The Brainiac

October 2018
Issue 3

Cognitive & Mental Health SIG

Updates from Our Chair

Lise McCarthy, PT, DPT, GCS

October is National Physical Therapy Month. This year the APTA's month-long campaign is focused on the serious topic of pain and pain management. And so the topic of pain is a major theme in this 3rd issue of the Brainiac newsletter.

Being aware of and trying to help manage another person's pain and associated stress can be anxiety-provoking. The best way I know to reduce my own anxiety and the anxiety of others whom I care about is to find and share information. In this issue, you will find resources and handouts that you can use in your efforts to take a more active leadership role in your community. We hope you share this information with your colleagues at work and at your local physical therapy chapter meetings.

Briefly, topics in this issue include:

- The struggle of older adults to manage pain in the opioid epidemic.
- How to assess and manage pain in people living with dementia.
- Awareness of features of Behavioral Variant Frontotemporal dementia that include emotional blunting, apathy, and loss of sympathy as early signs.
- Cognitive frailty as a condition that includes physical frailty and cognitive impairment.

All of us try to foster healthy ways to deal with stress, especially during the holiday season. One place to go for information on how you can reduce burnout at your workplace is to look at the self-care video posted on the webpage of the Cognitive and Mental Health SIG. One of my favorite ways to tackle stress is to channel the creative energy and imagery of Dr. Seuss. I recently discovered I am not the only one who does this. Go here to listen to the Dr. Seuss Advanced Directive Poem: http://zdoggmd.com/dr-seuss-advance-directive. It is guaranteed to make you smile - and maybe even chuckle - despite the seriousness of the end-of-life subject matter. Maybe, as a leader in your family/friend circle, you can pass this link on to your loved ones, as well as take self-care steps to ensure your own advanced directive is in place by the end of this year?

Wishing you all peace of mind as we enter this holiday season together.

NEWS AT A GLANCE:

ACADEMY OF GERIATRIC PHYSICAL THERAPY

Updates from Our Vice Chair

Christy Ross, PT, DPT, GCS, CDP, MSCS

Pain management in older adults is a complex challenge. Recognizing pain in individuals with dementia (IWD) has been described as a "guessing game" by nurses according to Kovach et al in 2000. In 2018, Jennings reported on the knowledge of general practitioners assessing pain in IWD indicating that only 10% were familiar with dementia specific pain tools and were uncertain about the consequences of the use of opioids in IWD.

The consequences of under-diagnosed, under-treated, and unrelieved pain can profoundly impact the quality of life of these individuals, and could lead to impaired psychosocial function. The importance of performing thorough evaluations in individuals with cognitive impairment who are experiencing behavioral changes to identify any possible pain behaviors cannot be underestimated. In this issue of *The Brainiac*, you may find access to the Pain Assessment in Advanced Dementia (PAINAD) scale, an evidence based pain behavior assessment scale, that cause be used to assess individuals who may experiencing pain. Pain, if first identified in individuals with dementia, is often treated by utilization of opioids. Opioid analgesics may cause overlapping symptoms such as depression, delirium, worsening of appetite and sleep as well as increased risk for falling (Shega 2007). Careful monitoring is crucial and, there is little evidence found to support long-term use of opiates to treat chronic pain. It is important to assess frequently for an appropriate stop date and termination of opioid use under the direction of a physician, and discuss further multidisciplinary non-pharmacological approaches. There is no better time than now, as physical therapy professionals, to share with our patients and clients the benefits of choosing safer alternatives for pain management like physical therapy. The individuals we serve depend on us!

We hope you enjoy this issue of *The Brainiac* and encourage you to share it with your colleagues!

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National Physical Therapy Month

DID YOU KNOW…

- Guerriero 2016 & Wells 1997: The nociceptor response and transmission of pain sensation are not affected by the physiological changes associated with dementia within the central nervous system. Specifically, the somatosensory cortex is largely unaffected by dementia and is crucial to the central modulation of pain. Yet, individuals may express their pain in ways that are quite different then older adults without cognitive impairment. Both stimulation detection and pain threshold are not affected by the progression of Alzheimer's Disease.
- Van der Leeuw 2018: Older adults with high levels of pain have an over three-fold increased risk of developing major memory impairment. However, these effects of pain are not associated with attention and executive function, only in the memory domain.
- Guerriero 2016: For individuals with dementia, pain is frequently under-recognized, underestimated, under diagnosed, and under-treated.
- The PAINAD Scale is a valid and reliable tool that incorporates five common pain behavior categories that can be used by clinicians and caregivers to monitor and track pain behaviors and treatment effectives over time.

HANDOUT:

- You may find more information on the PAINAD Scale along with a case study within the "A"-Club Documents listed on the Cognitive and Mental Health SIG Webpage on the AGPT website: https://geriatricspt.org/special-interest-groups/cognitive-mental-health/
- We hope you share this handout with your colleagues at your workplace and within chapter meetings.

Opioid Epidemic: Highlighting the Struggles of Seniors to Pain Management

"Pain is personal. Treating pain takes teamwork.", reads an APTA #Choose PT campaign slogan to raise awareness about the danger of opioid addition and prescription opioids, advance the use of person-centered care using multidisciplinary nonpharmacological pain management approaches, and how the APTA continues to encourage consumers and prescribers to following the Centers for Disease Control and Prevention (CDC) guidelines to choose safer alternatives like physical therapy to address their pain. Including health care costs, addiction treatment, criminal justice involvement, and lost productivity, the CDC estimates over $78.5 billion a year total economic burden of misused opioid prescriptions. Nearly 66% of 64, 400 Americans lives were claimed due to prescription or illicit opioids in 2016. There is no better time than now, as physical therapy professionals to share with your patients and clients the benefits of choosing safer alternatives for pain management like physical therapy, and recommend them to speak with their physician about other multidisciplinary nonpharmacological approaches to pain management.

The Agency for Healthcare Research and Quality (AHRQ) reported in September of this year that this opioid epidemic and the nation's public health crisis is impacting the older adult population. According to AHRQ, nearly 125,000 older adults were hospitalized due to opioid-related diagnoses. In 2015, nearly 30% of Medicare beneficiaries were prescribed opioids. Additionally, in 2015 and 2016, nearly 4 million seniors, filled 4 or more opioid prescriptions, on average, while 10 million seniors filled at least one opioid prescription.

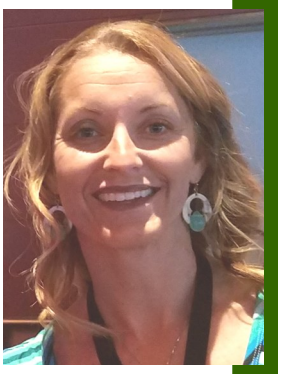
For more information, please visit the following:

1. APTA's #ChoosePT Opioid Awareness Campaign Toolkit that includes graphics, advertisements, handouts, patient stories, clothing, and other valuable resources at: https://www.moveforwardpt.com/ChoosePT/Toolkit#Graphics
2. APTA's PTNow provides resources for pain management including clinical practice resources, consumer information, the APTA's action and response to this epidemic, and other valuable resources at: https://www.ptnow.org/opioid
3. APTA's "Opioid Epidemic: Advocating for Safer Approaches to Pain Management", http://www.apta.org/OpioidEpidemic/
4. "APTA's 7 Staggering Statistics About America's Opioid Epidemic", https://www.moveforwardpt.com/Resources/Detail/7-staggering-statistics-about-america-s-opioid-epi

CLINICIAN CORNER

INTRODUCING TWO OF OUR CLINICAL LIAISONS:

CINDI CATHEY, PTA



I have been a PTA for almost 10 years, where I have worked in the Home Health setting for the last 9 years. I obtained my B.S. in health prior to becoming a PTA. I have held numerous roles for the Oklahoma Physical Therapy Association at the district, state, and national levels the past 9 years. I have served on the Tulsa Walk Alzheimer's committee since 2016, and I am very passionate about advocating for the geriatric population and currently serve as the co-advocate for Oklahoma.

I work daily with individuals who are diagnosed with Alzheimer's and other related dementia diagnoses. I truly love working with this environment. In my experience, the PT/PTA relationship and team work is very vital for treatment. I communicate with my PT frequently and have the privilege of seeing him daily, which is rare in home health, due to primarily treating in assisted living facilities. The communication amongst us is vital because of the mental condition of the patients. I may see something different, or find out more information.

MARIAN OVER, PT

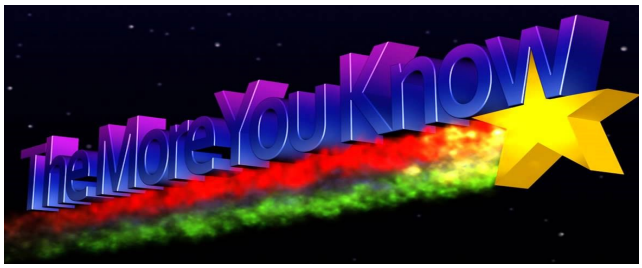
I currently teach in a PTA program at Stark State College in Canton, Ohio. I started my career being immediately active in APTA and at a hospital, where I had the fabulous opportunity to work with many experienced therapists. I learned so much that first year. I was able to put many of the concepts and theories that I learned at school into practice with their expert guidance. Now, I recommend that students start out their new careers with a mentor.

While working in acute care for four years, I became a well-rounded therapist. After my second daughter was born, I opted to leave acute care to work part time in a skilled nursing facility. It was then that I realized how much I loved geriatrics. I spent time reading and learning about treating these patients. I also got more involved with the American Physical Therapy Association and joined the geriatrics section in 1984. It was an exciting time in therapy. We worked hard to change the perception of going to a nursing home from dismal to that of a “stepping stone” – a step between the hospital and home or steps needed to improve the patients’ quality of life or end of life experience. Over the years, I have had the privilege of working with many patients with dementia at various stages of the diagnosis. What surprises me most about working with patients with cognitive impairment is how much they can improve physically despite their cognitive impairment.

What is Cognitive Frailty?

- The International Consensus Group on Cognitive Frailty define cognitive frailty as the presence of both physical frailty and cognitive impairment. (Keladiti 2013) An updated operational definition of cognitive frailty was developed as the presence of physical frailty, presence of slow walking speed or muscle weakness, cognitive impairment, and signs of impairment in word list memory, attention, executive function, or processing speed. (Makizako 2013, Shimada 2017)
- Cognitive decline has been found to be associated with physical frailty in older adults (Auyeung 2011), and in older adults, cognitive impairment and physical frailty are often co-morbid conditions. (Shimada 2018)
- Shimada and colleagues studied a cohort of 4000 older adults found that dementia risk was significantly associated with cognitive impairment and cognitive frailty, and the participants with cognitive frailty had a higher hazard ration than those with cognitive impairment. (Shimada 2018)
- Validated test battery, The National Center for Geriatrics and Gerontology Functional Assessment Tool assessing memory, attention, executive function, and processing speed domains, was utilized within the Shimada 2018 study and proposed to be helpful in early detection of the risk for physical and
cognitive decline in both community and clinical settings. (Shimada 2018)
- *To continue your learning, check out this research article:*

  Shimada H et al. Cognitive frailty predicts incident dementia among community-dwelling older people. J Clin Med. 2018: 7, 250-272.



...to pique your interest!

Ranking Barriers, Motivators, and Facilitators to Promote Physical Activity Participation of Persons with Dementia: An Explorative Study

Karssemeikjer EGA, de Klijm FH, Bossers WJR, Rikkert MGMO, van Heuvelen MJG. *Journal of Geriatric Physical Therapy,* August 2018

- Authors indicate a personalized interventions and a strong focus on individual characteristics can promote physical activity participation among individuals with dementia.

Incident Opioid Use and Risk of Hip Fracture Among Persons with Alzhiemer's Disease, a Nationwide Matched Cohort Study

Taipale H, Hamina A, Karttunen N, Koponen M, Tanskanen A, Tilhonen J, et al. Pain. October 12, 2018

- Authors indicate that opioid use was associated with an increased risk of hip fracture, with most risk during first two months of use, lessening thereafter. Future research is needed to see if slow titration of opioid doses in the beginning of treatment will reduce the risk of injurious falls.

Positive Effects of Combined Cognitive and Physical Exercise Training on Cognitive Function in Older Adults with Mild Cognitive Impairment or Dementia: A Meta-Analysis

Karsemeijer EGA, Aaronson JA, Bossers WJ, Smits T, Olde Rikkert MGM, Kessels RPC. *Ageing Research Reviews*, 2017; 75-83.

- Analysis of 10 RCTs with combine cognitive and physical intervention indicated a moderate to large positive effect on ADLs after complete of these interventions.

HIPPOCAMPAL HIGHLIGHTS

Dementia Action Alliance publishes Dementia Language Guidelines entitled, "Words Matter: See Me, Not My Dementia"

https://daanow.org/wp-content/uploads/2016/03/Words_Matter-See-Me-Not-My-Dementia.pdf

Jan Bays is our CMH SIG DAA Liaison

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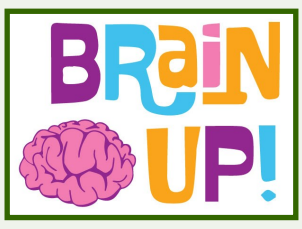
SAVE THE DATE!

Dementia Action Alliance Re-Imaging Dementia Conference

Call for Proposals:

June 20-22, 2019, Atlanta, Georgia



Academic Liaison Corner

Disease Spotlight:

Behavioral Variant Frontotemporal Dementia

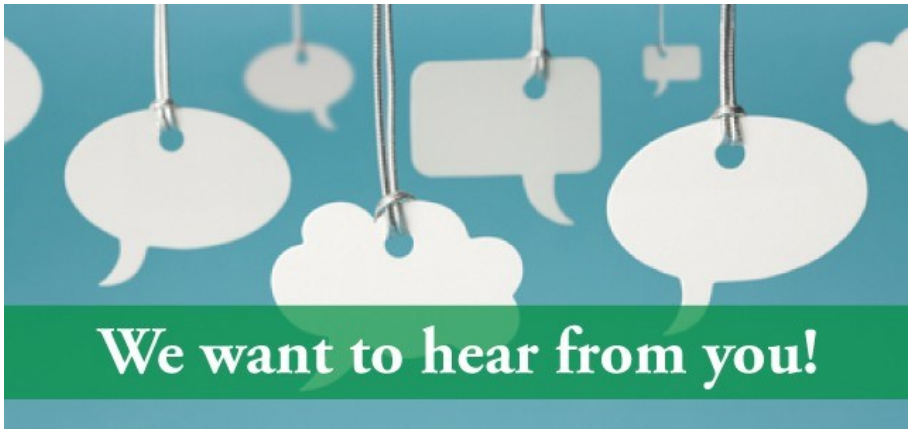
- 2nd most common type of dementia in individuals less than 65 years old, 1 of 3 the forms of FTD
- Criteria for Diagnosis:
  - Core Features: Insidious onset, gradual progression, with early signs of: decline in social or interpersonal function; impairment in regulation of personal conduct; emotional blunting, and loss of insight
  - Behavioral Supportive Features: Early signs of: apathy; behavioral disinhibition; loss of empathy/sympathy; perseveration, stereotyped, ritualistic, or obsessive behavior; hyperorality and dietary changes; decline in hygiene/grooming; mental rigidity/inflexibility; distractibility and impersistence; utilization behavior; socially inappropriate behavior; repetitive motor behaviors
  - Speech and Language Supportive Features: Altered speech output; semantic and phonemic fluency; aspontaneous; echolalia, perseveration, mutism
  - Physical Supportive Features: Primitive reflexes may be present, incontinence, akinesia, rigidity, tremor, low and labile blood pressure
- Inheritance
  - 40-50% of individuals diagnosed with FTD have 3 generations of positive family history
- Imaging Results:
  - MRI: Frontal and anterior temporal lobe atrophy
  - PET or SPECT: hypometabolism or hypoperfusion
- Reversible causes of FTD
  - Metabolic disturbances, poor nutrition, CNS infection, substance abuse, vascular disease, heavy metal toxicity, paraneoplastic infections
- *To continue your learning, check out these references:*

1. Robinovici GD, Miller BL. FTD:Epidemiology, pathophysiology, diagnosis, and management. 2010; May 24(5): 375-98.
2. Smith GE, Bondi MW. *Mild Cognitive Impairment and Dementia*. Oxford University Press. 2013.

Cognitive and Mental Health Special Interest Group Webpage

On our wonderful webpage you will find…

- Past SIG Meeting Minutes
- "A" Club Documents
  - Functional Assessment Staging Tool
  - PAINAD
  - Mini-Cog
- Research Resources
- SIG Links of Interest
- AGPT State Advocate Program Information



We would love to hear about your good news, too!

To be included in the next edition of *The Brainiac*, please send your information to:

Christy Ross at *RossC5@ccf.org* *or* Lise McCarthy at *lise@mipt.us*

Have a great next few months and
stay tuned for the next issue of *The Brainiac*!