



Forum 2019

Maximizing potential: promoting healthy aging
Maximiser le potentiel : promouvoir le vieillissement en santé

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Book of Abstracts

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SPECIAL EDUCATION SESSIONS

Management of Pain in Older Adults in the Opioid and Cannabis Era

Dr Geoff Bostick¹, Dr Katherine Harman², Neil Pearson³, Lesley Singer⁴, Eric Theriault⁵

¹University Of Alberta, Edmonton, Canada, ²Dalhousie University, Halifax, Canada, ³University of British Columbia, Vancouver, Canada, ⁴McGill University, Montreal, Canada, ⁵The Ottawa Hospital, Ottawa, Canada

Sir John A MacDonald Ballroom, June 28, 2019, 8:30 AM - 9:30 AM

Learning Objectives and Session Content:

The first portion of the presentation will broadly discuss best practices in pain assessment and management in older adults. Speakers will illustrate unique considerations older adults face such as communication challenges, falls risk, frailty, comorbidities and polypharmacy. The second portion of the presentation will focus on specific information about the risks and benefits of opioid and cannabis use for pain management. The final portion of the information will discuss the role of physiotherapists in managing pain in older adults who are using opioids or cannabis for pain management.

The objectives are:

1. Provide broad practical information about physiotherapy assessment and management principles for older adults living with pain
2. Detail specific issues related to opioid and cannabis use in older adults
3. Define the role of physiotherapists in helping older adults living with pain currently using cannabis and/or opioids for pain management

Relevance to Physiotherapy:

Advocating for optimal pain management for older adults is a key role for physiotherapists. Opioid use remains a common treatment for pain in older adults, particularly in long-term care and they are the fastest growing group utilizing cannabis. Physiotherapists need to be informed of the risks and benefits of these medications and how they influence care.

Target Population:

Physiotherapists or physiotherapy assistants (students or clinicians) involved in the management of pain for older adults.

Description of Supporting Evidence:

Older adults are at risk of inadequate pain assessment and management, and there is a high prevalence, particularly in long-term care. There is a common belief that pain in older adults is natural, and should be expected, but these individuals deserve full evaluation, counseling and support like others. In those receiving treatment, opioid medications remain a common prescription for older adult pain and cannabis has become a popular pain management strategy. While opioid prescription can be appropriate in some circumstances, clinicians and sufferers of pain should also be aware of increased risk for fractures, cognitive decline and suicide associated with opioids.(1) The increase in utilization of cannabis is largest in adults over the age of 65 years.(2) While literature on risks and benefits for using cannabis is limited, there may be side effects with implications for older adults, such as balance impairments.(2) Finally, literature suggests many older adults are either misinformed or under informed about the use of medications such as opioids and cannabis.(3) Given the key role physical therapists play in the health of older adults, it is important they understand the role of medications such as opioids and cannabis have in managing pain and how they influence rehabilitation.

Description of Session Format: The 60-minute presentation will include a combination of lecture and opportunities for discussion. Presenters will also incorporate demonstrations of assessment and management strategies throughout.

Conclusions and Implications: Pain assessment and management practices can be improved with attention to the unique considerations facing older adults. Medications such as opioids and cannabis are commonly prescribed, and it is important for physical therapists to understand the risks, benefits and rehabilitation implications for using these medications.

References:

Naples et al Clin Geriatr Med 32:725–735, 2016

Reynolds et al J Am Geriatr Soc 66:2167–2171, 2018

Harbaugh et al. University of Michigan National Poll on Healthy Aging.

Summary

Pain is often under treated in older adults. When treated, opioid and cannabis are common treatments. Patients are often under informed about these medications and they can be associated with important implications for physiotherapy management. Physiotherapists need to be informed on the risks and benefits of these medications and how they influence care.

Physiotherapy as Primary Prevention of Power Problems: Muscle Power Training for Seniors

Dr Scotty Butcher¹

¹*School of Rehabilitation Science, University Of Saskatchewan, Saskatoon, Canada*

Sir John A MacDonald Ballroom, June 28, 2019, 9:30 AM - 10:30 AM

Learning Objectives and Session Content:

The purpose of this presentation is to present evidence supporting the use of long term, whole body resistance training with a focus on enhancing power output in older adults. This session will highlight the impact of power training on physical function and resilience and will demonstrate a need for a shift in the approach used by physical therapists from a reactive to a preventative focus.

At the end of this session, participants will be able to:

1. Discuss the role of muscle power in the performance of daily activities in older adults;
2. Describe how power-type training can be used to prevent declining physical function and enhance physical resilience;
3. Debate the shift in focus that physical therapists need to adequately address power needs as part of a comprehensive physical training programme.

Relevance to the Physiotherapy Profession:

This session will be of relevance to therapists, students, and researchers in that it will present information based on recent evidence regarding the development of power training programs for older adults. In addition to the review of the evidence, the presenter will highlight his clinical and research experience with different types of practical power training for older adults.

Target Population:

This session will be of interest to clinicians, researchers, and students who are engaged or interested in best practice approaches to designing exercise training programs for older adults.

Description of Supporting Evidence:

Provide a descriptive overview of the literature that the topic is based on, as well as the level of supporting evidence. If there is a gap or lack of evidence for your topic, please provide explanation. The role of whole body strength and power training has, up until recently, been underappreciated in clinical practice and guidelines for exercise prescription in older adults. Recent research, however, has demonstrated that a) muscle mass, strength, and power are highly significant independent predictors of mortality, morbidity, and quality of life, b) power training improves clinically significant outcomes related physical function, physical resilience, and performance, and c) power training using non-traditional modes of loading can be as effective as traditional weights and training methods for enhancing power, making this type of training accessible outside the clinical and gym settings.

Description of Session Format:

The format for this proposed 60 minute session will be primarily lecture, however, time for select exercise demonstrations and small group discussion will be reserved to enhance attendee engagement.

Conclusions and Implications:

The physical therapy profession is at a crossroads in terms of its focus for the delivery of exercise-based interventions. There is enough evidence that long term programs which encompass multiple physiological adaptations including strength and power are most appropriate for enhancing performance of older adults in the completion of daily activities and functional tasks, as well as in dealing with life stressors with resiliency. Based on the available evidence, and the current level of skill in this type of prescription in the

profession, a shift in approach is needed to optimize the health and performance of our aging population. Physical therapists are in a prime position to lead this shift.

Summary

This presentation will highlight the current evidence around power-type resistance training for the prevention of declining mobility and in enhancing resilience of our aging community. Based on this evidence, this session will also demonstrate how the physical therapy profession, with a shift in focus, can be leaders in the delivery of practical programs for enhancing power outcomes.

Healthy Aging in a Northern Métis Community: How Cultural Understanding Can Inform Physiotherapy Health Promotion Interventions and Program Implementation

Mrs Liris Smith¹, Dr. Sarah Oosman¹, Dr. Sylvia Abonyi¹, Ms Liz Durocher¹, Mr. TJ Roy¹

¹*University Of Saskatchewan, Whitehorse, Canada*

Sir John A MacDonald Ballroom, June 28, 2019, 11:15 AM - 12:15 PM

Content:

This presentation highlights innovative ways to support healthy aging in partnership with Indigenous populations. During this interactive session we will: feature key components of a collaborative intervention research project entitled “Wuskiwiy-tan! (Let’s Move!): Aging Well in a northern Saskatchewan Métis community”; identify community engagement strategies for implementing effective health promoting interventions relevant to physical therapy practise, including strengths and challenges of applying a Participatory Action Research (PAR) approach; clarify the importance of applying the 4 R’s (respect, relevance, reciprocity, responsibility) and cultural humility.

Relevance:

Trends toward aging exist in Canada, and these trends also exist among Indigenous populations. Indigenous older adults experience greater health disparities across the lifespan than non-Indigenous older adults, and present with more chronic and complex conditions later in life. Indigenous older adults face unique challenges to healthy aging, while little is known about what a healthy aging trajectory looks like from an Indigenous perspective, within a Western- based care system. It is incumbent on clinicians, researchers and health care providers to seek new ways to engage and partner with Indigenous people and to learn new ways to understand healthy aging and wellness. This presentation will focus on the “how” of respectively engaging with a Métis community to support healthy aging, applying a pragmatic approach to implementing health promoting interventions guided by an Indigenous framework and using a “two-eyed seeing” perspective.

Target Population:

This presentation is intended for clinicians, researchers and key stakeholders working with Indigenous populations and interested in learning ways to support healthy aging using culturally relevant services and programs. This presentation will also appeal to health practitioners interested in engaging Indigenous communities to co-create meaningful research questions and outcomes.

Supporting Evidence:

Most Canadians believe that Indigenous populations are generally younger. However, Indigenous peoples are aging at a quicker rate than non-Indigenous populations. In 2006, 4.8% of the Indigenous population in Canada was aged 65 years or older; by 2016, this nearly doubled to 7.3%. Health disparities track throughout the lifespan and by the time Indigenous adults are 75 years or older they report living with 3 or more chronic conditions (while only 23% of non-Indigenous age-matched adults report the same). Presently there is a dearth of research in healthy aging among Métis populations and more needs to be done.

Format:

The session includes a presentation on project findings and small group discussions in workshop style. The interactive workshop component will allow participants to share experiences and ideas related to practising cultural humility; responding to the Truth and Reconciliation Commission Calls to Action in ways that are relevant to physical therapy and healthy aging; and actively engaging in respectful and meaningful partnerships with Indigenous older adults.

Conclusions: Physical therapy practice is informed and dominated by a western worldview. In order to address inequities that exist among Indigenous populations and to better meet the health needs of Indigenous older adults, physical therapists must seek innovative and diverse approaches to care.

Summary

This interactive session will highlight the research project entitled “Wuskiwiw-tan! (Let’s Move!): Aging Well in a northern Saskatchewan Métis community”; identify community engagement strategies for implementing effective health promoting interventions relevant to physical therapy practise through applying a Participatory Action Research (PAR) approach; clarify the importance of applying the 4 R’s (respect, relevance, reciprocity, responsibility) and cultural humility.

Rehabilitation in the Older Adult with Cancer

Ms Jodi Steele¹

¹Niagara College, Welland, Canada

Concurrent Session: Best Practices, Archibald / Campbell Room,
June 28, 2019, 1:45 PM - 3:30 PM

Relevance:

In Canada, older adults with a diagnosis of cancer are surviving longer. With this increased survival comes many different types of disability associated with cancer and its treatments.

Learning Objectives:

At the end of this session, therapists will have an understanding of the most relevant cancers in the older adult population and their medical treatments. Therapists will learn appropriate exercise techniques and safety considerations, how to administer an oncology assessment and how to design an individualized fitness plan for your client's abilities and goals.

Target Population:

As therapists, we are going to assess and treat clients with a diagnosis of cancer in acute care, outpatient clinics, rehab, private clinics and home care. We are just going to see more people that have been touched by cancer in many areas of practice.

Description of Supporting Evidence:

In the last ten years there has been a surge of research done in the area of exercise/ rehabilitation and cancer. Steindorf et. al. (2014) showed a 12-week resistance training program was a safe, feasible and an efficacious strategy to improve cancer-related fatigue and components of quality of life in patients with breast cancer during radiation. Brown and Schmitz (2014) make a compelling argument about the need for continued research to clarify the safety and feasibility of prescribing exercise to survivors of colorectal cancer. Lastly, Kerry Courneya published multiple studies in 2018 and 2019 on exercise interventions for specific cancer types and populations. This session will establish best practice guidelines for oncology rehabilitation in an aging population.

Description of Session Format:

This session will be lecture style with an opportunity to design specific exercise programs for specific cancers. The participants will be able to see videos of actually exercises designed and parameters for treatment (ie. Seated row for an older adult with breast cancer). Case studies will be handed out and in small groups, time will be allotted to brainstorm ideas about best practice and program design. This session will take approximately one hundred and forty five minutes.

Conclusion:

More and more patients are surviving after a diagnosis of cancer but unfortunately living with disability. The intent of this session is to help therapists become more knowledgeable in the world of oncology and inevitably strengthen the profession of physiotherapy.

Reference:

Brown, J. C., & Schmitz, K. H. (2014). The prescription or proscription of exercise in colorectal cancer care. *Medicine and science in sports and exercise*, 46(12), 2202-9.
Durstine, J.L., & Moore, G.E. (2003). *ACSM's Exercise Management for Persons with Chronic Diseases and Disabilities Second Edition*. Champaign, IL: Human Kinetics.
Steindorf (2014). Randomized, controlled trial of resistance training in breast cancer patients receiving adjuvant radiotherapy: results on cancer-related fatigue and quality of life

Summary

This presentation was designed to help educate therapists on the treatment of the older adult with a diagnosis of cancer. Special attention will be given to the oncology assessment, safety protocols, outcome measures and proper exercise prescription.

An Outcome Driven Approach to Keeping Aging Canadians with Hip and Knee Osteoarthritis Active

Ms Rhona McGlasson¹, Ms. Kira Ellis²

¹*Bone And Joint Canada, Toronto, Canada,* ²*Bone and Joint Health Strategic Clinical Network, Toronto, Canada*

Concurrent Session: Best Practices 2, Cartier / Langevin Room, June 28, 2019, 1:45 PM - 3:30 PM

Learning Objectives and Session Content:

The session will present hip and knee OA and its resultant reduction in physical activity and increase in chronic disease for aging Canadians. The Danish program, Good Life with osteoarthritis in Denmark (GLA:D®) will be used to describe how education, neuromuscular exercises and tracking outcomes at one year can increase long term physical activity. Details will be provided on the exercises, including the focus on stability and control of the joints as they are used in everyday activities to reduce the abnormal stresses through the joints. Interactive exercises will be undertaken to introduce the participants to functional joint testing and the normative data that can be used in a clinical setting. Results on the success of the program for aging Canadians to reduce pain and disability will be presented.

1. Understand the pathology of knee and hip osteoarthritis (OA) and the effects in aging
2. Understand the evidence-based program that reduces the symptom progression by 32% across Canada
3. Understanding how physiotherapists can reduce the pain and disability for aging Canadians to increase their physical activity and reduce chronic disease

Relevance to the Physiotherapy Profession:

Physiotherapists play a vital role in the management of patients with hip and knee OA including exercise prescription. GLA:D has resulted in increases in physical activity at 1-year post treatment. Physiotherapists are leaders in implementing GLA:D thereby demonstrating their relevance to the long-term health of people in Canada.

Target Population:

Clinical physiotherapists with an interest in MSK

Description of Supporting Evidence:

Osteoarthritis (OA) is a common chronic condition that can severely affect a person's quality of life. 13% of Canadians (4.4 million) have OA, which is projected to increase to more than 10 million (or one in four) by 2031 (AAC, 2011). Exercise benefit individuals with hip and knee OA reducing their symptoms. GLA:D® has helped individuals with OA reduce their symptoms and increase their physical activity in Denmark and Canada. The program consists of 2 education and 12 neuromuscular exercise sessions over 6 weeks and is effective for individuals with mild, moderate and severe symptoms. Certification is achieved by attending a 1.5 day course and has been provided to over 500 physiotherapists from all provinces and outcome data are collected from participants at baseline, 3 and 12 months post program. Results from 2017 have shown reduced symptoms of 32% with improvements sustained at 3 months. (Davis, GLA:D™ Canada Annual report 2017). By the end of 2018 there were over 1500 individuals who had received the program.

Description of Session Format:

Lecture format with demonstration or interactive.

Conclusions and Implications:

Hip and knee OA can reduce physical activity levels and the quality of life for older Canadians. GLA:D® reduces the progression of the symptoms and increases physical activity at 1 year on a national scale. This session is important for physiotherapists as it will provide the latest evidence in the management of OA and information on how evidence based practice can be implemented across Canada at a clinical level to support aging Canadians to remain physical active.

Summary

Osteoarthritis is a chronic condition that often occurs through aging affecting physical activity and quality of life. Good Life with osteoarthritis in Denmark (GLA:D®) is an education and neuromuscular exercise program that includes tracking outcomes at one year. This session will provide details on the neuromuscular approach including program results in reducing symptoms and increasing physical activity for aging Canadians.

Health Equity among Older Adults: Avenues for Advocacy and Leadership

Dr Shaun Cleaver¹, Ms Lisa Arcobelli¹, Dr Mohammad Auais², Dr Denise Connelly³, Dr Vanina Dal Bello-Haas⁴, Dr Vincent De Paul², Ms Ashley Lowndes⁵, Dr Kathleen Norman²

¹*School of Physical and Occupational Therapy, McGill University, Montreal, Canada,* ²*School of Rehabilitation Therapy, Queen's University, Kingston, Canada,* ³*School of Physical Therapy, Western University, London, Canada,* ⁴*School of Rehabilitation Science, McMaster University, Hamilton, Canada,* ⁵*Health & Rehabilitation Sciences, Western University, London, Canada*

Concurrent Session: Advocacy & Leadership, Coles Ballroom, June 28, 2019, 1:45 PM - 3:30 PM

Learning Objectives and Session Content:

This educational session is focused on the physiotherapy profession's role to improve equitable access to healthy lives among older Canadians.

By the end of this session:

1. Participants will be able to describe the concept of equitable healthy aging and apply it to the consideration of advocacy and leadership strategies.
2. Participants will have identified and prioritized issues for the Canadian physiotherapy profession's health equity advocacy and leadership strategies.

Relevance to the Physiotherapy Profession:

Older adults form a large and growing proportion of the Canadian population. Any health inequity faced disproportionately by older adults has the potential to escalate without actionable steps towards mitigation. Physiotherapists facilitate healthy aging through established and emerging areas of practice. Accordingly, the physiotherapy profession must proactively reflect on its role in promoting healthy aging to ensure that this is equitable.

Target Population:

- Physiotherapists concerned with population health and/or social justice.
- Physiotherapists interested in engaging in strategic leadership and advocacy.

Description of Supporting Evidence:

The importance of health equity and healthy aging are well-established. Health equity is achieved when reasonable action is deployed to counter unjust systematic differences in health outcomes. Healthy aging relates to "functional abilities to be and do what an older person has reason to value."¹ Given the significant aging of populations worldwide, these concepts have been merged and articulated as 'equitable healthy aging'.² Since physiotherapists help their patients maximize function, they are well-positioned to play a prominent role in the promotion of healthy aging.

Physiotherapy service provision in Canada is not always equitable. For example, people in rural areas and Indigenous peoples experience a disproportionate burden of illness and disability but have less access to physiotherapy services.³ The quality of physiotherapist care can also vary depending upon the payer.⁴ With Canada's aging demographics, the physiotherapy profession must take a leadership role and develop a concerted and intentional initiative to promote equitable healthy aging.

Description of Session Format:

This 105-minute educational workshop will focus on the identification and prioritization of leadership and advocacy strategies. Upon arrival, participants will identify and record one professional or personal issue that represents health inequity in older adults. The workshop will then comprise three parts. Part one will include a presentation on the concept of equitable healthy aging and three examples of physiotherapists incorporating this concept into their interventions. In part two, participants will discuss equity-promoting

strategies in small groups. Facilitators will collect the strategies from participants. In part three, facilitators will present the strategies; participants will then interact as a large group to substantiate and prioritize the strategies. Workshop facilitators will record notes from the participants' discussion to craft a finalized list of priority strategies.

Conclusions and Implications:

This action-oriented session will advance the position of physiotherapists as health professionals who can effectively promote equitable healthy aging in Canada.

1. WHO. World report on ageing and health; 2015.
2. Venkatapuram et al. Equity and healthy ageing. Bull WHO. 2017;95(11):791-2.
3. Grona et al. Bridging Health Care Access Gaps in a Remote Indigenous Community. 2018. http://saskphysio.org/images/Oct_2018_Newsletter/Indigenous_CPA_Practice2.pdf.
4. Hudon et al. Physiotherapy for injured workers in Canada: are insurers' and clinics' policies threatening good quality and equity of care? Results of a qualitative study. BMC. 2018;18(1):682.

Summary

This educational session will foster reflection about health inequities among older adults and support the mobilization of physiotherapists to promote equitable healthy aging. Participants will identify and prioritize advocacy and leadership strategies to promote health equity among the large and growing population of older adults in Canada.

TIME™ (Together in Movement and Exercise): How Healthcare and Community Collaboration Can Create Exercise Opportunities Beyond Healthcare Walls

Ms Margot Catizzone¹

¹*UHN- Toronto Rehab, Toronto, Canada*

Concurrent Session: Innovation, Archibald / Campbell Room, June 28, 2019, 4:15 PM - 5:15 PM

Learning Objectives and Session Content:

The session provides an overview of TIME™. TIME™ is a community-based group exercise program, focused on functional exercise for individuals with balance and mobility limitations. TIME™ is a healthcare and community collaboration in that each community partner (i.e. recreation centre) is linked with a healthcare partner (i.e. physiotherapist) who refers participants and offers training and guidance in delivering exercise programs for individuals with balance and mobility issues. At the end of this session participants will be able to: 1) Summarize the features that make TIME™ feasible, beneficial, and safe for a community setting; 2) Identify the important roles for physiotherapists in developing partnerships with community hubs to support them to work with more complex individuals; 3) advocate for launching community-based exercise programs in their respective neighbourhoods.

Relevance to the Physiotherapy Profession:

People living with neurological or other chronic conditions can experience persistent balance and mobility limitations, which often results in inactivity. We know that regular physical activity is essential to aging in good health. Outside of the healthcare system, opportunities for people with balance and mobility issues to participate in exercise programs are limited. A growing and aging population is adding pressure to our healthcare system so we must look outside of healthcare walls to find innovative solutions to address this issue. The TIME™ program serves as an example of how physiotherapists can pioneer innovative new models of care that help promote healthy aging through physical activity for some of the most vulnerable populations.

Target Population:

The session will attract clinicians and community organizations interested in increasing access to community-based exercise for individuals with balance and mobility issues.

Description of Supporting Evidence:

Evidence from uncontrolled studies suggests that group, task-oriented community-based exercise programs incorporating a healthcare-recreation partnership improve balance, leg strength, and walking capacity^{1 2 3}. One randomized trial showed benefit to everyday function⁴. Qualitative evaluations of the TIME™ program show: 1) community partners perceive the healthcare partnership as crucial to sustaining the safety and quality of the exercise program⁵; and 2) participants and their caregivers describe how increased balance, strength, and confidence post-program helps improve mobility, daily function, participation in social and leisure activities, caregiver mental health, and reduce caregiver assistance⁶.

Description of Session Format:

This session will be in lecture format with opportunity for discussion about solutions to implementation and sustainability of community-based exercise programs. Attendees will also view a video of the program which includes participant perspectives, and they will participate in a selection of the task-related exercises from the TIME™ program.

Conclusions and Implications:

People with balance and mobility limitations are more at risk for sedentary lifestyles and declines in functional ability and health status as they age. Access to regular physical activity is essential to mitigate this risk. Implementing and sustaining community-based exercise programs for this population is a

challenge. Partnerships between healthcare and community organizations are necessary to build capacity for safe and appropriate exercise programs that provide a means for vulnerable individuals to stay active. TIME™ demonstrates how physiotherapists can be successful in leading and advocating for exercise opportunities beyond healthcare walls to positively impact healthy aging.

Summary

Outside of the healthcare system, opportunities for people with balance and mobility issues to participate in exercise programs are limited. This session presents community-based group exercise program TIME™, a healthcare-community collaboration, as an example of how physiotherapists can pioneer innovative models of care that help promote healthy aging through physical activity for some of the most vulnerable populations.

Canada's First Accountable Care Unit: An Interdisciplinary Approach to Inpatient Care

Ms Alana Morrissette¹, Dr Ron Taylor¹, Ms Nicole Janeczko¹

¹Saskatchewan Health Authority, Regina, Canada

Concurrent Session: Innovation 2, Coles Ballroom, June 28, 2019, 4:15 PM - 5:15 PM

Learning Objectives and Session Content:

Canada's first Accountable Care Unit (ACU) was established in 2016. Since this time, other Canadian hospitals have adopted this model of care. An ACU distinguishes itself from usual hospital care by co-locating physicians, nurses, and allied health professionals onto a home-unit. Integrated workflows and structured communication protocols exist within the unit. This innovative reorganization of inpatient care delivery has improved outcomes including patient experience, staff satisfaction, length of hospitalization, and mortality. ACUs combine four features which have created unique opportunities for inpatient physiotherapists. This presentation will share ACU research findings and experiences of health professionals.

At the end of this session, participants will be able to:

1. Identify the four features of an ACU.
2. Identify how the ACU care model addresses barriers to interdisciplinary care.
3. Discuss how Structured Interdisciplinary Bedside Rounds, a distinguishing feature of an ACU, have improved patient care and satisfaction.

Relevance:

Acute care physiotherapists can experience barriers to intervention due to inappropriate referrals, ambiguous physician orders, infrequent patient mobilization, and modifiable impediments to patient mobilization. As part of the ACU interdisciplinary team, physiotherapists participate in structured interdisciplinary bedside rounds, receive earlier and more appropriate referrals, and have the opportunity for enhanced involvement and improved outcomes.

Target Population:

This session will be of interest to inpatient physiotherapists, health care providers and unit managers.

Description of Supporting Evidence:

The four pillars of an ACU include: 1) unit-based teams, 2) structured interdisciplinary bedside rounds, 3) unit-level performance reporting, and 4) unit-level nurse and physician co-leadership. A prospective cohort study demonstrated that the geographically aligned nature of an ACU fosters communication, mutual respect, cohesiveness and timeliness. Furthermore, a time series analysis demonstrated a decrease in mortality post-ACU implementation. A prospective study revealed a decrease in hospital length of stay (LOS), 30-day readmission, mortality and improved patient satisfaction. A prospective pilot study also demonstrated a decrease in LOS and decreased trend in thirty-day readmission. In addition, staff satisfaction improved along with patient satisfaction for pain management, overall care, treatment, and patient-centered care. A pilot study examining quality of life and physical performance measures of patients on an ACU will also be discussed.

Description of Session Format:

A physiotherapist and physician will lead a 60-minute presentation. The presenters will describe how usual hospital care is reactive relative to the proactive care on an ACU. The four pillars of an ACU will be explained and discussed by a leading ACU physician. The physiotherapy script for Structured Interdisciplinary Bedside Rounds (SIBR) and opportunity for improved patient mobility, discharge planning and overall therapy intervention will be reviewed by a physiotherapist. The value of professional

collaboration and effective communication for discharge planning will also be addressed. A video of SIBR will be reviewed for key physiotherapy high-performance behaviours and results of improved patient outcomes will be discussed.

Conclusion:

Inpatient physiotherapists can experience barriers to effective intervention. The ACU approach can be beneficial in overcoming such challenges. The co-location of health care providers, structured communication and other ACU features have resulted in improved patient outcomes and staff satisfaction.

Summary

Accountable Care Units are distinguished from usual hospital care by co-locating physicians, nurses, and allied health professionals onto a home-unit. Integrated workflows and structured communication protocols exist within the unit. This innovative model of care has improved outcomes including patient experience, staff satisfaction, length of hospitalization and mortality. ACUs combine 4 features which have created unique opportunities for inpatient physiotherapists.

Promoting Healthy Aging through Aquatic Therapy & Exercise

Ms Alison Bonnyman¹

¹University Of Toronto, Mississauga, Canada

Concurrent Session: Prevention and Health Promotion 2, Tilley / Tupper Room,
June 28, 2019, 4:15 PM - 5:15 PM

Learning Objectives and Session Content:

This session will be a comprehensive review of the advantages of exercising in water, the evidence behind it and appropriate aquatic therapy and exercise (AT&E) that enables active living and optimizes quality of life. Access, protocols and precautions will be explored. At the end of the session, participants will be able to 1) discuss the effectiveness of AT&E for aging individuals based on the evidence, 2) apply AT&E, with evidence and protocols, to common conditions that challenge our aging population, and 3) evaluate the 'fit' of AT&E in their community.

Relevance to the Physiotherapy Profession:

Physiotherapist's (PT) promote healthy, active living and thus facilitate participation in lifelong, community-based physical activity. Aquatic exercise provides a safe falls environment, with low joint load and assists upright mobility. AT&E addresses multi-morbidities. Many retirement homes have pools and community centres offer aquatic programs. As experts in mobility, PT's can optimize effective pool use, influence community programming and ensure that aging adults remain active and independent.

Target Population:

This session will be of interest to clinicians, managers, community leaders interested in supporting best practice in aquatic community programming and bridging the gap between rehabilitation and healthy aging.

Description of Supporting Evidence:

There is an increasing amount research supporting AT&E in the recovery and maintenance of health. The physiological effects of immersion are substantial and guide safe and effective exercise. Condition specific and post-operative AT&E research has investigated appropriate protocols and described positive physiological, functional, physical and social benefits when exercising in water. There is substantial evidence to suggest that exercising in water has added benefits compared to land.

- Liebs TR, Herzberg W, Ruther W, Haasters J, Russlies M, Hassenpflug J, 2012. Multicenter randomized controlled trial comparing early versus late aquatic therapy after total hip or knee arthroplasty. Arch Phys Med Rehabil. 93(2):192-9.
- Baena-Beato PA, Delgado-Fernandez M, Artero EG, Robles-Fuentes A, Gatto-Cardia MC, Arroyo-Morales M. 2014. Aquatic therapy improves pain, disability, quality of life, body composition and fitness in sedentary adults with chronic low back pain. A controlled clinical trial. Clin Rehabil 28(4):350-60.
- Morris DM. 2010. Aquatic Therapy to improve balance dysfunction in older adults. Topic Geriatr Rehabil. 26(2):104-119.
- Bergamin M, Ermolao A, Tolomio S, Berton L, Sergi G, Zaccaria M. 2013. Water versus land-based exercise in elderly subjects: effects on physical performance and body composition. Clin Interv in Aging.8:1109-1117.

Description of Session Format:

This session will be interactive, using powerpoint, iclickers/kahoot and video. Small groups will work through a case scenario to align hydrodynamics and goals. There will be opportunity for discussion about existing AT&E opportunities in their communities.

Conclusions and Implications:

It is important to use all physiotherapeutic tools to enable client-centred, community, integrated participation in the promotion of healthy aging. AT&E can be a significant enabler to engage older adults in safe, regular physical activity. This session will provide the evidence to support safe and effective utilization of AT&E to promote healthy aging.

Summary

Physiotherapists promote and facilitate participation in lifelong, physical activity. Aquatic exercise provides a safe falls environment, with low joint load and assists upright mobility. Aquatic therapy research has demonstrated positive physiological, functional, physical and social benefits. Physiotherapists have an opportunity to engage older adults in safe, aquatic physical activity that is community based and promotes healthy aging.

STAVE OFF: One Private Practice Owners attempt to Navigate the Health and Wellness Space

Mrs Christina Prevett¹

¹Stave Off Physiotherapy, Kingston, Canada, ²McMaster University, Hamilton, Canada

Concurrent Session: Prevention and Health Promotion, Cartier / Langevin Room,
June 28, 2019, 4:15 PM - 5:15 PM

Learning Objectives and Session Content

By the end of this session, participants will be able to

1. Apply action steps to the implementation of health and wellness practices into private practice physiotherapy clinics.
2. Identify red and yellow flags as well as ethical considerations for the role of physiotherapists in the health and wellness space.
3. Explore and assess the needs and considerations for physiotherapists working with gym owners or owning health and wellness spaces.

Relevance:

With the growing aging demographic in Canada and the rise of non-communicable diseases as driving forces in healthcare utilization, hospitalizations and all-cause mortality, there is a need for lifestyle focused interventions and programs. Physiotherapists are primary care clinicians with an expertise in non-pharmacological, conservative approaches to health management. The role of physiotherapists in health, wellness and prevention has gained increased attention over the last several years in light of these realizations.

In the public sector, some of these initiatives have taken place. However, how this looks in a private sector model appears to be more grey.

Target Population:

This session will be of primary interest to clinicians working in the private sector specifically clinicians, business owners and managers interested in diversifying their treatment and program offerings to include health, wellness and prevention initiatives.

Description of Supporting Evidence:

The World Health Organization in their Report on Aging (2015) has called for a paradigm shift in healthcare from reactionary practices to preventative policies and interventions (World Health Organization, 2015). Physical therapists have the knowledge and skills to lead the way in this transition. Previous scoping reviews have cited evidence for the value of health promotion practices in specific populations such as older adults via tertiary prevention (Duplaga M, Gysztar M, Rodzinka M, Kopec A, 2016), as well as on general physical activity promotion (Lowe A., et al., 2016). Research has already investigated the frequency, barriers, and facilitators to which conversations about healthy lifestyle and risk reduction strategies in PT are occurring in other countries (Healey, Broers, Nelson, & Huber, 2012). In the United States, PT acknowledge that it is within their scope of practice to counsel on health practices (Fruth, Ryan, & Gahimer, 1998), and patients feel that PT should speak with them about physical activity and weight loss management (Black, Ingman, & Janes, 2016).

In Canada, we too acknowledge the role that physical therapists can play in health promotion. STAVE OFF Physiotherapy & Exercise Facility was established in 2015. This clinic is a physiotherapy-gym hybrid model that attempts to bridge the gap between what is known about incorporating health promotion practices in physiotherapy services and best practices in regards to business, scope of practice and marketing in the physiotherapy prevention space.

Description of Session Format:

0-30 minutes: Lecture

30-45 minutes: Question and Answer

Conclusion:

It is well-established that physiotherapists have the knowledge, skills and scope of practice to provide services in the area of health, wellness and prevention. It is important for private practice owners to make the appropriate choices when it comes to respecting the rules and regulations as outlined the College of Physiotherapists. The aim of this session is to provide insights to allow physiotherapists to safely navigate this arena.

Summary

Physiotherapists have the knowledge, skills and scope of practice to provide prevention services. Clinicians need to make the appropriate choices in line with rules and regulations of the College of Physiotherapists including when and how these practices fall within the physiotherapy scope of practice. This session is to provide insights to allow physiotherapists to safely navigate this arena.

Mobilizing Evidence to Prevent Falls in Older Clients

Mrs Robin Chernos-Macleod¹, Ms. Cathy Harbidge²

¹Calgary Fall Prevention Clinic, Alberta Health Services, Calgary, Canada, ²Calgary Fall Prevention Clinic, Alberta Health Services, Calgary, Canada

Concurrent Session: Best Practices 3, Cartier / Langevin Room,
June 29, 2019, 8:30 AM - 10:15 AM

Learning Objectives and Session Content:

This session will discuss balance assessments and interventions provided to older adults at the Calgary Fall Prevention Clinic (CFPC). The CFPC's approach, which is based on the results of a randomized controlled trial showing benefit (Hogan et al. CMAJ 2001, 165: 537–543), will be presented. Additions and modifications to the initial approach have been made as new evidence becomes available. This includes adoption of FallProof!™, a balance and mobility certification program. The results of a feasibility study of FallProof!™ we conducted will be shared. Participants will be guided through a case study with analysis of a balance assessment and the creation of a personalized intervention plan based on the client's impairments.

At the end of this session, participants will be able to:

- Synthesize current evidence supporting the role of exercise in fall prevention.
- Understand how FallProof!™ can be used to evaluate balance with evidence-based outcomes, and provide tailored exercise prescription to clients in a group setting.
- While certification is required to teach FallProof!™ classes, participants will be able to apply some of the principles of FallProof!™ in their own practice with older adults.

Relevance to the Physiotherapy Profession:

Falls are a major concern for older adults, their families and society in general due to their impact on health, costs, and quality of life. The Canadian Institute for Health Information (CIHI) reported in 2018 that injuries from unintentional falls led to almost 1,800 emergency department visits and over 400 hospital stays every day in 2017. They were the most common cause of injury in 2016–2017.

Physiotherapists can play a significant role in improving balance and strength, one of the most significant risk factors for falls. This session will provide tools for therapists hoping to expand their assessment and treatment skills in this area of practice.

Target Population:

This session will be of interest to a broad range of physiotherapists including clinicians, managers, professional leaders, and educators interested in the implementation of best practices in fall prevention.

Description of Supporting Evidence:

Balance and muscle strength impairments are one of main risk factors for falls (A.F. Ambrose et al. *Maturitas* 75 (2013) 51–61). Exercise as a single intervention can prevent falls in community-dwelling older people. Programs that challenge balance and are of a higher dose have larger effects (Sherrington C, Michaleff ZA, Fairhall N, et al. *Br J Sports Med* Published Online First: 2016; 0:1–10. doi:10.1136/bjsports-2016-096547.) This session will improve understanding of the available evidence and assist in its adoption and implementation into clinicians' everyday practice.

Description of Session Format:

Session format will incorporate both a lecture, demonstrations with opportunities for interaction, and a case study where participants will analyze assessment findings to develop a safe but challenging intervention plan.

Conclusions and Implications:

With our ageing population, all physiotherapists need to be more aware of effective fall prevention strategies that can be used with their older adult clients. This presentation aims to increase knowledge of best practice in the assessment and treatment of balance disorders in this population, providing practical tips for their application in practice.

Summary

This session highlights balance assessments and interventions provided to older adults at the Calgary Fall Prevention Clinic. With our ageing population, physiotherapists need to be aware of effective fall prevention strategies to be used with older adults. Participants will obtain increased knowledge of best practice in balance disorders in this population, providing practical tips for application in practice.

Building Capacity for Elder Exercise Programming in Remote and Rural Indigenous Communities

Robert Baxter¹, Tiffany Gervasi², Kesa Keeash³, Nancy Keeskitay¹, Carol Lyn Saleese³, Ms Denise Taylor⁴
¹*Eabametoong First Nation, Eabamet Lake, Canada*, ²*Victoria Order of Nurses, Thunder Bay, Canada*,
³*North Caribou Lake First Nation, Weagamow, Canada*, ⁴*St. Joseph's Care Group, Thunder Bay, Canada*

Concurrent Session: Innovation 5, Archibald / Campbell Room, June 29, 2019, 8:30 AM - 10:15 AM

Learning Objectives and Session Content:

This session will enable participants to: 1) Understand health inequities faced by Indigenous peoples and the Truth and Reconciliation (TRC) Call to Action 19, “to identify and close the gaps in health outcomes between Aboriginal and non-Aboriginal communities” 2) Discuss strength-based, capacity-building models of care to deliver community-based programming, and 3) Describe the innovative use of technology to support a Falls Prevention and Community exercise program delivery for Elders in remote communities, addressing distinct health needs.

Relevance to the Physiotherapy Profession:

One-third of seniors over 65 and 50% of seniors over 80 will fall at least once annually (WHO, 2007). Falls are the leading cause of seniors' injury, deaths and hospitalizations and can lead to loss of independence. Preventative programming is necessary to promote health aging in this rapidly increasing cohort (Sutherland, 2018). Indications show Indigenous fall-related injury rates are considerably higher compared to non-Indigenous older adults (Scott, 2018). Physiotherapists are well positioned to deliver falls and injury preventative opportunities using education and exercise programming for seniors (Sutherland, 2018). In addition, physiotherapy screening and assessment skills promote referral to appropriate services. In many Indigenous communities, additional advocacy is required to develop rehabilitation services, requiring innovative models of care using the strengths and capacity of each community.

Target population:

This session will be of interest to clinicians, professional and community leaders, managers, educators and researchers interested in expanding current practices into rural or Indigenous communities using technology.

Description of Supporting Evidence:

Falls prevention programs and strategies have reduced seniors' falls by 20%, increasing quality of life and decreasing healthcare costs (SMARTRISK, 2006). Falls are multi-factorial. Risk factors include physiological, socio-demographic, medical, pharmacological, environmental and behavioural. As such, falls prevention programming must address multiple factors. The BEEACH evidence-based model addresses Behaviour, Education, Equipment, Environment, Activity, Clothing & Footwear and Health Management (Scott, 2017). The Elder Falls Prevention and Exercise classes focus on behaviour changes with modelling and experiential learning; education of participants and healthcare staff; and activity with a focus on strength, endurance, balance, and coordination. Exercise is one of the most recommended falls prevention interventions (Gillespie et al., 2009).

Falls prevention and exercise programming in Indigenous communities specifically needs to: consider the entire life course, use a wholistic framework, address local community priorities, provide local healthcare worker training including risk assessment skills, and build relationships within the community and with supporting organizations (Reading et al., 2011). The Elder Falls Prevention and Exercise classes are a community priority; delivered by local, trained healthcare workers using a wholistic framework; build on community strengths and capacity; and are a venue for relationship-building within the community and with rehabilitation organizations.

Description of Session Format:

Photographic lecture with discussion of participant organizational experiences.

Conclusions and Implications:

The Elder Falls Prevention and Community Exercise program responds to TRC Call to Action to reduce health disparities between Indigenous and non-Indigenous people. The program uses a community, strength-based, capacity-building model supported by kinesiologists and physiotherapists via personal computer videoconference. Each community delivers the program to meet their local capacities, needs, and cultural relevance. Using innovative technological support provides opportunities to expand rehabilitative programming despite limited human resources in remote and rural areas of Canada.

Summary

Elders in remote communities are at risk of falls with significant quality of life consequences. Using videoconference-support, the Elder Falls Prevention and Community Exercise program uses a strength-based, capacity-building community model of care to expand rehabilitative programming despite limited human resources and respond to the Truth and Reconciliation Call to Action to reduce health disparities between Indigenous and non-Indigenous people.

Prevention and Wellness are the Future of the Profession

Dr Scotty Butcher¹, Mrs Christina Prevett²

¹University of Saskatchewan, Saskatoon, Canada, ²McMaster University, Hamilton, Canada

Concurrent Session: Prevention and Health Promotion 3, Coles Ballroom,
June 29, 2019, 8:30 AM - 10:15 AM

Learning Objectives and Session Content:

The purpose of this workshop is to discuss the rationale, purposes, and challenges associated with health promotion, wellness, and prevention physical therapy practices. Using a World Café format, participants will help define the key areas of need for the development of a preventative approach, with a focus on prevention of morbidity and wellness promotion in older adults.

At the end of this session, participants will be able to:

- 1) Discuss the role of prevention, wellness, and health promotion for older adults in physical therapy practice;
- 2) Describe the key gaps in knowledge and skills of entry level physical therapists to be able to implement prevention and wellness practices; and
- 3) Contribute to the development of a “white paper” on the practice/business, advocacy, regulatory, and education concerns in implementing prevention and wellness practices.

Relevance to the Physiotherapy Profession:

As health care trends toward health promotion and wellness foci, the physical therapy profession is poised to lead a ground level shift in practice. In order to do so, however, we must be able to identify the key issues around the implementation of such practices. This workshop will attract input from key stakeholders from the advocacy, business, regulation, and education sectors to identify priorities for change.

Target Population:

This session will be of interest to clinicians, business owners, educators, regulatory bodies, Provincial Association representatives, and advocates for the physical therapy profession.

Description of Supporting Evidence:

The World Health Organization in their Report on Aging (2015) has called for a paradigm shift in healthcare from reactionary practices to preventative policies and interventions (World Health Organization, 2015). Physical therapists have the knowledge and skills to lead the way in this transition.

Research has already investigated the frequency, barriers, and facilitators to which conversations about healthy lifestyle and risk reduction strategies in PT are occurring in other countries (Healey, Broers, Nelson, & Huber, 2012; Aweto, Oligbo, Fapojuwo, & Olawale, 2013; Rea, Hopp Marshak, Neish, & Davis, 2004). In the United States, PT acknowledge that it is within their scope of practice to counsel on health practices (Fruth, Ryan, & Gahimer, 1998), and patients feel that PT should speak with them about physical activity and weight loss management (Black, Ingman, & Janes, 2016).

Description of Session Format:

The format for this proposed 105 minute workshop will be World Café style small group discussion with facilitators who are experts in the education, advocacy (Association), regulation (Colleges), and business aspects of health promotion.

A facilitator will be present for each discussion with prompting questions generated relating to the ethics, regulations, rules, guidelines and scope of practice of physiotherapists in health and wellness.

Conclusions and Implications:

As health care shifts toward health promotion, prevention, and wellness approaches, there is an important emerging opportunity for the profession of physical therapy to lead ground level practice change. In order to do so, we must identify the key benefits and challenges across multiple aspects of the profession. This workshop will lay the groundwork for the development of a white paper on prevention and wellness in physical therapy and begin to establish a network of therapists who can assist with directing the shift.

Summary

The purpose of this workshop is to discuss the rationale, purposes, and challenges associated with health promotion, wellness, and prevention physical therapy practices. Using a World Café format, participants will help define the key areas of need for the development of a preventative approach, with a focus on prevention of morbidity and wellness promotion in older adults.

How Well Do You Have to Walk to Walk for health? A Technological Solution to an Important Question

Mr Ahmed Abou-sharkh¹, Dr Kedar Mate¹, Dr Livia Pinheiro Carvalho¹, Mr Mehmet Inceer¹, Dr Nancy Mayo¹

¹McGill University, Montreal, Canada

Concurrent Session: Innovation 3, Archibald / Campbell Room,
June 29, 2019, 11:00 AM - 12:00 PM

Learning objectives:

At the end of this workshop, the participant will.

- A. Be able to identify the elements of safe and efficient walking;
- B. Have viewed and practiced with the Walk-Well Toolkit, a new innovative solution to promote healthful walking and participate in a therapeutic exercise designed to provide personal experience with applying the Walk-Well elements;
- C. Have brainstormed about barriers and solutions to facilitate the uptake of walking technology by members of the public and therapists.

Relevance to the Physiotherapy Profession:

The practice of Physiotherapy is evolving. Historically, focused on providing therapy in response to health crises, Physiotherapists now have an important role to play in prevention. There is considerable evidence that sustained engagement in physical activity is important for the prevention of health conditions including osteoporosis, obesity, cardiovascular disease, stroke, arthritis, and falls. One of the most accessible and effective physical activities is walking. However, many seniors and people with gait impairments do not walk well enough to sustain walking at an intensity and duration to promote health. This workshop will illustrate a new technology to promote Walking-Well for gait vulnerable populations.

Target Population:

This workshop will be relevant for clinicians, managers, researchers, and industry representatives who have a role in the rehabilitation of people with gait vulnerabilities.

Supporting Evidence:

There is Level 1A evidence (from systematic reviews) that gait training is effective in improving gait pattern, but effects abate with cessation of training. Hence alone, gait training will not translate into the sustained behavioural change needed for promoting healthful walking and for physical activity guidelines to be met. Typically, during gait training therapists use several verbal and visual cues to place the heel first when stepping. This simple strategy changes posture from stooped to upright and lengthens the stride. But once verbal cueing ceases, patients revert to an inefficient foot-flat gait. There is currently no way of providing feedback to patients about their walking quality outside clinical setting. We have developed a technology that can provide this feedback and thereby promote self-management of walking behaviour.

Session format:

The session will be a mix of presentation and “feet-on” experience. Research to date on walking and the development of the Walk-Well Toolkit will be presented followed by three interactive components where participants can: (i) test out the components of the self-assessment strategies; (ii) try out the feedback sensor; and (iii) experience a Walk-Well interactive session. These four 20-minute sessions will be followed by a 20-minute group discussion about next steps and how to make this technology more accessible.

Conclusions:

One-on-one physiotherapy for seniors with mobility limitations, some 20% of older Canadians, is not a possible solution to meet the needs of people who do not Walk-Well enough to reap health benefits. Physiotherapists will need to embrace technology to have a population health impact. Our demonstration of a new technology is an example of how Physiotherapists working in collaboration with researchers, engineers, and industry can provide solutions to real world needs. This workshop will provide Physiotherapists with a view about how the future of clinical practice can change to embrace prevention and promote self-management.

Summary

At the end of this Special Education Session, (1) the participant will be able to identify the elements of safe and efficient walking, (2) have viewed and practiced with the Walk-Well Toolkit, a new innovative solution to promote healthful walking and (3) participate in a therapeutic exercise designed to provide personal experience with applying the Walk-Well elements.

An Innovative Senior Dog Program

Ms Carrie Smith¹

¹*Animal Rehab Division, Oxford Mills, Canada*

Concurrent Session: Innovation 6, Cartier / Langevin Room, June 29, 2019, 11:00 AM - 12:00 PM

Learning Objectives and Session Content:

Dogs age faster than we do!

Over 40% of Canadian homes include at least one dog, and in recent years, owners are becoming more proactive about helping their aging pets stay active and mobile. This presentation outlines a 12-week Senior Dog Mobility Program, which helps dogs improve overall strength, balance, proprioception and mobility as they enter their golden years. Just like in humans, a simple walk is not enough to maintain strength and fitness.

At the end of the session, participants will be able to:

1. Recognize the signs of aging and common conditions seen in senior dogs
2. Use fun and easy ways to mobilize fascia in their own dog
3. Understand hind end, front end and core strengthening exercises using common household items

Relevance to Physiotherapy:

Animal rehab therapists see senior dogs on a regular basis for weakness, stiffness and overall loss of mobility. There are simple and effective exercises that can help these special patients live longer and more comfortably.

Target:

This presentation will be most useful to physiotherapists who are involved in animal rehab, but attendees who are not practicing animal rehab will be able to use these techniques and exercises on their own dogs and may become interested in pursuing animal rehab themselves.

Supporting Evidence:

There is very little research in the field of animal rehab, particularly when it comes to senior dogs. The majority of techniques and exercises are extrapolated from human physiotherapy. Those of us practicing animal rehab see a huge difference in overall mobility once dogs start doing a specific exercise program. It is common to see changes like being able to do the stairs again, being able to get up on furniture again and being able to get into a vehicle again. These changes can actually save a dog's life, as problems with mobility are one of the most common reasons for euthanasia.

Format:

The format of this talk can be either a power point lecture, or if the organizing team can bring in demo dogs, it can be a practical session using the dogs.

Conclusions:

One of the goals of the Animal Rehab Division is to become more apparent to physiotherapists, and to increase the number of Canadian physiotherapists who are practicing animal rehab. One of these ways is to present at national conferences and to introduce animal rehab to the mainstream attendees. This topic will bring a bit of fun to the Forum and show physiotherapists how their skill set can be easily transferred to animals.

Summary

This presentation will help anyone who owns a dog and will show physiotherapists how their skill set can be used to treat a completely different type of patient!

Introducing Technology in Clinical Practice to Increase Levels of Physical Activity for All Patients

Jennifer O'Neil^{1,2}, Dr Chantal von Schoenberg

¹University Of Ottawa, Rehabilitation Sciences, Ottawa, Canada, ²Bruyère Research Institute, Ottawa, Canada

Concurrent Session: Innovation 4, Coles Ballroom, June 29, 2019, 11:00 AM - 12:00 PM

Learning Objectives and Session Content:

We all know that increasing daily physical activity can be beneficial for our health. In the aging population, improving daily physical activity is key in maintaining quality of life. However, barriers such as lack of motivation and poor adherence are constant challenges for physiotherapist. Therefore, the use of technology in the aging population can be an interesting method to help improve the uptake as well as sustaining optimal physical activity.

The main objectives of this education session are:

1) provide an overview of the types of technology used to improve physical activity, and 2) assist the participants in developing creative ways to introduce the use and implementation of technology into their own clinical practice with the aging population.

Relevance to the Physiotherapy Profession:

The World Health Organization report (2018) on aging and health stated that by next year (2020) the population over the age of sixty will be greater than the one under the age of five. This report also identifies that the uptake of regular physical activity can assist in the prevention of non-communicable diseases such as stroke or diabetes. Regular physical activity also contributes to the prevention of falls and improves mobility. Therefore, as expert of physical activity and physical rehabilitation, we must find ways to facilitate the uptake of physical activity for all ages including the aging population.

Target Population:

This session will target physiotherapist working in all practice areas with older adults.

Description of Supporting Evidence:

The use of technology in health care settings, including physical rehabilitation, is constantly growing. Various types of technology such as the use of phone calls, emails, wearable sensors, virtual reality, videoconference have demonstrated to be feasible and effective for clinical use (1–2). These types of technology have also been used to help improve intervention satisfaction and motivation, facilitate adherence and access to rehabilitation services, and assess mobility, as well as the levels of physical activity, by individuals or groups.

Description of Session Format:

The presenters will initially provide a brief introduction of the technology and then facilitate small group discussions. Facilitation will be done in both French and English. During these interactive group discussions, attendees will be divided into small groups and will be asked to brainstorm ideas on how to implement different forms of technology into their current practice.

Conclusions and Implications

Continued innovation in clinical practice is required to provide evidence and patient-centered care. The use of technology can be a simple and low-cost method to help increase the level of physical activity in the aging population.

Reference:

1. Kew KM, Cates CJ. Home telemonitoring and remote feedback between clinic visits for asthma. *Cochrane Database Syst Rev.* 2016;2016(8).
2. Burke L, Lee AH, Jancey J, Xiang L, Kerr DA, Howat PA, et al. Physical activity and nutrition behavioural outcomes of a home-based intervention program for seniors: a randomized controlled trial. *Int J Behav Nutr Phys Act* [Internet]. 2013;10(14):1–8.

Summary

Increasing daily physical activity can be beneficial for our health. In the aging population, improving physical activity has an impact on quality of life. The use of technology can be an interesting tool to help improve the uptake as well as sustaining optimal physical activity. This interactive education session will provide ideas to implement different forms of technology into clinical practice.

Group Reconditioning Programs- Evidence from a One-Year Community-Based Pilot Program

Mrs Wendy-Lee Hamilton¹, Mrs Kathleen Mulherin², Ms Rebecca Crouse³

¹Nova Scotia Health Authority, Port Williams, Canada, ²Nova Scotia Health Authority, Port Williams, Canada, ³Nova Scotia Health Authority, Port Williams, Canada

Concurrent Session: Prevention and Health Promotion 4, Tilley / Tupper Room,
June 29, 2019, 11:00 AM - 12:00 PM

Learning Objectives and Session Content:

evidence of improved functional fitness and data collection methods is foremost.

At the end of this session, participants will be able to:

1) Screen participants directly from the community; 2) Discuss models of frail participants group fitness; 3) Use collected data to motivate participants and implement best practices.

Relevance to the Physiotherapy Profession:

The demand for physiotherapy services are on the increase. Innovative models of lifestyle modification for older community dwelling seniors must be explored. Partnerships with community recreation facilities and their staff can maximize the effectiveness of health care professionals as teams.

Target Population:

This session throws a broad net to professions including clinicians, managers, health educators, information technologists and researchers interested in knowledge translation.

Description of Supporting Evidence:

There has been a great deal of global research linking physical deconditioning to frailty, morbidity and mortality. A large British study (1) demonstrated that poor functional fitness in your 50's was associated with higher mortality rates. The risks of developing chronic diseases as you age can be mitigated by regular physical activity. (2) A recent publication (3) identifies frailty as a major determinate in developing dementia. Frailty is a modifiable factor resulting in poor health outcomes, yet there is no national plan in place to intervene when a person's functional fitness begins to deteriorate.

- 1) Cooper, Rachel, et al. "Physical capability in mid-life and survival over 13 years of follow-up" *Bmj* 348 (2014): g2219.
- 2) McPhee, Jamie S., et al. "Physical activity in older age: perspectives for healthy ageing and frailty." *Biogerontology* 17.3 (2016): 567-580.
- 3) Wallace, Lindsay MK, et al. "Investigation of frailty as a moderator of the relationship between neuropathology and dementia in Alzheimer's disease..." *The Lancet Neurology* 18.2 (2019): 177-184.

Description of Session Format:

We will concentrate on features that make a therapist-lead community groups different from existing fitness professionals' class. Lecture: screening from community, effective use of assistants, evaluation methods
Interactive: use of app technology for ongoing measures, frailty exercise modifications, safety considerations.

Conclusions and Implications:

While Canadians are living longer, we are living with a high disability rate, especially in our last decade. The role of physiotherapists is to identify disability and intervene; to maintain independence and improve quality of life. Our profession can provide leadership in creation of frailty reduction programs for those older adults not able to join regular senior's fitness programs. Making physiotherapist-led groups available within

the community reduces transportation barriers. Partnership with existing recreation facilities and/or community college spaces ensures both sustainability and scalability. Success looks like communities with active seniors, who move between regular recreation and reconditioning programs as needed. The consistent screening and data driven process defines the flow between both co-existing groups. Therapist lead community reconditioning could become a blueprint for healthy aging in this vast county.

Summary

Purpose/Rational: To present a partnership model of community-based care which delivers physiotherapist-led group functional fitness within recreation facilities. Older adults with chronic health challenges are assessed using an app and progress is monitored to ensure optimal outcomes. Our presentation will outline this model of care and its supporting tool box, which can readily be adapted to rural and urban communities.

RAPID FIRE POSTER PRESENTATIONS

Effects of Exercise Training on Lower Extremity Function in Older Adults with Heart Failure: A Systematic Review and Meta-Analysis

Ms Janelle Gravesande

Rapid Fire Posters, Sir John A MacDonald Ballroom, June 29, 2019, 7:30 AM - 8:30 AM

Health Break with Posters, Pope Ballroom, June 29, 2019, 10:15 – 11:00 AM and 1:30 – 2:00 PM

Purpose/Objectives and Rationale:

To determine the effect of exercise training on lower extremity function in older adults with heart failure (HF).

Relevance:

Exercise reduces mortality and hospital admission, but it is unclear whether it improves lower extremity function in older adults with HF.

Materials and Methods:

We searched MEDLINE, EMBASE, CINAHL, AMED and Web of Science from inception to August 1st, 2018. The search was limited by language (English only) and age (≥ 65 years). Reference lists of included studies were also searched for additional studies. Randomized controlled trials that assessed the effect of exercise on lower extremity function (walking speed, endurance, muscle strength and balance) of older adults with HF were included. We used The Cochrane Collaboration's risk of bias tool to assess the quality of included studies.

Analysis:

When possible, a meta-analysis was performed for each outcome using a fixed effects model (low heterogeneity: $I^2 \leq 40\%$) or a random effects model (moderate to high heterogeneity: $I^2 > 40\%$).

Results:

We retrieved 7333 records and 46 studies (2906 participants) were included in the final review. At follow-up (post intervention), we found a significant increase in six-minute walk test (6MWT) distance (14 studies), isokinetic knee extension strength (2 studies), isometric knee extension strength (2 studies) and number of heel lifts (3 studies) as well as a decrease in time taken to complete the timed up and go (TUG) test (2 studies).

Conclusion:

Exercise training improves lower extremity function. However, more trials are needed for some outcomes including heel lifts, knee extension strength and TUG due to the small number of studies (2-3 studies per outcome).

The Effects of Physical Exercise on Executive Function in Community-Dwelling Older Adults Living with Alzheimer's-Type Dementia: A Systematic Review

Ms Nicole Guitar

Rapid Fire Posters, Sir John A MacDonald Ballroom, June 29, 2019, 7:30 AM - 8:30 AM

Health Break with Posters, Pope Ballroom, June 29, 2019, 10:15 – 11:00 AM and 1:30 – 2:00 PM

"Purpose/Objectives and Rationale:

Impairment in executive functioning is an early indicator of Alzheimer's-type dementia (AD), and executive functioning is significantly correlated with functional ability. Physical exercise is known to improve executive functioning; however, no review has examined the effects of physical exercise on executive functioning performance in community-dwelling older adults living with AD.

Relevance:

This systematic review was designed to (1) systematically and critically evaluate physical exercise intervention studies which included a measure of executive function; and (2) determine the efficacy of physical exercise training on executive function performance in community-dwelling older adults living with AD.

Materials and Methods:

A systematic search was conducted. Two raters identified trials of physical exercise interventions in community-dwelling older adults living with AD, where a measure of executive functioning was recorded. Studies were included when they contained; participants diagnosed with AD who were community-dwelling, an outcome of executive function, and participants who completed a physical exercise intervention.

Analysis:

Six studies were identified in this review with a total of N = 319 participants. All articles were published between 2009-2016. Methodological quality was scored independently by two raters using the Physiotherapy Evidence Database scale, and the Cochrane's domain-based assessment of Risk of Bias.

Results:

Five different measures of executive function were used across the studies included in the review. The average physical exercise intervention was 3 times/week for 19 weeks for 50 minutes each time.

Conclusions:

Results show that physical exercise programs can be effective for improving and maintaining executive functions in community-dwelling older adults living with Alzheimer's-type dementia. However, further studies are needed to explore the potential benefits."

Transitioning from Hospital to Home: What do Older Adults Think Would Prevent Re-Hospitalization?

Dr Vanina Dal Bello-Haas

Rapid Fire Posters, Sir John A MacDonald Ballroom, June 29, 2019, 7:30 AM - 8:30 AM

Health Break with Posters, Pope Ballroom, June 29, 2019, 10:15 – 11:00 AM and 1:30 – 2:00 PM

"Purpose/Objectives and Rationale:

To understand older adult and family member perspectives regarding being in the hospital, the discharge process and hospital-to-home transition experience. Understanding the needs, priorities, and potential solutions from the perspectives of older adults and their family members can assist in enhancing the hospital-to-home experience for older adults.

Relevance:

Up to 2/3's of older people have functional decline when in hospital, and less than 1/2 return to their pre-illness level of function and mobility, leading to high rates of re-hospitalization.

Materials and Methods:

Purposeful sampling of hospitalized or recently discharged older adult patients, as well as family members. Interviews were conducted using a semi-structured guide. Six interviews were conducted with a total of 11 participants (six older adults recently discharged from the hospital, five family members).

Analysis:

Thematic analysis was completed by two researchers, and a final, comprehensive coding structure that was representative of the themes was developed.

Results:

Common themes included: 1) More involvement of family and patient in health decision making; 2) Need for improved caregiver teaching; 3) Need for clarity regarding information and referral process from hospital to community; 4) Need for more information and understanding regarding community-based programs. Several potential solutions were described: including older adults and families in discharge planning; providing written information; hands-on practice of skills e.g., transfers.

Conclusion:

Themes regarding needs and priorities centered around communication issues, lack of education and resultant lack of understanding. Effective strategies need to be developed and implemented to ensure hospital-to-home transition interventions emphasize identified issues. "

La technologie pour réduire les facteurs de risque de chutes chez les aînés en situation minoritaire francophone

Mme Dominique Cardinal

Rapid Fire Posters, Sir John A MacDonald Ballroom, June 29, 2019, 7:30 AM - 8:30 AM

Health Break with Posters, Pope Ballroom, June 29, 2019, 10:15 – 11:00 AM and 1:30 – 2:00 PM

But/objectifs : Cette étude évalue si Marche vers le futur (MVF) réduit la problématique des chutes chez les personnes âgées vivant en communauté francophone minoritaire.

Pertinence : Son approche unique par vidéoconférence le distingue des autres programmes de prévention. Il permet à des physiothérapeutes, qui ont suivi la formation, d'offrir un service qui n'est pas accessible autrement.

Méthodologie : De 2014 à 2016, il y a eu quatre vagues d'expérimentation. La force musculaire, l'équilibre et les connaissances ont été mesurés par : le sit-to-stand, le Berg, l'appui unipodal, et un test de connaissances pour 52 sujets. Les participants remplissaient un questionnaire de satisfaction et recevaient un appel téléphonique 6 mois post programme.

Analyse : Les analyses quantitatives des résultats aux différents tests ont été réalisées à l'aide du logiciel SPSS. Les comparaisons pré - post programme utilisent le test t de Student et le test non paramétrique avec groupe dépendant de McNemar. Les données qualitatives ont été compilées dans Excel. Les réponses ont été catégorisées selon une liste de thèmes et transposées en fréquences.

Résultats : Les résultats compilés (2014 - 2016) montrent que les participants sont satisfaits du programme. L'équilibre statique et dynamique s'est améliorée de $2,1 \pm 0,4$ point ($p < 0,001$) et de $6,8 \pm 2,1$ secondes ($p < 0,01$). La force musculaire a augmenté de $3,5 \pm 0,3$ secondes au sit- to- stand. Le test de connaissances montre une amélioration de $4,9 \pm 0,4$ points.

Conclusion : MVF réduit les facteurs de risque de chutes chez les aînés n'ayant pas accès à ce type de services.

Using the Theoretical Domains Framework to Identify Barriers and Facilitators to Exercise Among Older Adults Living with HIV

Ms Adria Quigley

Rapid Fire Posters, Sir John A MacDonald Ballroom, June 29, 2019, 7:30 AM - 8:30 AM

Health Break with Posters, Pope Ballroom, June 29, 2019, 10:15 – 11:00 AM and 1:30 – 2:00 PM

Relevance:

People living with HIV (PLWH) are experiencing an accelerated aging process. Although compelling evidence exists about the health benefits of exercise, many PLWH tend to be physically inactive.

Purpose/Objectives and Rationale:

The purpose of this study was to use the Theoretical Domains Framework (TDF) to investigate the barriers and facilitators to exercise among older PLWH.

Materials and Methods:

This qualitative study involved in-depth, semi-structured interviews with 12 adults aged 45 years and older recruited from HIV organizations and health centres.

Analysis:

Data were analyzed thematically using the TDF, and two investigators independently coded transcripts.

Results:

Six prominent domains were identified from the interviews: Social influences, environmental context and resources, reinforcement, intentions, social and professional role, and knowledge. Themes emerging from the interviews fit into all 14 domains of the TDF, and 1392/2081 (67%) of themes fit into the six most prominent domains. The participants had a working knowledge of exercise and its health benefits but were unfamiliar with specific exercise parameters. The majority identified environmental or resource constraints as salient barriers for participation in exercise programs. Co-morbidities, injuries, and the side effects of HIV disease and medication were also acknowledged as barriers. Stigma and discrimination from friends, family, and health care providers were commonly discussed. Participants spoke of the importance of social support to facilitate participation in exercise programs. Other facilitators included using technology and incorporating exercise into day-to-day activities.

Conclusions:

PLWH experience many barriers to exercise; those designing exercise interventions should identify salient barriers to physical activity participation and incorporate strategies to address these obstacles.

POSTER PRESENTATIONS

Mapping Community-Based Exercise Programs: Physical Activity Opportunities for Older Adults Living in the London Community with Stroke, Hip/Knee Osteoarthritis, or Age-Related Frailty

Dr. Denise Connelly¹, Mrs. Ashley Lowndes¹, Ms. Amy Yang¹, Ms. Jessica Tomlin¹, Ms. Victoria Kwong¹, Ms. Angela Zhang¹, Ms. Shannon Belfry², Ms. Norah Cuzzocrea³, Ms. Jennifer Jones³
¹University Of Western Ontario, London, Canada, ²Canadian Centre for Activity and Aging, London, Canada, ³thehealthline.ca Information Network, London, Canada

Health Break with Posters, Pope Ballroom, June 29, 2019, 10:15 – 11:00 AM and 1:30 – 2:00 PM

Purpose/Objectives and Rationale:

To enrich an online database of available community exercise programs and to understand what older adults and healthcare providers think about using it for health promotion.

Relevance:

The SouthWesthealthline.ca is a provincial initiative with dedicated funding to maintain an online database of up-to-date healthcare resource information. However, it remains largely untapped by older adults and primary healthcare providers in connecting their patients with local exercise programs.

Materials and Methods:

Four Physical Therapy students compiled a list of local exercise programs for older adults. Findings were shared with research partners at the SouthWesthealthline.ca to update/populate their database. Next, twenty older adults living with stroke, hip/knee osteoarthritis and/or age-related frailty participated in one of four focus group sessions. Participants completed a navigation exercise of the SouthWesthealthline.ca database and provided answers about their experience. Finally, five primary healthcare professionals were recruited for 30 minute interviews. Participants completed a navigation exercise of the SouthWesthealthline.ca database and provided description about their experience.

Analysis:

Focus group and interview transcripts were transcribed verbatim and qualitatively analyzed for recurring themes substantiated by participant quotations.

Results:

A well-sourced, accessible catalogue of community exercise programs for older adults was produced. Major themes of accessibility, trust and referral by a healthcare provider reinforced the use of this community-level resource by older adults. Themes of awareness and anticipated use by healthcare professionals supported the development and maintenance of the database.

Conclusions:

A searchable online catalogue of neighborhood-level exercise programs, including level of function, safety and instructor training, is an effective platform to promote exercise programs for older adults and healthcare professionals.

Summary

An online community exercise program database that is age-friendly and provides information about exercise leader qualifications, level of function for participation, and organized by neighborhood is highly valued by older adults, family physicians and physiotherapists. Feedback from older adults, physicians and physiotherapists was essential to improve accessibility and utility in developing an online community-based exercise and physical activity program catalogue.

Recovery in Mobility Following Hip Fracture and Surgical Repair: A Descriptive Study

Dr. Denise Connelly¹

¹University Of Western Ontario, London, Canada

Health Break with Posters, Pope Ballroom, June 29, 2019, 10:15 – 11:00 AM and 1:30 – 2:00 PM

Purpose/Objectives and Rationale:

This study aimed to describe mobility recovery in a group of older adults returning to home following hip fracture and surgical repair, and inpatient rehabilitation.

Relevance:

As the number of older adults in Canada grows, the incidence of hip fracture, the second leading cause of hospitalization for older adults, will increase dramatically. Promoting functional recovery for this group to live independently in the community and age-in-place is a priority for health care in Canada.

Materials and Methods:

Community-dwelling adults aged 65 years and older with hip fracture and surgical repair to be discharged to home following inpatient rehabilitation (n = 30) were recruited. At rehabilitation admission and discharge, and at home, 2, 6, and 12-weeks post-discharge, participants were assessed using the Functional Independence Measure, Composite Physical Function Scale, Timed Up & Go test (TUG), 6-Minute Walk Test (6MWT), and Berg Balance Scale (BBS).

Analysis:

Data were analyzed to generate descriptive statistics. T-tests and one-way repeated measures analysis of variance were conducted, as appropriate to the data, to detect significant differences over time.

Results:

The greatest gains in recovery were made during in-patient rehabilitation, although improvements ($p < 0.01$) continued across 2, 6, and 12-weeks post-discharge. At 12-weeks post-discharge, only those aged 70-79 years and 90-99 years achieved age-matched TUG and BBS normative scores; further, deficits of 10-60% in 6MWT persisted.

Conclusions:

Mobility improved significantly and all participants were discharged to home. However, age-matched normative values were not achieved by the majority of participants. Follow-up is necessary to determine whether additional functional gains can be made with participation in appropriate community exercise programs.

Summary

Older adults (≥ 70 years) with hip fracture and surgical repair recovered Timed Up & Go and Berg Balance Scale function, compared to age-matched normative data, at 12 weeks post-discharge to home from inpatient rehabilitation. However, 10-60% deficits persisted in Composite Physical Function Scale and 6-Minute Walk Test. Promoting recovery following discharge to home is a health care priority for aging-in-place.

Effects of Exercise Training on Lower Extremity Function in Older Adults with Heart Failure: A Systematic Review and Meta-Analysis

Ms Janelle Gravesande¹, Dr. Silvana Choo¹, Dr. Julie Richardson^{1,2}

¹School of Rehabilitation Science, McMaster University, Hamilton, Canada, ²Department of Health Research Methods, Evidence, and Impact (HEI), McMaster University, Hamilton, Canada

Health Break with Posters, Pope Ballroom, June 29, 2019, 10:15 – 11:00 AM and 1:30 – 2:00 PM

Purpose/Objectives and Rationale:

To determine the effect of exercise training on lower extremity function in older adults with heart failure (HF).

Relevance:

Exercise reduces mortality and hospital admission, but it is unclear whether it improves lower extremity function in older adults with HF.

Materials and Methods:

We searched MEDLINE, EMBASE, CINAHL, AMED and Web of Science from inception to August 1st, 2018. The search was limited by language (English only) and age (≥ 65 years). Reference lists of included studies were also searched for additional studies. Randomized controlled trials that assessed the effect of exercise on lower extremity function (walking speed, endurance, muscle strength and balance) of older adults with HF were included. We used The Cochrane Collaboration's risk of bias tool to assess the quality of included studies.

Analysis:

When possible, a meta-analysis was performed for each outcome using a fixed effects model (low heterogeneity: $I^2 \leq 40\%$) or a random effects model (moderate to high heterogeneity: $I^2 > 40\%$).

Results:

We retrieved 7333 records and 46 studies (2906 participants) were included in the final review. At follow-up (post intervention), we found a significant increase in six-minute walk test (6MWT) distance (14 studies), isokinetic knee extension strength (2 studies), isometric knee extension strength (2 studies) and number of heel lifts (3 studies) as well as a decrease in time taken to complete the timed up and go (TUG) test (2 studies).

Conclusion:

Exercise training improves lower extremity function. However, more trials are needed for some outcomes including heel lifts, knee extension strength and TUG due to the small number of studies (2-3 studies per outcome).

Summary

We conducted a systematic review and meta-analysis to determine the effect of exercise on lower extremity function (walking speed, endurance, muscle strength and balance) in older adults with heart failure (HF). We searched MEDLINE, EMBASE, CINAHL, AMED and Web of Science from inception to August 1st, 2018. Exercise training improved lower extremity function in older adults with HF.

Evaluating Knowledge Mobilization Strategies to Improve Mobility in Older Adults: The Move4Age Study

Dr. Jenna Smith-Turchyn², Dr. Julie Richardson¹, Dr. Sarah Neil-Sztramko¹, Dr. Maureen Dobins¹
¹*McMaster University, Hamilton, Canada*, ²*University of Toronto, Toronto, Canada*

Health Break with Posters, Pope Ballroom, June 29, 2019, 10:15 – 11:00 AM and 1:30 – 2:00 PM

Purpose/Rationale:

To explore online knowledge translation strategies to determine which are used most frequently by older adults to obtain mobility-related information. Additionally, this project explored participant engagement, satisfaction and perceived usefulness of the targeted knowledge translation strategies.

Relevance:

Maintaining physical activity and physical function is important for healthy aging. The goal of this study was to increase physical activity and physical mobility in middle-aged and older adults by providing them with mobility related information electronically. It is unclear how to best disseminate research findings on mobility-related interventions to older Canadians in order to do this.

Materials and Methods:

Process evaluation data was gathered through Google Analytics and Hootsuite throughout the intervention. Open-ended surveys and qualitative interviews were conducted with a subset of participants at the end of the study to determine engagement, satisfaction, and perceived usefulness of the strategies used. Data was analyzed using content analysis to determine categories and themes that emerged from the data.

Results:

Engagement with content delivered through weekly emails was highest and participants rated email content most favorably. Participants were satisfied with the intervention, noting the ease of participating and disseminating of information in an easy to access format (online) being beneficial features. Participants who did not find the intervention useful were those with already high levels of baseline physical activity or physical function, and those who were looking for more specific content.

Conclusion:

This project provides insight that can be used to improve future online knowledge translation interventions for older adults to improve mobility and function.

Summary

This project explored online knowledge translation strategies to determine which are used most frequently by older adults to obtain mobility-related information. Additionally, this project explored participant engagement, satisfaction and perceived usefulness of the targeted knowledge translation strategies.

La technologie pour réduire les facteurs de risque de chutes chez les aînés en situation minoritaire francophone

Mme Dominique Cardinal¹

¹*Consortium national de formation en santé-Université d'Ottawa, Gatineau, Canada*

Health Break with Posters, Pope Ballroom, June 29, 2019, 10:15 – 11:00 AM and 1:30 – 2:00 PM

But/objectifs : Cette étude évalue si Marche vers le futur (MVF) réduit la problématique des chutes chez les personnes âgées vivant en communauté francophone minoritaire.

Pertinence : Son approche unique par vidéoconférence le distingue des autres programmes de prévention. Il permet à des physiothérapeutes, qui ont suivi la formation, d'offrir un service qui n'est pas accessible autrement.

Méthodologie : De 2014 à 2016, il y a eu quatre vagues d'expérimentation. La force musculaire, l'équilibre et les connaissances ont été mesurés par : le sit-to-stand, le Berg, l'appui unipodal, et un test de connaissances pour 52 sujets. Les participants remplissaient un questionnaire de satisfaction et recevaient un appel téléphonique 6 mois post programme.

Analyse : Les analyses quantitatives des résultats aux différents tests ont été réalisées à l'aide du logiciel SPSS. Les comparaisons pré - post programme utilisent le test t de Student et le test non paramétrique avec groupe dépendant de McNemar. Les données qualitatives ont été compilées dans Excel. Les réponses ont été catégorisées selon une liste de thèmes et transposées en fréquences.

Résultats : Les résultats compilés (2014 - 2016) montrent que les participants sont satisfaits du programme. L'équilibre statique et dynamique s'est améliorée de $2,1 \pm 0,4$ point ($p < 0,001$) et de $6,8 \pm 2,1$ secondes ($p < 0,01$). La force musculaire a augmenté de $3,5 \pm 0,3$ secondes au sit- to- stand. Le test de connaissances montre une amélioration de $4,9 \pm 0,4$ points.

Conclusion : MVF réduit les facteurs de risque de chutes chez les aînés n'ayant pas accès à ce type de services.

Summary

Marche vers le futur est un programme de prévention des chutes offert par vidéoconférence qui permet de rejoindre les personnes âgées qui n'ont pas accès à ce service. Les résultats aux vagues d'expérimentation démontrent que les participants améliorent leur équilibre statique et dynamique, la force musculaire des membres inférieurs et leurs connaissances, réduisant ainsi les facteurs de risque de chutes.

Primary Care Practitioner Referral Process to Community Exercise Programs for Older Adult Patients with Hip/Knee OA, pre-/post TJA, or Repaired Hip Fracture in South-West Ontario

Dr. Denise Connelly¹, Mrs Ashley Lowndes¹, Ms. Jackie Sadi¹, Dr. Jane Thornton¹

¹University Of Western Ontario, London, Canada

Health Break with Posters, Pope Ballroom, June 29, 2019, 10:15 – 11:00 AM and 1:30 – 2:00 PM

Purpose/Objectives and Rationale:

To understand the referral process practiced by physicians and physiotherapists to connect their older adult patients (age 65+) with hip or knee osteoarthritis, pre-/post total joint arthroplasty, or repaired hip fracture to community exercise programs for maintenance of mobility and promotion of aging-at-home.

Relevance:

Primary care practitioners could augment the health of their older adult patients and promote their functional independence through knowledge of local community exercise programs available that are specific to their health condition, accessible and of high quality in safety, delivery and effectiveness (Ontario Ministry of Health and Long-Term Care, 2013; Canadian Physiotherapy Association, 2012).

Materials and Methods:

In-depth one-hour individual interviews were conducted with 8 physicians and 8 physiotherapists practicing in south-west Ontario. Data collection and analysis of transcribed audio-recordings were completed simultaneously according to grounded theory methodology (Charmaz 2007).

Analysis:

Thematic analysis was completed to identify recurring themes and quotations from participants to substantiate the findings.

Results:

Findings suggest that physicians and physiotherapists 'value' exercise programs for maintenance of patient physical function. 'Practical knowledge' of local community exercise programs is needed; however, referral varies with length of practice and time spent with patient. Further, successful referral of patients to community exercise programs depends on practitioner knowledge of location, accessibility, cost, and patient interest.

Conclusions:

Physicians and physiotherapists are key to participation by older adults in local programs. Dissemination of available community exercise programs for older adults at the neighborhood level to physicians and physiotherapists should be addressed.

Summary

Participation by older adults in community-based exercise and physical activity programs was addressed by exploring referral practices of physicians and physiotherapists as the 'bridge' between community programs and uptake by older adults with hip/knee osteoarthritis, pre/post joint arthroplasty and/or repaired hip fracture. Referral practices may be improved by advertising neighbourhood-level community-based exercise and physical activity programs to primary healthcare providers.

The Effects of Physical Exercise on Executive Function in Community-Dwelling Older Adults Living with Alzheimer's-Type Dementia: A Systematic Review

Ms Nicole Guitar¹, Dr Denise Connelly¹, Dr Joseph Orange¹, Dr Lindsay Nagamatsu¹, Dr Suan Hunter¹

¹Western University, London, Canada

Health Break with Posters, Pope Ballroom, June 29, 2019, 10:15 – 11:00 AM and 1:30 – 2:00 PM

Purpose/Objectives and Rationale:

Impairment in executive functioning is an early indicator of Alzheimer's-type dementia (AD), and executive functioning is significantly correlated with functional ability. Physical exercise is known to improve executive functioning; however, no review has examined the effects of physical exercise on executive functioning performance in community-dwelling older adults living with AD.

Relevance:

This systematic review was designed to (1) systematically and critically evaluate physical exercise intervention studies which included a measure of executive function; and (2) determine the efficacy of physical exercise training on executive function performance in community-dwelling older adults living with AD.

Materials and Methods:

A systematic search was conducted. Two raters identified trials of physical exercise interventions in community-dwelling older adults living with AD, where a measure of executive functioning was recorded. Studies were included when they contained; participants diagnosed with AD who were community-dwelling, an outcome of executive function, and participants who completed a physical exercise intervention.

Analysis:

Six studies were identified in this review with a total of N = 319 participants. All articles were published between 2009-2016. Methodological quality was scored independently by two raters using the Physiotherapy Evidence Database scale, and the Cochrane's domain-based assessment of Risk of Bias.

Results:

Five different measures of executive function were used across the studies included in the review. The average physical exercise intervention was 3 times/week for 19 weeks for 50 minutes each time.

Conclusions:

Results show that physical exercise programs can be effective for improving and maintaining executive functions in community-dwelling older adults living with Alzheimer's-type dementia. However, further studies are needed to explore the potential benefits.

Summary

Physical exercise is known to improve executive functions; however, no review has specifically examined the effects of physical exercise on executive function performance in community-dwelling older adults living with AD. The results of this systematic review show that physical exercise programs can be effective for improving and maintaining executive functions in community-dwelling older adults living with Alzheimer's-type dementia.

Transitioning from Hospital to Home: What do Older Adults Think Would Prevent Re-Hospitalization?

Dr Vanina Dal Bello-Haas¹, Briana Virag¹, Melody Maximos¹, Olivia Virag¹

¹*McMaster University, Hamilton, Canada*

Health Break with Posters, Pope Ballroom, June 29, 2019, 10:15 – 11:00 AM and 1:30 – 2:00 PM

Purpose/Objectives and Rationale:

To understand older adult and family member perspectives regarding being in the hospital, the discharge process and hospital-to-home transition experience. Understanding the needs, priorities, and potential solutions from the perspectives of older adults and their family members can assist in enhancing the hospital-to-home experience for older adults.

Relevance:

Up to 2/3's of older people have functional decline when in hospital, and less than 1/2 return to their pre-illness level of function and mobility, leading to high rates of re-hospitalization.

Materials and Methods:

Purposeful sampling of hospitalized or recently discharged older adult patients, as well as family members. Interviews were conducted using a semi-structured guide. Six interviews were conducted with a total of 11 participants (six older adults recently discharged from the hospital, five family members).

Analysis:

Thematic analysis was completed by two researchers, and a final, comprehensive coding structure that was representative of the themes was developed.

Results:

Common themes included: 1) More involvement of family and patient in health decision making; 2) Need for improved caregiver teaching; 3) Need for clarity regarding information and referral process from hospital to community; 4) Need for more information and understanding regarding community-based programs. Several potential solutions were described: including older adults and families in discharge planning; providing written information; hands-on practice of skills e.g., transfers.

Conclusion:

Themes regarding needs and priorities centered around communication issues, lack of education and resultant lack of understanding. Effective strategies need to be developed and implemented to ensure hospital-to-home transition interventions emphasize identified issues.

Summary

We interviewed 6 older adults and five family members to determine their perspectives (needs, priorities, potential solutions) regarding being in the hospital, the discharge process and hospital-to-home transition experience. Themes regarding needs and priorities centered around communication issues, lack of education and resultant lack of understanding.

Using the Theoretical Domains Framework to Identify Barriers and Facilitators to Exercise Among Older Adults Living with HIV

Ms Adria Quigley¹, Mr. Larry Baxter², Ms. Laura Keeler¹, Dr. Marilyn MacKay-Lyons^{1,2}

¹*Dalhousie University, Halifax, Canada*, ²*Community Member, HALIFAX, Canada*, ³*Nova Scotia Health Authority, HALIFAX, Canada*

Health Break with Posters, Pope Ballroom, June 29, 2019, 10:15 – 11:00 AM and 1:30 – 2:00 PM

Relevance:

People living with HIV (PLWH) are experiencing an accelerated aging process. Although compelling evidence exists about the health benefits of exercise, many PLWH tend to be physically inactive.

Purpose/Objectives and Rationale:

The purpose of this study was to use the Theoretical Domains Framework (TDF) to investigate the barriers and facilitators to exercise among older PLWH. **Materials and Methods:** This qualitative study involved in-depth, semi-structured interviews with 12 adults aged 45 years and older recruited from HIV organizations and health centres.

Analysis:

Data were analyzed thematically using the TDF, and two investigators independently coded transcripts.

Results:

Six prominent domains were identified from the interviews: Social influences, environmental context and resources, reinforcement, intentions, social and professional role, and knowledge. Themes emerging from the interviews fit into all 14 domains of the TDF, and 1392/2081 (67%) of themes fit into the six most prominent domains. The participants had a working knowledge of exercise and its health benefits but were unfamiliar with specific exercise parameters. The majority identified environmental or resource constraints as salient barriers for participation in exercise programs. Co-morbidities, injuries, and the side effects of HIV disease and medication were also acknowledged as barriers. Stigma and discrimination from friends, family, and health care providers were commonly discussed. Participants spoke of the importance of social support to facilitate participation in exercise programs. Other facilitators included using technology and incorporating exercise into day-to-day activities.

Conclusions:

PLWH experience many barriers to exercise; those designing exercise interventions should identify salient barriers to physical activity participation and incorporate strategies to address these obstacles.

Summary

This qualitative study evaluated the barriers to physical activity and exercise among older people living with HIV. Barriers included side effects from HIV disease, stigma and discrimination, and comorbidities. Facilitators included social support and the use of technology. These barriers and facilitators can help health providers design appropriate exercise interventions for older individuals living with HIV.