

Who's Teaching Who?

Reciprocal Teaching and Learning between Pharmacy Students and the Elderly

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Background

- ▶ Increased use of teaching techniques that mimic real-life experiences in teaching / training health professionals:
 - ▶ Role play
 - ▶ Case studies / simulated patients
 - ▶ Inquiry-based / problem-based learning
- ▶ Goal:
 - ▶ Self-directed learning
 - ▶ Develops problem solving skills: Encourages students to identify, classify, and apply clinical knowledge to resolve health-related problems

Team Members – interprofessional, students, senior, community partners

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- ▶ Melly Swamidass, co-founder of Seniors Bridging Cultures Club, Seniors NL
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- ▶ Linda Ou, BScPhm, PharmD Candidate, MSc Candidate, Clinical Epidemiology, McGill University

Community-Based Learning

- ▶ Experiential learning – real life, not simulated patient or paper case study
- ▶ Applied – forces students to integrate knowledge learned
- ▶ Teaches soft skills – communication, active listening, professional etiquette
- ▶ An underutilized approach to teaching / student learning
 - ▶ Promotes student engagement
 - ▶ Enhances students' ability to apply / integrate knowledge learned
 - ▶ May be interprofessional / interdisciplinary – develops teamwork skills

Research Study #1 – Pilot study

- ▶ September 2015 – new teaching/learning strategy in PHM5302 Special Patient Populations (a didactic lecture-based course)
- ▶ University Grants Program: Quick Start Public Engagement Grant
- ▶ Objective: Assess the potential value in having final year pharmacy students interact with, teach, and learn from seniors and new immigrants
 - ▶ At the Seniors Resource Centre (SRC / Seniors NL) and the Association for New Canadians (ANC)
 - ▶ Presentation followed by open sharing / group activity (informal, food involved)
 - ▶ At the SRC, students taught then learned from the seniors; and seniors learned from the students then taught them
- ▶ Positive feedback from all involved (seniors, immigrants, students, group facilitators)

Current Study – why needed? “Patients as partners”

- ▶ Seniors should actively participate in their own health care decisions
- ▶ Nursing home pharmacist comments:
 - ▶ A common theme we hear in conversation with our nursing home patients is a loss of independence. They are unaccustomed to be relying on trained healthcare staff for everyday tasks, (grooming, medication administration...). This can create stress and a reduced quality of life.
 - ▶ This project works to combat this issue. In addition to providing seniors with education and evidence-based medical care, this process allows all involved to learn from our seniors, who are ultimately the experts in their own health.
 - ▶ It will help our patients maintain/regain that sense of independence, autonomy and purpose that they may feel had been lost

Research Study #2 – Current Study

- ▶ Involvement of community-dwelling seniors (Seniors NL, nursing homes)
- ▶ University Grants Program: Teaching and Learning Framework Fund
 - ▶ Significantly larger grant applied for and awarded
- ▶ Objectives:
 - ▶ Expand on the pilot study with respect to seniors in the community
 - ▶ Independent seniors plus seniors with varying levels of dependency (nursing homes)
 - ▶ Ensure sustainability for this activity within the pharmacy curriculum for future years
 - ▶ Course redesign finalized
 - ▶ Equipment purchases for this course activity (to ensure self-sufficiency)

Healthy Aging & Seniors-Centred Care

- ▶ Community support
 - ▶ “Aging in Place”
- ▶ Patient-centred care i.e. Seniors-Centred Care
 - ▶ Seniors should be partners in their own care
 - ▶ Seniors are often very knowledgeable about what works for them healthwise
 - ▶ Health professionals should listen to and learn from seniors
 - ▶ Empowering for seniors

Educational Frameworks

Project Alignment with Memorial Univ. Teaching and Learning Framework (TLF)

- ▶ This project fits within Memorial University's Teaching and Learning Framework (2011), beginning with the Foundational Statement (p.7) that "**teaching and learning...connects learners and educators to each other** (in this case, students-seniors-professor), **our community and our world** (in this case, community-dwelling seniors from various cultural backgrounds), in the service of **knowledge generation and exchange** (in this case, primarily between pharmacy students and seniors)".
- ▶ This project creates opportunities for engagement between students and the community at large (TLF Strategic Plan 2014-2017)

Project Alignments with Educational Frameworks

- ▶ MUN Teaching and Learning Framework (TLF)
 - ▶ Promotes MUN's Core Values in teaching & learning
 - ▶ Follows the guiding principles for the teaching & learning community at MUN
- ▶ Community of Inquiry Framework
- ▶ Koeb's Experiential Learning Cycle
- ▶ Cultural Competency Framework
- ▶ Informed Shared Decision-Making Framework

Promotion of Memorial's Core Values

- ▶ The project promotes Memorial's Core Values (TLF p.8) and helps to develop them in our students:
 - ▶ **collegiality** in engaging seniors with respect,
 - ▶ **inclusiveness** in engaging seniors of diverse cultures,
 - ▶ **responsiveness** in being receptive to the needs of individual seniors and the nursing home population,
 - ▶ **integrity** in being honest and ethical in all interactions with seniors,
 - ▶ **respect** in having regard for seniors' knowledge and experience,
 - ▶ **accountability** in accepting responsibility (for their role as pharmacists-in-training. NAPRA professional competencies 2014)

Principles of the Teaching and Learning Community at Memorial University

- ▶ **builds relationships** and establishes connections between students/educators and seniors (i.e. members of the broader community)
- ▶ **engages people** by requiring purposeful and meaningful participation by students and seniors
- ▶ **creates synergies** by integrating learning from the classroom setting (students), informal learning experiences (seniors), and practical applications (specific health-related topics)
 - ▶ connecting between teaching/learning and the wider community engagement to promote and encourage knowledge co-creation
- ▶ **focuses on the learner**

- ▶ Memorial's core values are generic graduate attributes
- ▶ *Engagement* and *participation* are key principles in developing these core values and are key activities in this project
- ▶ "...learnt through the way students *engage* with the course's learning *experiences...something that is learnt, not something that is taught*, with the learner rather than the teacher being in the foreground". (Barrie SC 2007)

Principles of the Teaching and Learning Community at Memorial University

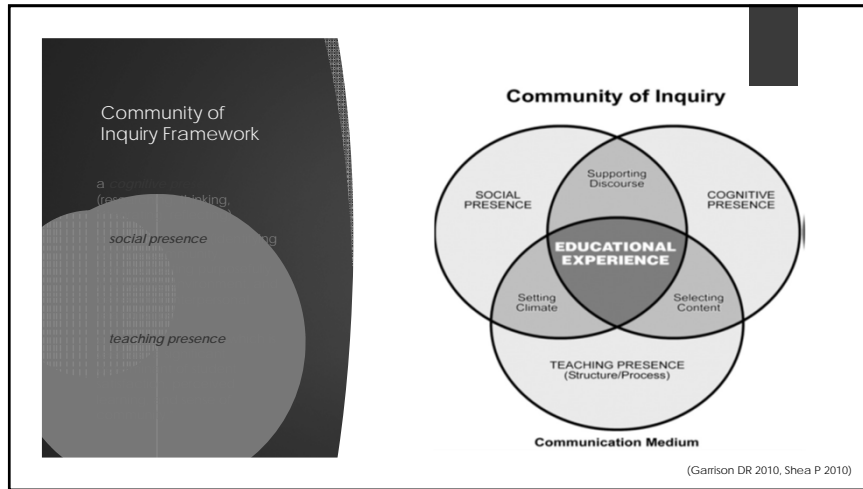
- ▶ **fosters transformation** – this project may serve as an eye-opening experience for our students to foster their transformation from solely being care-providers/teachers to the general public to a dual role of being both care-providers and care-receivers/learners
- ▶ Students must **acknowledge responsibility** that they are responsible for their own learning
 - ▶ since they must research and prepare a suitable presentation to seniors which is evaluated.
- ▶ This project **supports lifelong learning**
 - ▶ as these are activities that working pharmacists should be performing

Community of Inquiry Framework

Learning in this project occurs outside the classroom, and as such follows the three elements of the community of inquiry framework (originally developed for online education)

- ▶ a **cognitive presence** (researching, thinking, integrating, reflecting),
- ▶ a **social presence** (identifying with the community, communicating purposefully in a trusting environment, and developing interpersonal relationships),
- ▶ and a **teaching presence** which is seen as "a significant determinant of student satisfaction, perceived learning, and sense of community."

(Garrison DR 2010, Shea P 2010)



Informed Shared Decision-Making

- ▶ "Patients should be involved in making decisions about their health care." (Towle 1999)
- ▶ This project encourages and empowers seniors to be participants in making decisions about their own health care, and teaches students about informed shared decision making
- ▶ The framework for teaching and learning informed shared decision making includes competencies for the health professional and for the patient (Towle A 1999)

Cultural Competency Framework

- ▶ Dialoguing with multicultural seniors at the SRC may help develop students' cultural competence.
- ▶ This cultural competency framework includes:
 - ▶ knowledge of differential effects of treatment in various ethnic groups
 - ▶ awareness of how culture shapes individual behaviour and thinking, and the social context in which specific ethnic groups live
 - ▶ awareness of one's own prejudices
 - ▶ abilities to transfer information in an understandable way and to adapt to new situations flexibly and creatively

(Seeleman C 2009)

Methodology

Methodology

- ▶ This project uses *applied learning contexts* to develop practice and communication skills, self-confidence and professionalism
 - ▶ achieved by having students provide presentations to seniors and interact informally with **seniors – as living case studies** with insight into lived experiences of wellness and illness
- ▶ Students (4-5/group) present special interest health-related topics to community dwelling seniors, then facilitate round table discussions on the topic/issue, and follow up regarding outstanding client questions (if needed)
- ▶ Not just focusing on substantive content, these sessions also focus on practice-related skills:
 - ▶ active listening, critical assessment of patient responses, and the student's ability to elicit information from the clients/seniors

REFINED AGING SEMANTICS DIFFERENTIAL (R-ASD)

For a 70 – 85 year old man & a 70 – 85 year old woman

Gonzales (2010), Polizzi (2003), Rosencranz (1969)

	1	2	3	4=0"	5	6	7	
Cheerful								Cranky
Pleasant								Unpleasant
Friendly								Unfriendly
Kind								Cruel
Sweet								Sour
Nice								Mean
Tolerant								Intolerant
Cooperative								Uncooperative
Fair								Unfair
Grateful								Ungrateful
Unselfish								Selfish
Considerate								Inconsiderate
Patient								Impatient
Positive								Negative
Calm								Agitated
Thoughtful								Thoughtless
Humble								Arrogant
Frugal								Generous
Flexible								Inflexible
Good								Bad
Hopeful								Despairing
Optimistic								Pessimistic
Trustful								Suspicious
Safe								Dangerous

Evaluations: Mixed-Methods Research

Student Assessment

Formative
Prepared Powerpoint presentations and handouts – prior to session with seniors – feedback given & needed changes made

Summative
Reflective journal entries (graded)

Qualitative

Reflective Journal Entries
Entries purposely allowed to be free-flowing & open-ended
Reflective not descriptive: focus on "what did I learn from this experience?" not "what was this experience?"
Fosters life-long learning & scientific inquiry in students
Focus Groups

Quantitative

Validated Questionnaires
Refined Aging Semantic Differential (r-ASD) – assesses change in student perception of seniors
Attitudes Towards Pharmacists – assesses change in seniors' perception of pharmacists
Tailor-made Questionnaires
Public Engagement Feedback Forms. Adapted & specific. (students, seniors)
Pre- vs Post- Experience

Attitudes Towards Pharmacists

(CSHP 2015)

	1 - Prescription filler	2	3 - Both equally	4	5 - Health Care Provider
Statements about pharmacists in your community	Strongly Agree	Mostly Agree	Mostly Disagree	Strongly Disagree	Unknown
Pharmacists have the education and professional training to do more for patients than just filling prescriptions.					
Pharmacists working with other members of a health care team to provide care to patients with chronic diseases care would result in better health outcomes.					
If pharmacists were included as members of health care teams, patients overall quality of life would improve.					
I consider a pharmacist part of my overall health care team.					
If pharmacists worked more closely with doctors it would reduce overall health care costs.					
If pharmacists were able to prescribe medication for minor ailments, it would alleviate overcrowding in emergency rooms and walk-in clinics.					

PUBLIC ENGAGEMENT SESSION FEEDBACK FORM

Course: PHMS302 Special Patient Populations
 Site: _____

	☹ Strongly Disagree	☺ Disagree	☺ Agree	☺ Strongly Agree	☹ Neither Agree Nor Disagree
The public engagement session helped me to develop skills that I will use as a practising pharmacist.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The public engagement session helped me to further understand my role as a future pharmacy professional.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The public engagement session furthered my understanding of knowledge in practice.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interaction with community members helped me to better understand ethical issues related to pharmacy practice.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The out-of-class activities gave me confidence in my ability to deal with members of the public.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The out-of-class session was a good use of my time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My interest in special patient populations was stimulated by the out-of-class session.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The community session enhanced my overall experience as a learner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The out-of-class activities helped me to meet overall course objectives.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The out of class activities were well organized.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public engagement sessions should be continued in 5302 for future years.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Kolb's Experiential Learning Cycle

This project engages students in Kolb's Experiential Learning Cycle (McLeod 2013):

- ▶ by providing a **concrete experience** (new encounter between students and seniors)
- ▶ and requesting a **reflective observation** (required on-line reflective portfolio after the new encounter),
- ▶ it is hoped that students will modify their concept of seniors and how best to interact with them (**abstract conceptualization**),
- ▶ and apply this new understanding to future interactions with seniors (**active experimentation**).

PUBLIC ENGAGEMENT SESSION FEEDBACK FORM - SENIORS

Course: _____
 Site: _____

	☹ Strongly Disagree	☺ Disagree	☺ Agree	☺ Strongly Agree	☹ Neither Agree Nor Disagree
This session provided me with useful health information.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This session helped me to further understand the roles of a pharmacist.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This session gave me an opportunity to share my knowledge with future pharmacists.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This session gave me confidence in my ability to interact with health professionals (such as future pharmacists).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This session was a good use of my time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This session was well organized.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sessions like this should be continued for future years.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Course Alignments and Learning Outcomes

- ▶ Learning outcomes for these community-based sessions align with the Association of Faculties of Pharmacy in Canada (AFPC) educational outcomes (<http://www.afpc.info/node/39>)
- ▶ In addition to being based on those outcomes identified in the Integrative and Applied Learning Value Rubric created by the Association of American Colleges & Universities (AAC&U) (Rhodes & Finley, 2013). <https://www.aacu.org/value/rubrics/integrative-learning>

Qualitative Findings

The value of social interaction and sharing patient narratives

- ▶ Many students' commented on the overlap between their formal conversations/presentations and the informal interactions with seniors:
 - ▶ informal discussions with seniors prior to presentation
 - ▶ conversations that students had during the social mingling that occurred after their formal presentations
 - ▶ the questions and answer sessions that followed
 Seniors provided rich narratives (and taught students – discussed later)
- ▶ Students also reported:
 - ▶ gaining an appreciation for understanding some of the challenges faced by seniors
 - ▶ gaining an enhanced sense of awareness of themselves as soon-to-be licensed health professionals

Student Journal Entries: Five Core Themes

These core thematic categories include:

- ▶ the value of social interaction and sharing patient narratives
- ▶ the diversity and interconnectedness of patient-specific issues
- ▶ the opportunities for learning from patients
- ▶ the challenging nature of real-life practice settings
- ▶ The value of community-based learning opportunities

Some Verbatim Comments (AB)

"...probably one of the most gratifying experiences that I have had over my four years of pharmacy school...very valuable experience...some [questions] were completely unrelated to our presentation topic...forced us to think on the spot...a great chance to apply what we had previously learned about various conditions or medications..."

More Verbatim Comments (AB)

"...lady...feels as though she does not have a pharmacist anymore...has moved into the home...This really stuck with me...taught me that it is very important for me as a pharmacist to try and maintain that relationship with my patients even if they go into a home and are no longer coming to the pharmacy every month for their refills..."

"...This lady had several questions about her diabetes, which made me realize how valuable a follow-up call could be to a resident in a home like this...In the future, if I work at a pharmacy that provides medications to a home, I will be sure to call the residents periodically to check on them and see whether they have any questions or concerns about their health."

The diversity and interconnectedness of patient-specific issues

- ▶ Professional practice will require pharmacists/students to draw on what they know in order to identify problems before they can be solved
- ▶ Unlike in a formal classroom setting, problems are often not clearly identified or named
- ▶ Health professional schools (e.g. MUN School of Pharmacy) have taken steps to address this by providing *simulated patient care scenarios in skills lab settings* for students to learn how to identify and resolve health-related problems
- ▶ But real life scenarios such as the community engagement activities in this project are clearly more realistic and unpredictable, providing for a better learning venue

The Value of the Informal Socialization Time

CM: "...engaged dialogue ...very social atmosphere. Not only was it an opportunity to educate but also an opportunity for us to learn about them. I hope to create more opportunities like this one when I have graduated."

Some Verbatim Comments (RS) – Recognizing Diversity

- ▶ "...At times, it seems like people in most medical professions group all elderly people together and may talk to them in a way that appears condescending.
- ▶ ...I think it is very important to recognize the needs of every individual person who you are dealing with as a pharmacist. Though some elderly people may have hearing problems their minds are still very sharp. While others can hear clearly but may be experiencing trouble with their memory.
- ▶ ...The opportunity to do this presentation really reemphasized this to me as all of the residents were so different from each other and would all have required different styles of care."

We teach students to be patient-specific in thinking and problem solving, making recommendations and developing care plans. This project created an active learning opportunity.

The opportunities for learning from patients

- ▶ Students reported recognizing that, while they had previously thought of professional practice as being a one-directional teaching activity (i.e. professional to patient), the experience had triggered the realization that practice settings involve a great deal of interaction and dialogue with people, and is a learning activity for them as well (i.e. patient as teacher)

More Verbatim Comments

Student 3: "I especially enjoyed the round table discussion... hearing them give us their input on their own experiences with memory loss and medication compliance...one lady tells us about how she carries a list of medications in her wallet, in my opinion was a great idea, and in my own practice I will encourage my elderly patients to do the same. Surprisingly, I went to this activity assuming that I would be doing the teaching, yet I learned something too!"

Some Verbatim Comments

Student 1: "I noticed how interested the seniors (were)... one woman wrote down the recommendation for ginger Graval instead of taking regular Graval... It really goes to show that by making little recommendations such as this, pharmacists can make a big difference in improving patient safety."

Student 2: "We learned a lot from putting together the presentation... we learned a lot from the seniors as well... One gentleman had injuries from a fall and it was great to hear about his first-hand experience and his tips that worked for him, and we could incorporate these tips into our practice."

The challenging nature of real-life practice settings

- ▶ Students reported feeling exhilarated by their involvement in community settings
- ▶ Students were empowered by their recognition of what they had learned
- ▶ Students were impressed by the energy and enthusiasm of the seniors as well as the quality of the questions that they asked during their presentations
- ▶ Many commented that the experience was a valuable reminder that they would be working in real-life settings in which they would enjoy both considerable autonomy and responsibility in just a "few short months" (Student SC)
- ▶ Sometimes the lessons learnt were more about the importance of patient interaction—a skill many students reported as being more important than they had previously realized

Gaining Awareness About Seniors

"I was not aware of how knowledgeable seniors are about their health and how eager they are to learn new things. This was a great eye opener to my future practice...I was surprised by the amount of questions they asked and how interested they were in the topics that were presented (hypertension and constipation)."

The Value of Community-based Learning Opportunities

- ▶ "Spending time with the residents and hearing them speak of the respect they hold for pharmacists was both fulfilling and gratifying..."
- ▶ "It's that extra step from learning in a classroom to applying it to real life patients that helps to solidify the material for me..."

Learning Soft Skills – Communication

"...beneficial giving a presentation in patient friendly language... something we don't usually get to do."

"This activity allowed us as students to find an easy way to communicate our knowledge without using medical jargon and complicated sentences."

This can sometimes be a challenge as we learn a lot of medical terminology in pharmacy school and it is hard...to alter this to make it easier for patient interpretation. With some practice we were able to adjust our constipation presentation to target the senior audience."

A Final Verbatim Comment

"When I walked out of the SRC today I had the biggest smile on my face because I was confident that I had chosen a fulfilling career. Knowing that I may have had a positive impact on (at) least one of those individuals makes all the exams, assignments, and stress of the last four years definitely worth it."

Student Reflections Summary

Of the Overall Experience

motivating
meaningful *gratifying*
remarkable *humbling* *rewarding*
effective *memorable* *enjoyable*
fulfilling
eye-opening *inspiring* *fun*
valuable

Of the Seniors

interested
appreciative *respectful*
educated *humorous* *happy*
social *eager* *healthy* *knowledgeable*
attentive *wise*
active *energetic*
kind *responsive*
welcoming
engaged

Focus Groups - Seniors

► What qualities seniors think are important in a pharmacist?

- "Good listener"
- "Knowledgeable"
- "Well-mannered"
- "Friendly"
- "Caring"
- "Takes time"
- "Calls you by name"

Focus Groups - Seniors

► Session provided an opportunity for shared knowledge

- "I learned that pharmacists have a much wider role than we tend to think...there is much more involved in terms of advice."
- "I thought it was fantastic...they knew way more than I ever thought they knew. They knew so much about medications...to me they were like doctors."
- "Not everybody has elderly grandparents or elderly relatives that they have contact with so I think it is a very important opportunity to interact with older people and see things from their perspective."

Quantitative Findings

Public Engagement Surveys

- ▶ Administered at 5 separate sites on 12 separate occasions (total of approx. 80 participants)
- ▶ Surveys indicated that the sessions helped to:
 - ▶ provide seniors with valuable health information (97% strongly agree + agree)
 - ▶ provide seniors with a renewed sense of confidence in their ability to interact with health professionals (91%)
 - ▶ gave seniors an opportunities to share their knowledge with future pharmacists (89%)
 - ▶ helped seniors to further understand the roles of a pharmacists (96%)

Seniors' responses - Attitudes Towards Pharmacists

- ▶ Approx. 75 participants for this survey
- ▶ Roles of a Pharmacist:

Prescription filler	More than prescription filler	Both Equally	Less than health care provider	Health Care Provider	No response
6% (n = 4)	7% (n = 5)	45% (n = 33)	3% (n = 2)	23% (n = 17)	15% (n=11)

Public Engagement Surveys

- ▶ Seniors also thought that:
 - ▶ The sessions were a good use of their time (94% strongly agree + agree)
 - ▶ The sessions were well organized (95%)
 - ▶ The sessions should be continued for true years (95%)

Other Seniors' Attitudes/Opinions Toward Pharmacists

- ▶ Pharmacists have the education and professional training to do more for patients than just filling prescriptions. (94% strongly agree + agree)
- ▶ Pharmacists working with other members of a health care team to provide care to patients with chronic diseases would result in better health outcomes (96%)
- ▶ If pharmacists were included as members of health care teams, patients' overall quality of life would improve (94%)
- ▶ "I consider a pharmacist part of my overall health care team" (98%)
- ▶ If pharmacists worked more closely with doctors it would reduce overall health care costs (90%)
- ▶ If pharmacists were able to prescribe medications for minor ailments, it would alleviate overcrowding in Eri and walk-in clinics (90%)

Students' Change in Attitudes Toward Seniors

▶ Initially, my impression of seniors is they are frail, weak and shy individuals.... Today, I met a crowd of energetic eniors who actively listen and ask questions druestions during our presentation which changed my perspective on the aging population,,,

Insights Summary

- ▶ Community-based learning experiences were a valuable addition to didactic teaching
- ▶ Pharmacy students became more aware of concrete issues faced by seniors and how different issues relating to special patient populations overlapped
- ▶ Pharmacy students recognized that seniors were active and intelligent, and often very much aware and engaged in their own health care
- ▶ Some students initially felt nervous, but many reported feeling excited about the possibilities opened up by applying their academic knowledge; as well as feeling more confident about their ability to navigate real-world settings

Students' Change in Attitudes Toward Seniors

▶ It helped me realize that not all old folks are grumpy and hard to deal with. It was actually quite the opposite. Most of the seniors that I spoke to were very sociable and friendly.

More Insights

- ▶ Students often commented on how their initial expectations about the task at hand changed through their encounter
- ▶ Students have gained a new appreciation for the importance of "soft skills" in interacting with patients
- ▶ Students are more aware of the need to carefully parse out and identify different, often overlapping, patient-care issues

Summary

- ▶ These interim findings suggest that the course and associated project offers a productive approach to teaching upper-year students about special patient populations in a setting that promotes critical thinking and professionalism
- ▶ In addition, the seniors themselves reported positive outcomes related to their understanding of pharmacists and their capacity to engage in meaningful and collaborative forms of decision making with their pharmacists

In the words of one student:

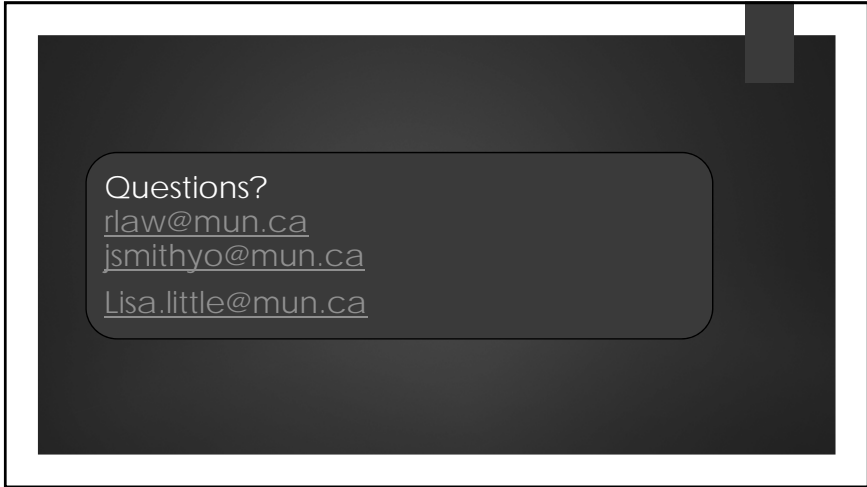
"Doing public engagement activities like this one is the reason I wanted to become a pharmacist in the first place. You don't only get to help people and become a major advocate for their well being just from behind the dispensary counter."

Project Summary

- ▶ This research project is a teaching innovation integrating **experiential learning** with **community health outreach** into a **didactic patient care course** for undergraduate final year pharmacy students.
- ▶ Students teach **seniors** then learn from their "learners", and seniors learn from students then are empowered to teach their "teachers".
- ▶ This project uses applied learning contexts to develop practice / communication skills, self-confidence and professionalism in students.
- ▶ It fosters students' respect for the wisdom of seniors, and knowledge of seniors' health-related issues.

References

- ▶ A Comprehensive Framework for Teaching and Learning at Memorial University. May 10, 2011.
- ▶ Bankle SC. (2007) A conceptual framework for the teaching and learning of generic graduate attributes. *Studies in Higher Education*, 32:4439-458. DOI:10.1080/37507070701476100
- ▶ Garrison DR, Anderson T, Archer W. (2010) The first decade of the community of inquiry framework: a retrospective. *Internet and Higher Education*, 13:5-9.
- ▶ Gonzales, E., Tan, J., Morrow-Howell, N. (2010) Assessment of the Refined Aging Semantic Differential: Recommendations for Enhancing Validity. *Journal of Gerontological Social Work*, 53:304-381.
- ▶ McLeod SA. (2013) Kolb - Learning Styles. Retrieved from www.simplypsychology.org/learning-kolb.html
- ▶ Polizzi, K.G. (2003) Assessing attitudes toward the elderly: Polizzi's refined version of the Aging Semantic Differential. *Educational Gerontology* 29(3):197-216.
- ▶ Rosencranz, H., & McNevin, T. (1969). A factor analysis of attitudes toward the aged. *Gerontologist*, 9 (1): 55-59.
- ▶ Seeleman C, Suurmond J, Stronks K. (2009) Cultural competence: a conceptual framework for teaching and learning. *Medical Education*, 43:229-237.
- ▶ Shea P, Hayes S, Vickers J et al. (2010) A re-examination of the community of inquiry framework: Social network and content analysis. *Internet and Higher Education*, 13:10-21.
- ▶ Teaching and Learning Framework: Strategic Plan 2014-2017
- ▶ Towle A, Godolphin W. (1999) Framework for teaching and learning informed shared decision making. *Brit Med J* 319:766-771.



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