literature review current.

How do you envision your research benefiting the "public at large"? I have asperations that my research would help develop a more comprehensive approach to childbirth where we consider the mental health needs of women in concert with physical needs. I'd like to run a pilot project to have mental health professionals follow up after child birth the same way that doctors/nurses follow up post-surgery. I would ask: "Would this have any impact on post-partum suffering/depression?" We could also make some system changes with a goal to prevent adverse affects.

Dr. McGrath Accepts Inaugural Legacy of Leadership Award from HealthCareCAN

NSHA/IWK Integrated Vice President of Research, Innovation and Knowledge Translation, Dr. Patrick McGrath is the recipient of the very first Legacy of Leadership award from HealthCareCAN. The Legacy of Leadership award is a prestigious award that "*recognizes exceptional individuals who have made long-lasting and outstanding contributions to advancing Canada's health system and have demonstrated significant and sustained commitment toward the enhancement of the health of Canadians*".

In response to the award, Dr. McGrath said: "*Legacy implies you are finished, in the last innings of my career, I intend to do as much as I can to advance health for Canadians*." He thanked his family, staff and colleagues for their support throughout his career.

Dr. McGrath has published 300+ peer reviewed papers, 50 book chapters and 14 books in the areas of e-health, pediatric pain and psychology. He is senior editor of the Oxford Textbook

"Legacy implies you are finished, I am not finished. In the last innings of my career, I intend to do as much as I can."

of Paediatric Pain, founding director of Pain in Child Health and originator of the Translating Research into Care (TRIC) Grant program. The Strongest Families Institute, which he founded,

Dr. Patrick McGrath received the inaugural Legacy of Leadership Award in Ottawa.

provides mental health care to families in Canada, Finland and Vietnam. He was a key player in the development of the BIOTIC translational imaging research facility and the IWK Research Registry. In addition to being a clinical psychologist, senior health administrator, scientist and social entrepreneur, Dr. McGrath is also a professor at Dalhousie where he founded the clinical psychology PhD program.

Dr. McGrath has received many awards most notably the 2013 Earnest C. Manning Principal Award, a Mental Health Commission Innovation Award. He is an officer of the Order of Canada and a fellow of the Royal Society of Canada and the Canadian Academy of Health Sciences.

A video about this award can be viewed here: https://vimeo.com/187654699

Welcome Amy Wilson

After over 10 years in Research Services, Emily Walker is enjoying a well deserved retirement. Emily enjoys gardening and spending time with her family and we wish her the best.

Amy Wilson joined Research Services as the new Publications Coordinator in the Spring of 2016. She tells the stories of researchers in this and other publications published by Research Services.

After completing a BA at Acadia (Nova Scotia) and Masters of Science in Publishing from Pace University (New York), she is proud to call Halifax home. She enjoys traveling, spending time out doors with her family, skiing, camping and geocaching as well as playing the drums. She values being involved in her community and volunteers as the Director of Communications for the NS Chapter of Project Management International (PMI). Amy holds the Certified Associate in Project Management (CAPM) PMI designation and hopes to challenge the PMP exam in 2017.

Amy Wilson is the new Publications Coordinator for Research Services at NSHA

NSHA Staff Obtain Certified Clinical Research Professional (CCRP) Designation

The Society of Clinical Research Associates (SoCRA) offers an International Certification Program to create an internationally-accepted standard of knowledge, education, and experience for Clinical Research Professionals. Candidates who meet specific criteria are eligible to write a certification exam to be recognized as a Certified Clinical Research Professional (CCRP®) in the international clinical research community.

The standards upon which this certification program is based have been set forth by SoCRA to promote recognition and continuing excellence in the ethical conduct of clinical trials.

In the Spring of 2016, seven NSHA staff committed to preparing for this challenging exam and are now Certified Clinical Research Professionals.

Congratulations

Rebekah Conlon	*Research Coordinator, Hematology*
Christine Hines	*Research Coordinator, Clinical Trials*
Trisha Hudson	*Research Coordinator, Hematology*
Kaye LeMoine	*Research Manager, Nephrology*
Flynn Reagan	*Research Assistant, Hematology*
Rebecca Robichaud	*Research Assistant, Hematology*
Jackie Whyte	*Data Management, Nephrology*

Educational Opportunities

Date/Time	Series/Topic	Presenter	To Register/More Info
October 21, 2016 8:30am- 12:00noon	RMU- *Introduction to Biostatistics in Health Research*	Steve Doucette, Senior Biostatistician, RMU	email: daniela.meier@nshealth.ca
November 2, 2016 9:00am- 12:00noon	RMU- *Introduction to Health Economics in Health Research*	Pat Berrigan, Health Economist, RMU	email: daniela.meier@nshealth.ca
November 3, 2016 12:00noon- 1:00pm	Research Education Program, Supports & Services- *Research Development and Publications*	Sandra Crowell, Program Leader, Research Development Office & Amy Wilson, Publications Coordinator, NSHA	email: elaine.strohm@nshealth.ca
November 9, 2016 12-1pm, 1-2pm	Research Education Program, Standards & Regulations- *ICH-GCP & Division 5 Regulations Training*	Janet Gallant, BScN, CCRP, Program Manager, Research Education, NSHA	email: elaine.strohm@nshealth.ca
November 10, 2016 8:30am-3:00pm	RMU- *Designing and Conducting Focus Groups in Health Research*	Olga Kits, Qualitative Methodologist, RMU	email: sandra.pauls@dal.ca
November 16, 2016 12:00noon- 1:00pm	Research Education Program, Building Research Capacity- *Qualitative Research*	Olga Kits, Qualitative Methodologist, RMU	email: elaine.strohm@nshealth.ca
November 17, 2016 12:00noon- 1:00pm	Research Education Program, Supports & Services- *Submitting & Reporting to the NSHA REB: Set Yourself Up for Success!*	Brittany Scott, Administrative Coordinator & Starla Burns, REB Coordinator, NSHA	email: elaine.strohm@nshealth.ca
November 22, 2016 12:00noon- 1:00pm	Research Education Program, Standards & Regulations- REACH- *Privacy, Confidentiality and Research*	Jacquelyn Legere, Compliance Manager for Research Services, Horizon Health Network, New Brunswick	email: elaine.strohm@nshealth.ca
December 8, 2016 12:00noon- 1:00pm	Research Education Program, Supports & Services- *Becoming a Savvy Searcher: Ten Steps to Literature Searching*	Katie MacLean, Librarian Educator, Library Services, NSHA	email: elaine.strohm@nshealth.ca

Date/Time	Series/Topic	Presenter	To Register/More Info
December 14, 2016 12:00noon- 1:00pm	Research Education Program, Building Research Capacity- *Getting Published*	Dr. Lee Kirby	email: elaine.strohm@nshealth.ca
January 17, 2017 12:00noon- 1:00pm	Research Education Program, Standards & Regulations- REACH- *Medical Device Research: What is "Good Clinical Practice"?*	Kelly Trask, Research Manager, Orthopedics Research, NSHA	email: elaine.strohm@nshealth.ca
January 18, 2017 12:00noon- 1:00pm	Research Education Program, Building Research Capacity- *Building and Managing Your Own Research Team*	Dr. Robin Urquhart	email: elaine.strohm@nshealth.ca
February 15, 2017 12:00noon- 1:00pm	Research Education Program, Building Research Capacity- *Quantitative Data Collection & Analysis Part 1*	Dr. Jennifer Payne	email: elaine.strohm@nshealth.ca
March 9 & 10, 2017 8am-3pm & 8:30am-12:30pm	Research Education Program, Standards & Regulations- *Diving into Clinical Trials? SINK OR SWIM*	Janet Gallant, BScN, CCRP, Program Manager, Research Education, NSHA	email: janet.gallant@nshealth.ca
March 15, 2017 12:00noon- 1:00pm	Research Education Program, Building Research Capacity- *Types of Bias in Epidemiologic Research*	Dr. Hala Tamim	email: elaine.strohm@nshealth.ca
April 19, 2017 12:00noon- 1:00pm	Research Education Program, Building Research Capacity- *Research Designs*	Dr. Hala Tamim	email: elaine.strohm@nshealth.ca
April 20, 2017 12:00noon- 1:00pm	Research Education Program, Standards & Regulations- REACH- *Project Management*	Amy Wilson, Publications Coordinator, NSHA	email: elaine.strohm@nshealth.ca

Funding Opportunities

Deadline	Program Name	Agency	More Information
Nov 1, 2016	Translating Research into Care (TRIC)	QEII Foundation	http://www.cdha.nshealth.ca/discovery-innovation/qeii-fdn-tric-grants
March 15, 2017	NSHA Research Fund	NSHA	http://www.cdha.nshealth.ca/discovery-innovation/research-fund-competiton

Research Resources

Researcher Directory- Join Today!

We invite all NSHA Researchers to join our Researcher Directory available on our website. It continues to grow as more and more researchers sign on. It only takes a few moments to join. If you would like to be included, please submit a researcher directory form to Amy Wilson (amy.wilson@nshealth.ca).

You can join the Directory or access Directory listings at:

http://www.cdha.nshealth.ca/discovery-innovation/researcher-directory

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Do you need help refining the quantitative or qualitative methods for your research project, health economics, developing an analysis plan, data collection, building a database, managing your data, or analyzing your data? Would you like a quote for methods support for an upcoming funding application? The RMU can help. Our priority is to support your research.

It's easy—visit our web site to download an RMU Consultation Request form. Complete and send the form to us. We'll be in touch shortly thereafter to book an initial consult during which we will work with you to identify the best solution(s) for your needs. For more information about how the RMU can help your research, how the RMU consulting process works or to request a quote for an upcoming research grant application, please visit: http://www.cdha.nshealth.ca/rmu

CANADA'S TOP 40 RESEARCH HOSPITALS 2015 RESEARCH Infosource Inc.

Research in Progress is produced by NSHA Research Services. You can view this newsletter and the newsletter archive at:

http://www.cdha.nshealth.ca/discovery-innovation/research-progress-newsletter

Please direct inquiries, comments about or items for the newsletter to: Amy Wilson 902-473-5156 amy.wilson@nshealth.ca

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