

Graduates, Faculty and Guests,

Congratulations to you all ! What an exciting time for you as you enter this phase of your education; finally applying the theory learnt in the classroom to the clinic and at last starting to treat patients. And at the same time earning a masters degree and stepping into the world of research.

I can't help but think how fortunate you are. 35 years ago we graduated with a Bachelor of Science in OT or PT and had no training or knowledge of research. We were the clinicians and they were the researchers with little dialogue or connection between the 2. There were very few therapists with graduate degrees, let alone doing actual research. There was no internet for transmitting the new developments to the clinician quickly and evidence based medicine, a term we now use on a daily basis was but a concept being developed.

Clinicians dedicated to patient care are a special breed. They are the therapists who plan innovative treatment sessions. They engage, mentor and support their patients and their families and develop techniques and expertise for special conditions and situations. A good clinician never lets the patient know if they are in a hurry or overloaded. They are the backbone of the health care system. I have worked with dozens of outstanding clinicians and I sincerely hope you all become one of these.

But I would like to suggest that there is another type of clinician; one who truly sees what is going on with the patients but then thinks about her observations beyond what her co-workers might typically think. I would describe this style of therapist as a clinician researcher. This is a professional with a curiosity who is anxious to formalize this curiosity into a question. He or she gives direct care every day or every week but is also initiating or assisting with research. A somewhat unique and critical role as a clinician researcher is the bridge between the academic and clinical worlds.

I am sure you have all heard of the term from bench to bedside; when the results of basic research from the lab or academia are applied to the clinical setting resulting in better outcomes for the patient. Perhaps the pathway is really more interactive; the questions we pose each day working with our patients in the clinic can lead to meaningful research projects; so perhaps a new slogan might be; clinical issues to research ideas.

When the clinicians working with the patients everyday develop the research question, the project has a relevance and purpose and buy in. Let me give you an example of what I mean by clinical issues to research ideas

In 2000 OT's from 10 SH formed a study group to evaluate if children with below elbow prosthesis were more functional or had better quality of life than those without. Our hunch was that there was little difference between wearers and non-wearers but tradition and lack of meaningful research dictated that everyone was better with a prosthesis and should get one whether they wanted it or not. After 4 years 400 children were assessed and we proved our therapists' intuition was right. There was no difference. This research project changed the plan of care prescribed by limb deficiency teams for these kids. A new approach was developed and adopted whereby the prosthesis was no longer mandatory but rather a tool to be offered and used for the specific needs expressed by the individual child. This was an important and refreshing advance in the field of pediatric orthopedics. Not to mention the wonderful experience of collaborating with peers to develop a new tool used for this population study, traveling to annual meetings throughout the project and presenting findings at conferences in great cities.

This was my first real exposure to research and it changed how I viewed the clinical contacts with my patients. I began to appreciate the importance of outcomes and measurement.

This experience coupled with having recently earned my Masters degree allowed me to take on a new position and opportunity of working half time treating patients and half time as the clinical outcomes projects coordinator.

Allow me to describe a few more examples of clinicians driving research.

Mary: who observed that SB patient developed pressure sores after a spinal fusion and suggested using pressure mapping pre & post fusion to document change in sitting posture.

Dr. Hamdy who hypothesized that botox injected into the muscle of a limb being lengthened might decrease spasm and pain during the long distraction or lengthening period.

Steph who observed that children with Osteogenesis Imperfecta undergoing spinal fusion regained their mobility function at approximately 6 months post op and wanted evidence to support this observation which she could

then share with families to encourage them as they prepared for this major surgery

Nathalie who felt children with cerebral palsy of GMFCS level III or IV did not respond well or really progress much after the rhizotomy procedure to reduce spasticity. She used standardized assessment scores to demonstrate to the neurosurgeons they were not good candidates for this procedure.

In each of these examples the idea became a research project with results that were published in journals, displayed as posters or presented at conferences by the clinician themselves.

I am convinced that we therapists are very well suited to being clinician researchers.

We are trained in observation and are good listeners. We see our patients fall, progress, plateau and hear their frustrations and then feel their acceptance.

We recognize the value & need for measurement. From the goniometer to the COPM, we are accustomed to quantifying the change that occurs and naturally promote an atmosphere of measurement.

We are close to the patient, and embrace client centeredness. This allows us to see what is relevant to the patient. Not only do we routinely set functional, measurable goals with each client, we understand what really makes a difference in their lives.

In conclusion I wish you well in your placements; hope you have some fun mastering that goniometer, that the supervisors are not too tough, that your first patients are not too challenging but mainly I hope you will think about clinical placements with a different broader perspective and turn those issues you observe into ideas and questions and become patient oriented clinician researchers.