Pediatric Multiple Sclerosis Research at Stony Brook  

As you are learning more about what Occupational Therapy means and what we do as Occupational Therapists you may be asking yourselves, “Where do we fit in within the health care arena?” “What is considered our level of expertise?”, or “How do we know which population we should offer intervention to?”

This was my dilemma when I first starting working with the pediatric multiple sclerosis clinic within Stony Brook University Hospital. I needed to know my place within the clinic and how to impose my level of expertise without over stepping my boundaries. Let me explain Pediatric MS. It is an area that is seemingly new to the medicine let alone therapeutic intervention. Many pediatric disorders present in a very similar fashion, especially autoimmune and neurological disorders, so this condition has gone unnoticed until the 1950s and is still questionable to some medical professionals. There are other inflammatory de-myelinating diseases of the CNS which may present in a similar fashion, and it can be difficult to make a clear distinction early on. For instance, acute disseminated encephalomyelitis (ADEM) can appear with similar symptoms, though in these cases, they often have fever and a recent viral infection as well. Additionally, ADEM is usually considered a monophasic illness, in that it occurs once, and typically, does not recur (Banwell, Shroff, Ness, Schwid and Weinstock-Guttman, 2007). Optic neuritis (ON), transverse myelitis (TM), also presents with similar symptoms to pediatric MS, but does not impact the mental status. These de-myelinating conditions are usually isolated occurrences in children. If recurrences occur, they increase the possibility of MS (Ness et al., 2007). Clinically isolated syndrome (CIS) refers to a single episode of de-myelinating neurologic dysfunction, including ON, TM along with the other symptoms above. A second event can lead to a diagnosis of MS.

So having a brief understanding about the complexity of the disease it is easy to understand what it is meant when I ask what my position is. So I took a look at all of symptoms of Pediatric MS. They are: fatigue, visual deficits, changes in motor skills, problems with toileting, depression, poor coordination, cognitive difficulties, numbness, tingling and pain.

These symptoms are very similar if not the same as adult MS except that the relapses between exacerbations are shorter and the symptoms of an attack occur quicker between the first and second attack. Also, this disease has a longer progression with children than adults. So there may be many years between exacerbations for children.

In observing Dr. Lauren Krupp, the pediatric neurologist who heads the pediatric MS clinic, it was easy to observe the degenerative effects of the disease during her neurological exams. The children would usually present with visual disturbances and motor weaknesses, on one side more than the other. Here is where it was decided what my role as an Occupational Therapist will be within this clinic. In order to strengthen the argument for therapeutic needs for
Event Recognition  by Kim Kuhnert (2011-2012 SOTA Fundraising Chairperson)

On Tuesday, September 27th, 2011, the Student Occupational Therapy Association (SOTA) of Stony Brook University is hosting an Occupational Therapy Awareness Night at Citi Field! Practitioners, students and individual’s whose lives have been touched by the occupational therapy profession will unite at 7:10pm to watch the New York Mets take on the Cincinnati Reds and raise awareness of the power of occupational therapy. In addition to promoting occupational therapy, the Mets have offered to donate 30% of tickets sold in designated sections to raise funds for our student association. Price of tickets range from $12-32 and must be purchased through Stu Cohen, the group sales representative for the event (See attached flyer for further details). Contact Stu before tickets run out and join us at Citi Field on September 27th for America’s favorite pastime. Baseball: a meaningful occupation shared by both players and fans.

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“In order to strengthen the argument for therapeutic needs for these children, there has to be evidence to back it up.”

-Mary Squillace, DOT, OTR/L

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these children, there has to be evidence to back it up. Currently, I am the principle investigator of a study involving the study of gross grasping muscle strength, pinch muscle strength, and fine motor manipulations. The measurements of these children (between ages 13-17) are taken within these four categories using the standardization of the dynomometer, pinch meter, Purdue peg board and the nine hole peg board. These measurements will then be compared to a population of teens within the same age group that are without the disease to determine if there is a significant difference in the results. A T-test will be used for this comparison and to prove that there may be a difference, thereby resulting in a need for therapeutic intervention. Also, while on the unit, I have been helpful in recognizing the need for splinting for stabilization purposes for some of the children who were in pain when writing or using their hands excessively.

We are also involved in the consultation regarding the transition between educational advancement and career choices. The Pediatric MS clinic offers psychosocial counseling regarding the future of these children and their career choices, from the social worker, nurse practitioner and...
First Year Student of the Month

Jonathan Tianchon
Weekday Class of 2014

1. If you could choose your last meal, what would it be?
   Anything my grandma cooks.
2. What field of OT interests you the most?
   Burn care.
3. What is one item you could not live without?
   A rice cooker.
4. If you won a million dollars, what would be the first thing you would do with it?
   EAT.
5. If you could give one piece of advice or message to the world, what would it be?
   Take everything seriously, except yourself.

Second Year Student of the Month

Jenielle Metz
Weekday Class of 2013

1. Where is your hometown?
   My hometown is Obuasi in the Ashanti region of Ghana.
2. If you could choose your last meal, what would it be?
   My last meal would be mashed potatoes with sirloin steak, red wine sauce, mushrooms, green peppers, and onions. (yummy lol)
3. If you could live anywhere in the world, where would it be?
   If I could live anywhere in the world, I would choose to live in Paris…something about that city entices me.
4. Why did you choose OT?
   I realized I wanted to be in a medically related profession. I was drawn to the creative aspect of Occupational Therapy.
   Use it as bribe money for the SBU OT professors to let me graduate in 2012 instead of 2013.
5. If you could give one piece of advice or message to the world, what would it be?
   “Wherever you are – be all there.” –Jim Elliot

Third Year Student of the Month

Elvis Manzanillo
Weekend Class of 2012

1. Where is your hometown?
   I’m originally from the Dominican Republic, but was raised in the Bronx, NY.
2. What is your favorite song?
   I don’t have one favorite, I like all music. But according to my iTunes “most played” section, I listen to Jay-Z, Kanye West, and Coldplay a lot.
3. Why did you choose OT?
   I initially wanted to be a PT for a sports team, then was advised by my mom to look into OT because “it was a better fit”; I compared both careers, and loved that OTs can practice across many settings. Mom was right.
4. What is your favorite TV show?
   ESPN Sportscenter
5. If you won a million dollars, what would be the first thing you would do with it?
   Have someone take a picture of me planking on it.
6. If you could give one piece of advice or message to the world, what would it be?
   Don’t stress the COULD haves, if it SHOULD have, it WOULD have.
This past year we were able to fundraise $1,000 for the Wheelchair Sports Federation through the use of basket raffles, bake sales and other fundraising events. Through volunteer opportunities we had with Bill Hannigan, we were able to take a look at what the WSF was all about. For those of you who were able to participate you know how great this organization is and all that it stands for. This is why it is so important for us as students to be involved in SOTA and all of its fundraising events. With each person contributing to the bake sales and basket raffles, we’re able to give generously to an organization in our community. All in all we did a great job this year and we should be proud of the effort we put in to help our classmates attend conference and contribute to a $1,000 donation to a great organization. Let’s see if we can top it this year!

References for “Pediatric Multiple Sclerosis Research at Stony Brook” by Mary Squillace DOT, OTR/L:
