Fall 2012 issue

November 21 is Resident Advocacy Day

Promoting Good Mental Health

CPS Resident Advocacy Day

We are looking forward to November 21, 2012 for the launch of this year's Resident Advocacy Day. The focus of the day is **promoting good mental health**. Our objectives are to raise awareness about the prevalence of mental health issues (depression, anxiety, ADHD, mood disorders etc.) in the paediatric population and to provide parents with information on the early signs of mental health problems and where to go for help. The event will have 2 parts: a resident education session and a community awareness component at each of the 17 paediatric programs across the country.

We hope it will be an exciting day. Stay tuned for details from your CPS resident representative for further details in your program.

NRP Young Investigator Award

Are you interested in neonatal resuscitation research? If so, this news is for you!

New to the Neonatal Resuscitation Program (NRP), the Young Investigator Award provides up to $5,000 to further knowledge in the area of neonatal resuscitation. The award is open to residents, fellows-in-training and professionals who are no more than five years out of their fellowship.

$750 toward Electives in a Developing Country

October 31 is the deadline for the Fall 2012 Don and Elizabeth Hillman International Child Health Grants.

Present Research at the 90th CPS Annual Conference

The 2013 CPS Annual Conference will be in Edmonton, Alberta, June 19-22. The deadline for abstract submissions is **December 1**.

Links and Resources

CPS Residents Section

Grants for Residents

CPS 2013 Annual Conference - Edmonton, AB

From the Editor's Desk

Please email your suggestions, ideas or comments to san.basak@gmail.com

Resident Teaching on the Fly

Sanjukta Basak, PGY3

So, we all know that working on the wards or in a clinical teaching unit (CTU) can get really busy. With academic rounds, patient centres rounds, resident presentations, handover, family meetings... It is a challenge just to see our patients and get our notes written. As a senior resident, it saddens me that the 'teaching' part of our clinical teaching units so often gets left out when the wards get busy. Studies suggest that residents spend about a quarter of their time teaching and that up to two-thirds of medical student education is provided by residents. I felt it was a very important part of my senior resident ward rotation to teach just like my attending staff. But it has definitely been a challenge to strike the right balance between clinical duties and education.

Here are some ways that I learned to better incorporate teaching into a typical day on the wards:

Seize those teachable moments

I tried to teach on the go by tackling small aspects of a topic. Let's say it's morning rounds, and you have just finished handover from the overnight team. There is a new asthmatic on the ward and the on-call resident has completed her presentation of the case and treatment is initiated. Rather than tackling the huge topic of asthma as a whole, I might summarize the latest CPS statement treatment guidelines in 4 to 5 minutes, emphasizing how these management principles apply to the case in hand. Quick highlights are sometimes very helpful. I would then try to email one good paper to those interested in learning more.

Teaching doesn't need to be a formal lecture. It can be reviewing a procedure, demonstrating a physical exam skill, writing a prescription, or explaining how to write a succinct progress note. Observing how to run a family meeting, providing discharge instructions for an ITP patient, or getting consent to give IVIG for that Kawasaki patient can be both informative and instructional. It is key to alert your student to these 'teachable moments' by being explicit about what they are about to learn. You'd be surprised how many trainees don't even realize they are being taught.

Good preparation

Whenever I read a paper or review article, I try to make a quick summary on my iPad or a blank sheet of paper, keeping in mind how I would explain this paper if I had to share it with someone else. Once when we had three suspected ITP patients on the ward, I needed a refresher myself on the further investigations, treatment and follow-up guidelines. So I created a 'quick reference' sheet for myself with the definition, clinical presentation, differential diagnosis, investigations (what and when needed), treatment and follow-up/discharge instructions.

I keep these sheets handy and pull them out on call or during rounds to teach around a topic in 5 to 10 minutes. Having prepared these mini presentations really helped me to organize an informal teaching session on

the fly. Also, remember your audience: I try to focus more on developing a differential and the approach to diagnosis with medical students, and on clinical decision-making with junior residents. I prepare my sheets keeping targeted learners in mind.

Explain approaches to patient care
Sometimes I'll run through my list of patients and review a patient's course of treatment, explaining why each investigation was made or medication given. As simple as this sounds, we often don't do it in rounds. As residents, we can get so bogged down with doing the work that we forget to stop and think about why we are doing that MRI.... This strategy works really well with medical students.

Learn together
Has this ever happened to you? You ask a question to the attending staff and they throw it right back at you to read up on and teach the rest of the team the next day. I hated this when I was a junior resident but I also learned best this way. On the ward I tried to modify this tactic by finding a case or diagnosis where we could divide up the reading and conquer it together: a mini study group if you will.

Get feedback
Remember to ask the trainee if what you've tried to teach is helpful. I tried to get informal feedback on my teaching skills by asking for it.

Finding the right tool
There are many structured tools available, like the one-minute preceptor or the SNAPPS model. They are helpful to review but in reality, finding the time to teach when things are busy is about being creative, flexible and adaptable within the time constraints being placed upon you. We have academic half-days, grand rounds, journal clubs for more formal and detailed instruction, but remember that your five minutes dedicated to teaching in any given day can still go a long way to fill gaps in your trainee's learning.

Paediatric Residency at NOSM

Melanie Buba, PGY2

I would like to take this opportunity to introduce you to the newest paediatric residency program in Canada! The Northern Ontario School of Medicine (NOSM) paediatric residency program recently welcomed its fourth group of new residents. NOSM grew out of the northern stream of the University of Ottawa's paediatric residency program and is unique for placing residents in a community of their choice in Canada's Northeast or Northwest for 4 to 6 months of each academic year. Also, as PGY3s, we spend two months in Sioux Lookout - a small Ontario community that acts as a medical hub for hundreds of First Nations communities in the region. We act as true generalists in our community. One day in hospital can mean resuscitating a 28-weeker, admitting a child with his first seizure, and managing a toddler in DKA.

The small number of residents in northern Ontario allows for a tremendous resident-to-preceptor ratio, early fostering of autonomy, and more focus on learning rather than on service. Training in an environment without competing paediatric subspecialties creates lots of opportunities to consult

about undifferentiated patients, engage in problem solving, develop critical thinking skills and approach to paediatric problems with knowledge and experience that goes well beyond the basics.

From day one, we are mentored into a senior resident role by supportive and enthusiastic preceptors, and the opportunities for honing procedural skills are endless. These experiences are complemented by our subspecialty rotations at the Children's Hospital of Eastern Ontario in Ottawa, as well as by elective opportunities in first, second and fourth year. It truly is the best of both worlds! I am grateful to be completing my paediatric residency training through the NOSM program. An amazing range of clinical experiences have given me valuable skills, wider knowledge, and a realistic perspective on the true scope of illness in Canadian children.

Resident Advocacy Grant Project Update - Preventing injury through the promotion and distribution of bicycle helmets

Tavis Bodnarchuk, Kym Haberer, Jenette Hayward, Esther Lee, Meghan McPherson, Stefanie Narvey, Vera Saad

Until recently, Manitoba was a province without bike helmet legislation for children and youth, despite the fact that wearing a correctly fitted bicycle helmet is known to reduce the risk of head and brain injury by as much as 85% (MacKay et al., 2011). Provinces and territories mandating bicycle helmets have seen their rate of bicycle-related head injuries reduced by some 45% reduction. Canadian research also suggests helmet legislation is not associated with reduced cycling.

As a group, we decided to help promote the use of bike helmets among Manitoba youth by raising public awareness, making helmets more easily available through free distribution, and rewarding appropriate bicycle helmet usage. Our long-term goal was to get legislation passed mandating helmet use for all cyclists.

To achieve our objectives, we gave presentations on the importance of using a properly fitted bike helmet at schools in lower-income areas, which are known to be at higher risk for cycling injuries. We also visited paediatric clinics to give away free helmets. One of these visits was covered by local media. We partnered with non-profit organizations to store and distribute helmets- free to children who were caught biking without a helmet- and award prizes to young cyclists who were wearing their helmet. We donated helmets to numerous community organizations, OT/PT clinics and the Winnipeg police bike auction.

We developed a petition advocating helmet legislation in Manitoba and distributed copies to the Ministry of Healthy Living, the provincial Premier, the leader of the opposition, and the opposition's health critic. We distributed a standard letter to MLAs and to local physicians to facilitate their own advocacy for legislation. We also met personally with Jim Rondeau, Manitoba's Minister of Healthy Living, Youth and Seniors, to present our

petition.

This journey has been a very rich experience with many lessons learned. We met with a surprising amount of resistance to what had seemed to us to be a noncontroversial safety measure. We faced the challenge of meeting with numerous community partners despite very busy schedules. As key contacts moved on or became unavailable, we often needed to plan an approach all over again. The intricacies of politics, while not a surprise, were yet another challenge that we had to deal with.

On the other hand, we had many rewarding successes. We distributed 900 free helmets. We discovered and partnered with many vibrant and beneficial community organizations and developed a system of education and reinforcement. We supported political proponents of helmet law and helped encouraged widely felt paediatrician advocacy. Most importantly, new bike helmet legislation has been passed.

We are grateful to all those who supported this work, especially the University of Manitoba's Department of Pediatrics and Child Health, and the Canadian Paediatric Society, who funded our project. Special thanks to our mentors, Drs. Lynne Warda and Patrick McDonald, who guided us through this quest.

The Preventable Tragedy: ATV use and advocating as paediatric residents

Justine Cohen-Silver, PGY3
Evelyn Rozenblyum, PGY4

"Johnny" is an otherwise healthy 3-year-old boy who became curious about his father's all-terrain vehicle (ATV) one evening in February. His father went outside with him and turned on the ATV. Within five seconds their lives changed forever: Johnny jumped onto the ATV when his father turned away momentarily, stepped on the gas, and went full speed into a wall about 50 feet away. Johnny was rushed by air ambulance to the Hospital for Sick Children. He sustained multiple fractures and a severe head injury.

"Tom" was 15 years old. He loved his ATV, even though he had already suffered various injuries while riding it. One day, despite wearing a helmet, his ATV rolled and the crush injury Tom sustained was tragically fatal.

For any resident, such dreadful clinical encounters are grave and profoundly sad, largely because we know they are preventable. These events change a family's life forever because all too often they transform a healthy and able child into a neurologically impaired or deceased child. In recognizing that these are preventable occurrences should we also, as paediatric residents, ask ourselves: "Can we do more than just support this family? How can we prevent these scenarios and unite as physicians to advocate for children and against this type of tragic loss?"

ATVs are designed for off-road use, commonly having four wheels, large, lower pressure tires, a high centre of gravity, no roof and no airbags[1]. They come in a range of sizes with engine displacements of 50 to 700cc, and can

weigh over 300 kg (661 lbs)[3]. The Canadian ATV industry recently updated a voluntary standard recommending that children should not ride ATVs with an engine size greater than 70cc or 90cc if they were younger than 12 and 16 years of age, respectively[3]. New recommendations indicate that Y-6+ models are designed for riders 6 years and older, Y-10+ and Y-12+ models are for riders aged 10 and 12 (respectively), and 'T' models are for riders aged 14 and up. These models come with factory-set maximum speeds of 16 to 32 km/h, but speed limits can be adjusted higher in all models-to a maximum of 61 km/h in the T model. ATVs are expensive vehicles so frequently, families share adult-sized ATVs. Youth ATVs have not been proven safer for use.

Over the last 20 years, ATVs have become increasingly popular in Canada. As their numbers have grown, so have the rates of injuries, hospitalizations and deaths related to ATV use. There was a 50% increase in injuries and hospitalizations from 1996 to 2001, with 36% of these occurrences in children between the ages of 5 and 19 years of age[2]. ATV injuries tend to be significantly more severe than injuries sustained from riding a bicycle, and more often require admission to hospital and intensive care, along with prolonged hospital stays[2]. In Ontario, there was a major increase in ATV fatalities from 1996 to 2005 (74 in total) with 21% of fatalities occurring in children under 16 years of age, and the major cause of death being head trauma[4]. Risk factors associated with death include alcohol use, riding at night, not wearing a helmet and excessive speed[4]. Injuries are more common in the summer months, tend to happen between the hours of 16:00 and 20:00[3], and most injured riders are male (90%).[4]

The Canadian Paediatric Society position statement "Preventing injuries from all-terrain vehicles," was revised and updated in 2012. It states that children and adolescents are at highest risk for ATV injury because they lack the knowledge, physical size, strength, and cognitive and motor skills to operate these dangerous vehicles safely[3,4].

Legislation governing ATV use varies greatly across Canada despite ongoing efforts to standardize and harmonize provincial/territorial laws. Inconsistencies in registration requirements (e.g., minimum age), in operating ages (i.e., on private and public lands, with and without adult supervision), in safety training requirements and in mandatory helmet use[5] still prevail in many jurisdictions. On August 30, 2012, the Canadian Paediatric Society issued a news release in conjunction with their updated statement calling for "provinces and territories to harmonize their off-road legislation, prohibiting ATV operators who are under 16 years, making helmet use and training courses compulsory, and restricting riders from carrying passengers".[6]

It is too late for Johnny and Tom. We were not able to help prevent their tragedies, but as paediatric residents, maybe we can work to prevent their recurrence. We can come together as physicians to help prevent the preventable from happening.

The University of Toronto paediatric residents are joining faculty at the Hospital for Sick Children, along with Parachute, a national, charitable collaboration among Safe Kids Canada, SmartRisk, ThinkFirst Canada and Safe Communities Canada. We are working together to advocate for legislation against youth ATV use in Ontario. We hope to take a multifaceted

approach- raising public awareness, involving media, launching educational campaigns, and approaching the Ontario government. Our objectives are to ensure, by law, a minimum operator age of at least 16 years, to restrict the number of passengers, to make helmet use compulsory with no exemptions, and to require training courses, vehicle licensing and registration.

Utilizing current evidence on ATV-related deaths and injuries, we urge paediatricians to counsel families about the dangers of these vehicles. We should let families know that most ATV injuries occur most often during evening hours in the summer, and usually involve male passengers and riders. We should recommend that all ATV drivers pass an approved training course, wear a government-certified helmet and other safety gear, avoid using alcohol or other substances, and ride without passengers. Families should be aware that ATV injuries are more severe than those sustained from other recreational vehicles, such as bicycles, and that children and youth are disproportionately affected.

Let's all work together to make a difference! We are hoping to make safety-related legislation uniform across Canada because it is proven to prevent injuries. We need your help to make this a reality across the country! To find out how you can become involved, please contact: evelyn.rozenblyum@sickkids.ca or justine.cohen-silver@sickkids.ca . We look forward to updating you in an upcoming newsletter about how our advocacy is going!

We would also like to acknowledge the tremendous support of our staff supervisors at the Hospital for Sick Children: Dr. Suzanne Beno (an emergency medicine physician, already working closely with Parachute on issues around ATVs and legislation), Dr. Charlotte Moore (a general paediatrician with a background in social paediatrics), and Dr. Adele Atkinson (an allergist and immunologist, and our amazing program director).

References:

1 Rodgers GB. All-terrain vehicle injury risks and the effects of regulation. Accident Analysis and Prevention 1993; 25(3): 335-46.
2 Yanchar NL, Kennedy R, Russell C. ATVs: Motorized toys or vehicles for children? Injury Prevention 2006; 12(1): 30-34.
3 Canadian Pediatric Society. Preventing injuries from all terrain vehicles. Paediatrics & Child Health 2004; 9(5): 337-40.
4 Lord S, Tator CH, Wells S. Examining deaths due to all-terrain vehicles, and targets for prevention. The Canadian Journal of Neurological Sciences 2010; 37(3): 343-49.
5 http://www.safekidscanada.ca/Professionals/Advocacy/Documents/26780-ATVProvincialLegislationChart.pdf
6 CPS News Release August 30, 2012: Tighter Controls Needed on ATV Use, http://www.cps.ca/media/release-communique/all-terrain-vehicle-use.
7 Fonsenca AH, Gehsner MG, Bromber WJ, Gantt D. All terrain-vehicle injuries: Are they dangerous? A 6-year experience at a level I trauma center after legislative regulations expired. American Journal of Surgery 2005; 71(11): 937-940.