

# **Conference App**



Don't forget to download the mobile app for quick access to all important conference information!

## **Mobile Devices**

- Download the app on your device by searching: "The Event App By EventsAir" on the Apple Store or on Google Play
- Once installed, enter Event Code: 38cacap
- · Login using the email you used to register for the course and the PIN number you received this morning by email

### Computer

- Visit our attendee app on your web browser: https://uottawacpd.eventsair.com/attendeeapp/cacap2018/38cacap/
- · Login using the email you used to register for the course and the PIN number you received this morning by email

# **Course Evaluations**



Your feedback is important to us! Please remember to complete the course evaluations forms. To access the course evaluations forms, please log into the attendee app, and follow the instructions below. To evaluate the overall conference, please select the session "Concluding Remarks and Overall Evaluation".

- Select Agenda
- Click the session that you would like to evaluate
- Click on the speaker name
- · Click evaluation

# **Access to Course Presentations**



All available course materials will be posted online, so long as the presenter has granted us permission to do so. To access the presentations for the course, please log into the attendee app, and follow the instructions below:

- Select Agenda
- Click the session
- Click on the speaker name
- Click presentation

# **WIFI Access**



Complimentary WIFI is available. To connect, please select the network "Banquet Lobby".

# Accreditation



This event is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada, and approved by the University of Ottawa's Office of Continuing Professional Development. You may claim a maximum of 15.75 hours (credits are automatically calculated).

This one-credit-per-hour Group Learning program meets the certification criteria of the College of Family Physicians of Canada and has been certified by the University of Ottawa's Office of Continuing Professional Development for up to 15.75 Mainpro+ credits.

# Conference Theme and Learning Objectives

This year's conference theme is Challenges in Child and Adolescent Psychiatry: Caring for Populations with Complex Needs.

# Learning Objectives:

- . Review up-to-date information on the aetiology, clinical presentation and treatment outcomes of complex psychiatric presentations in children and youth
- Describe the complex interplay between social and individual characteristics and the presentation of psychiatric disorder

# Thank You to the 38th Annual CACAP Conference Keynote Speakers

- Dr. Amy Bombay, Assistant Professor, School of Nursing, Department of Psychiatry, Dalhousie University
- Dr. Benjamin Goldstein, Senior Scientist, Evaluative Clinical Sciences, Hurvitz Brain Sciences Research Program, Sunnybrook Research Institute,
  Director of Research, Department of Psychiatry, Sunnybrook Health Sciences Centre, Director, Clinician Scientist Program, Department of
  Psychiatry, Faculty of Medicine, University of Toronto, Professor, Departments of Psychiatry, Pharmacology, and Psychological Clinical
  Science, University of Toronto, Adjunct Assistant Professor, Western Psychiatric Institute and Clinic, University of Pittsburgh School of
  Medicine
- Dr. Shuvo Ghosh, Director, Resident Research and Scholarly Projects (Core Pediatric Residency Program); Head, Gender Variance Program (GVP); Coordinator, Child Development Research Alliance (CDRA); Member, McGill Global Child Health Initiative
- Dr. Gagan Joshi, Director, Autism Spectrum Disorder Program in Pediatric Psychopharmacology, Associate Program Director, MGH Fellowship in Autism Spectrum Disorder, Medical Director, The Alan & Lorraine Bressler Program for Autism Spectrum Disorder, Massachusetts General Hospital, Boston Massachusetts, Associate Professor of Psychiatry, Harvard Medical School, Boston Massachusetts, Research Affiliate, McGovern Institute for Brain Research Massachusetts Institute of Technology, Cambridge Massachusetts
- **Dr. Daphne Korczak**, Director, Children's Integrated Mind and Body (CLIMB) Program; Staff Psychiatrist, The Hospital for Sick Children; Assistant Professor, Pediatrics, University of Toronto; Associate Member, Institute of Medical Science
- **Dr. Daniel Pine**, Senior Psychiatrist, The Ross Center, Member, Scientific Research Council, Child Mind Institute, Chief, Section on Development and Affective Neuroscience, Chief, Emotion and Development Branch, Chief of Child and Adolescent Research in the Mood and Anxiety Disorders Program, National Institute of Mental Health
- Dr. Susan Weiss, Director, Division of Extramural Research at the National Institute on Drug Abuse (NIDA)

# Thank You to the 38th Annual CACAP Conference Executive Committee

- Dr. Daphne Korczak
- Dr. Roberto Sassi
- Ms. Elizabeth Waite
- Dr. Chris Wilkes

# Thank You to the 38th Annual CACAP Conference Research and Scientific Program Committee

- Dr. Ademola Adeponle
- Dr. Alexa Bagnell
- Dr. Anthony Bailey
- Dr. Danielle Baribeau
- Dr. Khrista Boylan
- Dr. Amy Cheung
- Dr. Nathalie Gingras
- Dr. Benjamin Goldstein
- Dr. Daniel Gorman
- Dr. Lily Hechtman
- Dr. Sarosh Khalid-Khan
- Dr. Daphne Korczak (Vice-Chair)
- Dr. Frank MacMaster
- Dr. Rob Milin

- Dr. Rachel Mitchell
- Dr. Suneeta Monga
- Dr. Kathleen Pajer
- Dr. Roberto Sassi (Chair)
- Dr. Noam Soreni
- Dr. Ashley Wazana

# Thank You to the 38th Annual CACAP Conference Local Planning Committee

- Dr. Sabina Abidi
- Dr. Alexa Bagnell
- Ms. Megan Bellefontaine
- · Ms. Debi Follett
- Dr. Johanna Zed





Dear colleagues,

It is a great pleasure to welcome you to Halifax for the 38<sup>th</sup> Annual Conference of the Canadian Academy of Child and Adolescent Psychiatry.

I am sure you will join me in expressing sincere appreciation to Drs. Roberto Sassi and Daphne Korczak, Chair and Vice Chair of the Research and Scientific Program Committee, for their dedication, passion and ongoing work in preparing a wonderful program. We are privileged to have a number of outstanding speakers who will inspire us and share their expertise on "Challenges in Child and Adolescent Psychiatry: Caring for Populations with Complex Needs".

I would like to sincerely thank CACAP's Local Planning committee, Drs. Abidi, Bagnell, Zed, Ms. Bellefontaine and Follett, for assisting with organization and development of the play therapy guide to ensure that your visit is educational and entertaining. I would like to thank Sheena Levesque, Conference Planner, from the University of Ottawa Continuing Professional Development department for her excellent work in assisting with all the organization and details related to the conference.

I encourage you to take the time and opportunity to share with colleagues, learn about their work, passion and recent updates in Child and Adolescent Psychiatry. Take a moment to meet and support medical students and residents, and share the pleasure of working with children and their families. I am looking forward to meeting and hearing from you in Halifax!

# Dr. Sophia Hrycko

President, Canadian Academy of Child and Adolescent Psychiatry

# Dear Colleagues,

Greetings! We are excited to welcome you to the 38th Annual Conference of the Canadian Academy of Child and Adolescent Psychiatry in the beautiful city of Halifax, NS. Our theme this year, "Challenges in Child and Adolescent Psychiatry: Caring for Populations with Complex Needs", strives to reflect the increasing complexity of the cases we see on our daily practice.

Over the years, the population we serve has struggled with higher levels of medical, psychiatric and psychosocial comorbidities. Clinicians have been faced with treatment dilemmas and phenomenological presentations that are unique in certain populations. Our outstanding line-up of keynote speakers will bring up a wide range of clinical and research expertise on a variety of complex treatment dilemmas: on Sunday, Dr. Joshi (MGH/Harvard) will review pharmacological treatment options for children and youth with ASD, while Dr. Pine (NIMH) will present an update on the neurobiology of mood and anxiety disorders in children. On Monday the program starts early, with our Breakfast with Experts session featuring Dr. Korczak (SickKids) and Dr. Goldstein (Sunnybrook), focusing on the links between metabolic disorders and mental health. Later in the morning we will have Dr. Gosh (McGill) presenting on mental health issues for transgender youth, while Dr. Bombay (Dalhousie) will review the mental health concerns in indigenous youth. Finally, on Tuesday we will have Dr. Weiss (NIDA) reviewing the most up to date research on cannabis and mental health. Our program also includes an impressive lineup of seminars, symposia and poster presentations on a variety of key topics in child and adolescent psychiatry.

On behalf of the entire Research and Scientific Program Committee, we hope you have an excellent time networking with colleagues and enriching your clinical knowledge during our conference. We look forward to see you in Halifax!

# Dr. Roberto Sassi

Chair, CACAP Research and Scientific Committee

# Dr. Daphne Korczak

Vice-Chair, CACAP Research and Scientific Committee











Dear Colleagues,

"Ciad Mile Failte", a 100,000 welcomes to Nova Scotia! We are very excited to host the 38<sup>th</sup> Annual Conference for the Canadian Academy of Child and Adolescent Psychiatry. The theme of this year's conference "Caring for Populations with Complex Needs", is at the heart of what we do in child and adolescent psychiatry. Working with youth and families within the context of their community and culture, to support better health outcomes and improved function is our passion and top priority.

Nova Scotia has long welcomed visitors and new Canadians. We have a close connection to the sea, and our history is strongly influenced by Mi'kmaq, Acadian, African Nova Scotian and Celtic and Gaelic cultures. Halifax is the home to Pier 21, one of the main entry points welcoming immigrants to Canada in the 20<sup>th</sup> century. As a port city on the Atlantic, Halifax has been the base for shipping and trade, naval and military resources, government and tourism. Walking around the city and along the waterfront gives you a wonderful feel for the history and vibrancy of this region. People are friendly and generous, the pace is relaxed and the local food and drink is excellent.

This year is the 150<sup>th</sup> anniversary of Dalhousie Medical School, with a long history of training Maritime physicians. The IWK Health Centre is the Maritimes specialized centre for children, youth and women's health and mental health care. The IWK opened the Garron Centre, a state of the art inpatient psychiatric unit for youth up to 19 years of age, in 2014. Both campuses are within walking distance of the conference.

The conference is being hosted in an ideal location to explore the waterfront, downtown and local parks by foot. The Play Therapy Guide has great suggestions of things to do, and the Atlantic International Film Festival is taking place in Halifax during the conference. With a warm welcome to all our colleagues, we are looking forward to a great conference. We hope you enjoy your stay, and have some time to "come play with us" and explore the city and the province while you are here.

SEPTEMBER 15, 2018 (PRE-CONFERENCE COMMITTEE MEETINGS)						
8:00 - 12:00	Royal College of Physicians and Surgeons of Canada, Child and Adolescent Psychiatry Subspecialty Committee	Commonwealth B				
11:00 - 17:00	CACAP Board of Directors Meeting	Maritime Room				
12:00 - 18:30	Conference Pre-Registration	Commonwealth Foyer				
13:00 - 16:00	Child and Adolescent Psychiatry Committee on Postgraduate Education Meeting	Commonwealth B				
18:00 - 21:00	Association of Professors of Child and Adolescent Psychiatry Dinner Meeting	Maritime Room				

SEPTEMBER 16,	2018					
07:00 - 17:30	Registration	Commonwealth Foye				
08:00 - 08:20	Presidential Address	Commonwealth A				
08:20 - 08:30	esearch and Scientific Committee Chair Remarks Commonv					
08:30 - 09:50	The Pharmacological Treatment of ASD and Its Comorbidities, Across the Lifespan Dr. Gagan Joshi, Director, Autism Spectrum Disorder Program in Pediatric Psychopharmacology, Associate Program Director, MGH Fellowship in Autism Spectrum Disorder, Medical Director, The Alan & Lorraine Bressler Program for Autism Spectrum Disorder, Massachusetts General Hospital, Boston Massachusetts, Associate Professor of Psychiatry, Harvard Medical School, Boston Massachusetts, Research Affiliate, McGovern Institute for Brain Research Massachusetts Institute of Technology, Cambridge Massachusetts	Commonwealth A				
	<ul> <li>Identify the complexities and challenges of pharmacological treatment of children and youth with ASD</li> <li>Describe evidence-based treatment options for this population</li> </ul>					
09:50 - 10:00	Awards Presentation #1	Commonwealth A				
10:00 - 10:20	Nutrition and Networking Break	Atlantic Mezzanine				
10:20 - 11:40	Neurobiology of Mood and Anxiety Disorder in Children <u>Dr. Daniel Pine, Senior Psychiatrist, The Ross Center, Member, Scientific Research Council, Child Mind Institute, Chief, Section on Development and Affective Neuroscience, Chief, Emotion and Development Branch, Chief of Child and Adolescent Research in the Mood and Anxiety Disorders Program, National Institute of Mental Health  Review up-to-date information on neurobiological models for the aetiology and presentation of</u>	Commonwealth A				
	mood and anxiety disorders in children and youth  • Discuss the implications of these neurobiological models on treatment decisions for complex cases					
11:40 - 12:05	Laing House Youth Speak Steph Young and Keith MacIsaac	Commonwealth A				
	Youth Speak is an award-winning educational program that uses a peer-to-peer approach to increase mental health knowledge and reduce stigma. Members reach out to schools, businesses, community groups, conferences, and other events to share their personal stories of mental illness and how Laing House has played a role in their recovery.					
12:05 - 12:15	Awards Presentation #2	Commonwealth A				
12:15 - 13:45	Lunch on Your Own and Exhibits					
12:15 - 13:45	World Café (light lunch offered)	Commonwealth B				
12:15 - 13:45	CACAP Education Committee Meeting	Maritime Room				
12:15 - 13:45	CACAP Research and Scientific Committee Meeting	Boardroom				

13:45 - 15:15	Concurrent Session Round A	
A1	RESEARCH SYMPOSIUM Emerging Family and Genetic Studies of Childhood-Onset Obsessive-Compulsive Disorder (#67) Dr. S. Evelyn Stewart, Dr. Paul Arnold, Dr. Clara Westwell-Roper	Tradewinds
A2	WORKSHOP Post-Secondary Student Mental Health: a Primer for Canadian Psychiatrists (#27) Dr. Andrea Levinson	Harbour A
АЗ	SPECIAL INTEREST STUDY GROUP  Meeting the Complex Needs of the Medical/Mental Health Population (#53)  Dr. Claire De Souza, Dr. Kelly Saran, Dr. Tyler Pirlot, Dr. Roberto Sassi, Dr. Javeed Sukhera, Dr. Sophia  Hrycko, Dr. Ruth Russell, Dr. David Lovas, Dr. Selene Etches	Commonwealth B
A5	SPECIAL INTEREST STUDY GROUP  Applying Evidence-Informed Practices to the Selection of Future Child & Adolescent Psychiatrists (#46)  Dr. Chetana Kulkarni, Dr. Raj Rasasingham	Harbour B
15:15 - 15:30	Nutrition and Networking Break	Atlantic Mezzanine
15:30 - 17:00	Concurrent Session Round B	
B1	RESEARCH SYMPOSIUM Prediction and Prevention of Psychopathology in Developmental Cohorts (#60) Dr. Rudolf Uher, Dr. Ashley Wazana, Dr. Barbara Pavlova	Tradewinds
В2	SPECIAL INTEREST STUDY GROUP 4-Phase Approach to Treating Somatization (#66) Dr. Tyler Pirlot	Commonwealth B
В3	RESEARCH SYMPOSIUM Disruptive Mood Dysregulation Disorder: A Case-Control Actigraphy Study (#49) Dr. Jean Marc Guile	Harbour B
B3	Disruptive Mood Dysregulation Disorder: A Case-Control Actigraphy Study (#49)  Dr. Jean Marc Guile	Harbour B Harbour A
	Disruptive Mood Dysregulation Disorder: A Case-Control Actigraphy Study (#49)  Dr. Jean Marc Guile  WORKSHOP  Demystifying Eating Disorders: The ABC's (#11)	

SEPTEMBER 17, 2018	3	
07:15 - 08:15	CACAP Credentials Committee Meeting	Boardroom
07:15 - 17:30	Registration	Commonwealth Foyer
08:00 - 08:15	Welcome Back	Commonwealth A
08:15 - 09:15	Breakfast with the Experts: The Cross Talk Between Metabolic Issues and Mental Health in Youth <u>Dr. Benjamin Goldstein,</u> Senior Scientist, Evaluative Clinical Sciences, Hurvitz Brain Sciences Research  Program, Sunnybrook Research Institute, Director of Research, Department of Psychiatry, Sunnybrook  Health Sciences Centre, Director, Clinician Scientist Program, Department of Psychiatry, Faculty of  Medicine, University of Toronto, Professor, Departments of Psychiatry, Pharmacology, and Psychological  Clinical Science, University of Toronto, Adjunct Assistant Professor, Western Psychiatric Institute and  Clinic, University of Pittsburgh School of Medicine; <u>Dr. Daphne Korczak</u> , Director, Children's Integrated  Mind and Body (CLIMB) Program; Staff Psychiatrist, The Hospital for Sick Children; Assistant Professor,  Pediatrics, University of Toronto; Associate Member, Institute of Medical Science  Identify and discuss the association between childhood mood disorders and increased  cardiovascular disease morbidity in adulthood	Commonwealth A

9:15 - 09:25	Awards Presentation #3	Commonwealth A
09:25 - 10:30	Transgender Youth <u>Dr. Shuvo Ghosh</u> , Director, Resident Research and Scholarly Projects (Core Pediatric Residency Program); Head, Gender Variance Program (GVP); Coordinator, Child Development Research Alliance (CDRA); Member, McGill Global Child Health Initiative	Commonwealth A
	<ul> <li>Identify the distinctive presentation of mental health issues among transgender youth</li> <li>Describe effective clinical approaches for this population</li> </ul>	
10:30 - 10:50	Nutrition and Networking Break	Atlantic Mezzanine
0:50 - 11:50	Mental Health in Indigenous Youth <u>Dr. Amy Bombay,</u> Assistant Professor, School of Nursing, Department of Psychiatry, Dalhousie University	Commonwealth A
	<ul> <li>List and identify the challenges experienced by indigenous youth</li> <li>Identify how to better provide mental health treatment for this population</li> </ul>	
1:50 - 12:00	Awards Presentation #4	Commonwealth A
12:00 - 13:30	AGM Lunch	Commonwealth A
.3:30 - 15:00	Concurrent Sessions Round C	
а	RESEARCH SYMPOSIUM Adolescent Predictors of Adult Outcomes in ADHD (#41) Dr. Lily Hechtman	Tradewinds
C2	WORKSHOP PANS/PANDAS: Bridging the Divide Between Research and Clinical Practice (#56) Dr. Susan Baer, Dr. Megan MacFadden, Dr. Evelyn Stewart, Dr. Clara Westwell-Roper	Harbour A
СЗ	SPECIAL INTEREST STUDY GROUP  Working with Youth Who Use and Misuse Substances (#25)  Dr. Selena Etches, Mr. Jeff Thoms	Commonwealth B
C4	ACADEMIC PERSPECTIVES Supporting Healthy Development in Autism Spectrum Disorders: Challenges and Solutions (#3) Dr. Katharina Manassis, Dr. Lukas Propper, Dr. Celia Robichaud, Dr. Pippa Moss, Dr. Lila Amirali	Harbour B
.5:00 - 15:30	Nutrition and Networking Break	Atlantic Mezzanine
5:30 - 17:00	Concurrent Sessions Round D	
D1	RESEARCH SYMPOSIUM Transdiagnostic eHealth Sleep Intervention for Parents of Children with NDD (#19) Dr. Penny Corkum, Dr. Shelly Weiss, Ms. Nikki Ali, Ms. Jenny Tyler	Tradewinds
D2	WORKSHOP Bringing Mental Health Literacy to Schools (#5) Dr. Stan Kutcher, Dr. Yifend Wei	Harbour A
D3	WORKSHOP InCYT-Y (Integrative Cognitive Yoga Therapy for Youth): A Pilot Study (#23) Dr. Arianne St Jacques, Dr. Upasana Krishnadev	Commonwealth B
D4	RESEARCH SYMPOSIUM  Defining the Complexity of the Paediatric Consultation-Liaison (CL) Psychiatry Population (#52)  Dr. Claire De Souza	Harbour B

SEPTEMBER 18, 2018	3		
07:00 - 12:30	Registration	Commonwealth Foyer	
07:00 - 08:00	SickKids & CAMH Breakfast (Open to 40 Participants) Interested in working at SickKids or CAMH? Please join aluminae and friends of SickKids and CAMH for breakfast and conversation to learn more about the exciting opportunities that exist at each institution. RSVP here: https://www.surveymonkey.com/r/SK_CAMH	Lunenburg Room r	
08:00 - 09:30	Concurrent Sessions Round E		
E1	SPECIAL INTEREST STUDY GROUP Challenges and Strategies for Managing Complex Needs in Inpatient Psychiatry (#32) Dr. Lila Amirali, Dr. Andrew Hall	Tradewinds	
E2	WORKSHOP Psychotherapeutic Approaches to Supporting Trans* Youth with Body Dysphoria (#65) Dr. Sue Zinck	Harbour A	
E3	WORKSHOP How to Write and Review a Scientific Journal Article (#13) Dr. Khrista Boylan, Dr. Normand Carrey	Commonwealth B	
E4	ACADEMIC PERSPECTIVES Lean Learning in Halifax: System Change in Outpatient Mental Health (#64) Dr. Alexa Bagnell, Maureen Brennan, Onur Pakkanlilar, Dr. Sabina Abidi, Dr. Sharon Clark, Dr. Jill Chorney	Harbour B	
09:30 - 09:45	Nutrition and Networking Break	Atlantic Mezzanine	
09:45 - 10:45	<ul> <li>Panel Presentation: Top 3 Reviewed Poster Presentations</li> <li>Family History of Mental Illness, Adversity and Psychopathology in Youth (#47)         <i>Ms. Alyson Zwicker</i></li> <li>Maintenance Pharmacological Treatment in Pediatric Bipolar Disorder: A Systematic Review (#6)         <i>Dr. Caitlin S. Yee</i></li> <li>Do Systematic Reviews and Meta-Analyses Meet International Quality Standards? (#43)         <i>Dr. Kathryn Bennett</i></li> </ul>	Commonwealth A	
10:45 - 10:50	Awards Presentation #5	Commonwealth A	
10:50 - 12:05	Cannabis Use and Mental Health in Youth <u>Dr. Susan Weiss</u> , Director, Division of Extramural Research at the National Institute on Drug Abuse (NIDA)  Assess the neurobiological impact of cannabis use in children and youth  Describe the potential mental health consequences of cannabis use in this population	Commonwealth A	
12:05 - 12:15	Closing Remarks and Scientific Awards	Commonwealth A	

CACAP has heard you that as an organization it plays an essential role in supporting the development and dissemination of educational resources and opportunities in the field of Child & Adolescent Psychiatry. Now we need your help in directing this process to ensure that it meets your needs. Please complete our brief online Education Needs Assessment Survey to help us better understand which resources or opportunities would be most valuable and relevant to you! The survey will take less than 10 minutes to complete. https://www.surveymonkey.com/r/96W592Z

# Concurrent

# Sessions



# #3 Supporting Healthy Development in Autism Spectrum Disorders: Challenges and Solutions Academic Perspectives Dr. Katharina Manassis

<u>Learning objectives:</u> Identify challenges and potential solutions to early developmental transitions in ASD; Identify challenges and potential solutions to transition to emerging adulthood in ASD: Discuss models of systems organization designed to support healthy development in ASD

Objectives: Complex presentations and individual differences in Autism Spectrum Disorder (ASD) pose challenges for mental health providers, particularly during developmental transitions. We highlight the impact of major transition periods on mental health in young individuals with ASD, the need for support and specialized mental health services, and potential solutions from family, professional, and systems perspectives. Method: Presentations focus on transition from pre-school to school-age, transition to secondary education, and transition to emerging adulthood in ASD, as well as organization and integration of systems needed to help ASD children and youth successfully navigate these transitions. Potential solutions to transitional difficulties are illustrated using detailed clinical examples, survey results, description of organizational systems (e.g., the evidence-based Medical Home model of care), and review of existing empirical evidence. Conclusion: The multi-faceted needs of individuals with ASD, their sensitivity to change, and lack of integration among medical, social, and educational systems all pose challenges during developmental transitions. Potential solutions must include perspectives from ASD individuals, families, sensitive clinicians, case managers, and health systems experts. The need for family-centred and coordinated care is emphasized.

# Session #1: Challenges Related to Transitions in Children and Adolescents with Autism Spectrum Disorder Dr. Lukas Propper, Dr. Celia Robichaud

<u>Learning objectives:</u> Identify challenges related to major transition periods in children and adolescents with ASD; Discuss the impact of major transition periods on mental health in young individuals with ASD; Determine the need for support and specialized mental health care services for children with ASD

Background: Coping with a change in daily routines is challenging for many young individuals with autism spectrum disorder (ASD) and dealing with unpredictable situations involving new people and new environments during a transition period can cause stress and lead to an onset or exacerbation of their mental health difficulties. Objectives: We selected 2 major transition periods (transition from preschool to school-age and transition to junior high school during adolescence) to demonstrate common challenges associated with the transitions, point out gaps in the existing mental health care system, and the need for better collaboration between the mental health and educational systems. Method: We will present 2 complex case scenarios to highlight the challenges in each of the selected transition periods and review mental health difficulties commonly associated with the transition related life changes in children and adolescents with ASD. Conclusion: It is important to monitor mental health in young individuals with ASD, especially during major life changes, as the transitions pose an increased risk for an onset or exacerbation of their mental health issues. It is also important to advocate for an adequate support during the transitions and for development of mental health services tailored toward the needs of children and adolescents with ASD.

# Session #2: Transition to Emerging Adulthood in Autism: Challenges and Potential Solutions Dr. Katharina Manassis, Dr. Pippa Moss

<u>Learning objectives:</u> Identify barriers to successful transition to adulthood in ASD youth; Discuss potential solutions to transitional problems from a family perspective; Discuss potential solutions to transitional problems from a professional perspective.

Objectives: The Mental Health Commission of Canada has identified transition to emerging adulthood as a priority in care, emphasizing the need to remove barriers to integration of services and sectors. Individuals on the Autistic Spectrum (ASD) face particular transitional challenges, with high rates of adult unemployment or employment/IQ discrepancy, social isolation, post-secondary drop-out, and internalizing disorders among both youth and caregivers. More over, community participation decreases from adolescence to adulthood in ASD. We will highlight barriers to ASD youths' successfully navigating this transition, and potential solutions from family and professional perspectives. Method: Key concepts will be illustrated with clinical examples and results from a Nova Scotia survey of young adults with ASD. Empirical evidence for transitional supports will be reviewed briefly. Results: Transitional barriers include misinformation/stigma about ASD youth, family burnout, interventions targeted to neurotypical youth, and poor integration among medical, educational, vocational, and social systems. Solutions require attention to individual differences among ASD youth and their families, supports tailored to those differences, and systems integration. There is limited research evidence for case management and multi-family group approaches. Conclusion: Further study is needed of optimal supports for ASD youth transitioning to adulthood, but family engagement and communication between sectors appears essential.

# Session #3: Organizing Services for Autistic Children: Medical Home Model of Care

<u>Learning objectives:</u> Identify the challenges of organizing care to meet the multiple medical and mental health needs of autistic children; Discuss the development of the Medical Home Model of Care and evidence for its benefits; Identify the challenges to implementing the Medical Home Model of Care, especially in academic hospital settings

Objectives: Autistic children typically struggle with multiple medical and mental health needs, and families are often left to navigate a complex, fragmented array of community resources resulting in many unmet needs. High quality primary care, as exemplified by the Medical Home Model of Care proposed by the American Pediatric Society, offers the promise of meeting a high proportion of these needs. This presentation will describe the model, evidence for it, and challenges with its implementation. Method: After describing the model and its similarities and differences from other models of care, the literature on the use of the Medical Home Model of Care is reviewed. Then, implementation challenges are illustrated with specific examples from the author's practice in an academic hospital setting. Conclusion: The Medical Home Model of Care appears to be associated with a reduction in unmet needs of children with ASD. Family-centered and coordinated care are very important elements of the model that likely account for its favorable outcomes. However, further study of the model is needed and implementation challenges remain in many settings.

# #5 Bringing Mental Health Literacy to Schools Workshop

Dr. Stan Kutcher, Dalhousie University; Dr. Yifeng Wei

<u>Learning objectives:</u> Discuss mental health literacy and its importance within a comprehensive pathway through care; Discuss an effective mental health literacy resource applied by usual classroom teachers through curriculum in grades 8 to 10; Identify an effective educator training intervention that assists in the identification, support, triage and referral of students with mental disorders

A unique, freely available mental health literacy curriculum resource intervention and educator training for identification, triage and support of students with mental health concerns intervention have now been successfully applied in schools across most of Canada's provinces. Research shows significant, substantial and sustained positive impact on student and teacher outcomes and improved access to care for students. The original train-the-trainer model has now been enhanced with an on-line, certified professional education opportunity for classroom teachers. Research has demonstrated the impact of this approach as well. Knowing about the availability of this evidence based intervention is important for child and adolescent psychiatrists who may be working with schools or who may be looking for approaches that they can provide in their communities. Opportunities now exist for child and adolescent psychiatrists who wish to develop capacity to deliver these interventions as part of their community based work to learn about them through this workshop.

# #11 Demystifying Eating Disorders: The ABC's Workshop

Dr. Clare Roscoe, Children's Hospital of Eastern Ontario

<u>Learning objectives:</u> Review Eating Disorders in children and youth, including understanding them from the patient's perspective; Identify practical skills on how to assess, engage and treat youth with mild to moderate eating disorders in their practice, as well as when to refer to a specialized treatment center; Identify and assess risks associated with eating disorders, including the psychological effects of malnutrition, and how to include screening as part of a global psychiatric risk assessment

Eating disorders are difficult and complicated mental health issues. They can be insidious and hidden, ego —syntonic in nature, and can leave mental health providers feeling ill-equipped to provide the best care for their patients. At the same time, eating disorders appear to be increasing in prevalence with each successive generation (Hudson et al., 2007 and Preti et al., 2009). They also carry high morbidity as well as the highest mortality of any mental illness (Smink et al., 2012). Fortunately, eating disorders amongst children and adolescents are also highly treatable, with a 50-70% full recovery rate when diagnosed and treated within the first three years (Strober et al., 1997). This practical and engaging workshop will help participants to understand the nature of eating disorders, their risks, and the common co-morbidities associated with eating disorders. In this interactive and case based workshop, participants will learn how to approach, identify, assess and triage a youth with an eating disorder, and how to engage the youth and their family in treatment.

# #13 How to Write and Review a Scientific Journal Article Workshop

Dr. Khrista Boylan; Dr. Normand Carrey

<u>Learning objectives:</u> List different ways of making written contributions to the Journal; Confidently prepare a letter to the Editor or Brief Report; List at least 4 important steps in conducting a review of a manuscript

The Journal of the Canadian Academy of Child and Adolescent Psychiatry is an open access Journal welcoming the contributions of members and friends of our Academy. Participation by submitting a letter to the editor, an article or reviewing a manuscript are but a few examples. Many of us would like to write an article but are not sure about the process or the types of articles that can be submitted. One aim of this workshop is to mentor clinicians and researchers alike on how to publish successfully in the Journal by reviewing the article types and outlining a process for working with the editors. The editors greatly appreciate participation of CACAP members in the article review or Editorial Board process. A second aim of the workshop is to demonstrate how to do a step by step review of a paper.



Innovation today, healthier tomorrows

#19 Transdiagnostic eHealth Sleep Intervention for Parents of Children with NDD Research Symposium

Dr. Penny Corkum, Dalhousie University; Dr. Shelly Weiss, Hospital for Sick Children/University of Toronto; Ms. Nikki Ali, Dalhousie University; Ms. Jenny Tyler Co-Author(s): Ms. Kim Tan-MacNeill, Dalhousie University, Dr. Gabrielle Rigney

<u>Learning objectives:</u> Review sleep problems in children with NDDs; Discuss the foundational research studies informing a transdiagnostic eHealth intervention; Identify how to experience Better Nights, Better Days for Children with NDD

Upward of 90% of children with neurodevelopmental disorders (NDD) experience sleep problems, particularly insomnia (i.e., difficulties falling asleep, staying asleep, and problems with morning awakenings). Despite clear evidence that sleep problems can have significant consequences for children's physical and psychosocial health, as well as for their parents' well-being, less than 15% of these children receive evidence-based treatments (i.e., behavioural interventions). Key access barriers include limited training for health care providers (HCP) and few available intervention programs that are accessible to parents and targeted to children with NDD. To determine if an eHealth transdiagnostic intervention would address these access barriers, we conducted four foundational studies. The first two studies, a Systematic Review and a Delphi study, gathered information from stakeholders – researchers and content experts. Ms. Nicole Ali, a 3rd year PhD student in Clinical Psychology, will share the results of these two studies. The second two studies, including a Focus Group study and a Usability study, gathered evidence from consumers of sleep interventions – parents and health care providers. The results of these two studies will be shared by Dr. Shelly Weiss, pediatric neurologist at the Hospital for Sick Children. All four studies provide evidence for the feasibility of a transdiagnostic eHealth intervention. Dr. Penny Corkum will share how the results of these four studies are being used to inform the development of Better Nights, Better Days for Parents of Children with Neurodevelopmental Disorders.

### Session #1: What Do the Stakeholders Say?

<u>Learning objectives:</u> Review research literature on sleep interventions for children with NDD; Identify how a Delphi study can contribute to developing interventions; Discuss what experts in the are a of sleep and NDD believe are key components to intervention

Introduction: Children with NDD are at high risk for sleep problems, especially insomnia. It is currently not known whether behavioural sleep interventions developed for typically developing (TD) children are effective for children with NDD, and if interventions need to be modified for each diagnostic group. To address this question, we conducted two studies – a systematic review and a Delphi study. Methods: The systematic review was conducted to identify and evaluate commonalities, trends in outcomes, and the methodological quality of parent-delivered behavioural sleep interventions for children with NDD. Nine databases were searched, and 5,602 unique studies were identified. A total of 40 studies met eligibility criteria after full-text review. The goal of the Delphi study was to gain consensus from experts in the field on the key components of an eHealth, parent-implemented, intervention program. Participants (n=27) responded to open-ended questions, in iterative rounds, rated the recommendations that were made by the group (131 recommendations in total). Results: The systematic review found that children with NDD displayed similar sleep problems, and interventions that were used were similar to those used for typically developing children. All studies reported that at least one behavioural intervention was effective. Of those 131 recommendations made in the Delphi study, 52 items had high importance and high consensus and were deemed to be priority items. Furthermore, 75% of the recommendations were believed to be applicable across NDD groups. Conclusions: From the perspective of stakeholders, these results suggest the feasibility of developing a transdiagnostic behavioural sleep intervention suitable for children with a range of NDD.

# Session #2: What Do the Consumers Say?

<u>Learning objectives:</u> Discuss parents' and health care providers' views about the barriers and facilitators to accessing behavioural sleep interventions for children with NDD; Discuss what parents think needs to be modified from behavioural sleep interventions for typically developing children to be useful for children with NDD; Conduct focus groups and usability studies to develop interventions

Introduction: Parents of children with NDD have reported difficulty accessing interventions that are appropriate for their children. Parents and Health Care Providers (HCP) have reported that that these interventions need to be targeted at the child's specific disorder to be effective. There is limited data to decide if a transdiagnostic intervention would be acceptable and effective. We conducted two studies to address this question - a focus group study and a usability study. Methods: For the focus group study, a total of 86 individuals participated in virtual focus groups or individual interviews (20 parents and 21 HCP). Qualitative analyses were conducted to determine the themes about barriers and facilitators. The usability study included 27 participants (parents of children with NDD) who completed the Better Nights, Better Days (BNBD) eHealth program that was designed for TD children. Employing a mixed-method research design, quantitative and qualitative feedback was collected to identify perceptions of the elements of the BNBD design and session content that require modification. Results: The focus groups yielded qualitative data on elements of an online behavioural intervention endorsed by knowledge-users, and the perceived efficacy of a transdiagnostic approach to treatment. The usability study found that parents of children with NDD were generally satisfied with the BNBD program and recommended only minor changes so that it would be appropriate for use with children with NDD. Conclusions: From the perspective of consumers, these results suggest the feasibility of using a transdiagnostic behavioural sleep intervention suitable for children with a range of NDD.

# Session #3 Building a Transdiagnostic Intervention

<u>Learning objectives:</u> Identify the most important components of an eHealth intervention; Identify what a transdiagnostic intervention is and how to balance cross-diagnostic information and specific diagnostic information; Review how we modified Better Nights, Better Days so that it would be appropriate for parents of children with NDD

Introduction: Better Nights, Better Days (BNBD) is an eHealth intervention for parents of children with insomnia. It is targeted at parents of healthy children with no medical or mental health disorders. It is currently being evaluated through a pan-Canadian RCT with over 500 families and the trial will be completed in June 2018. We were interested in whether this intervention could be modified to be acceptable and effective for children with NDD. Methods: Using the information gained from the before-mentioned foundational research studies as well as clinical expertise, BNBD is currently being modified for children with NDD. The foundational studies were designed to identify evidence-based, expert-supported, and parent-approved components of behavioural interventions for insomnia in children with NDD. We are applying the findings from these foundational studies related to intervention delivery, content, and considerations specific to diagnostic populations, along with the clinical expertise of the multidisciplinary investigators to modify the existing BNBD program to be suitable for parents of children with NDD. Results: A comprehensive eHealth transdiagnostic intervention to treat insomnia in children with NDD will be finalized by May 2017. This intervention will be tested in a pan-Canadian RCT starting in the Summer 2018. Conclusions: The systematic, empirical, and patient-oriented approach to modifying BNBD to be suitable for children with NDD is likely to result in an accepted and effective intervention that has the potential to improve the sleep and quality of life in children with NDD and their families.

#23 InCYT-Y (Integrative Cognitive Yoga Therapy for Youth): A Pilot Study

Dr. Arianne St Jacques; Dr. Upasana Krishnadev

Learning objectives: Discuss the evidence base supporting the use of yoga to treat mental health difficulties: Review the pilot study, InCYT-Y: Integrative Cognitive Yoga Therapy for Youth, a new manualized yoga treatment; Discuss future directions for the broader application of yoga as treatment modality

Yoga psychology highlights a multi-directional relationship between one's behavioral experience, distorted thought waves (vrittis) in the mind and one's overall well-being. Yoga involves a process of distinguishing and addressing these distorted thoughts, through mental and behavioral practice, in order to better understand oneself and reality. The practice of yoga is intended to improve upon the natural motion of the body, developing moment-to-moment self-awareness, improving mental and physical flexibility and cultivating greater awareness of the mind-body connection. The combined application of breathing, exercise, meditation, relaxation and healthful eating promotes mindfulness and the ability to "turn inwards". Taken as a whole, yoga emphasizes developing a skill set that enables the practitioner to shift flexibly between acceptance- and change-oriented practices in order to achieve greater internal and external self-regulation. There is evidence supporting the use of exercise and yoga for mental health, serving as both primary and secondary interventions. Despite growing research efforts, there are many limitations to the studies including small sample sizes and insufficient detail relating to the intervention and participant improvement. These limit study replication, or, given the small sample sizes, prevents aggregation into meta-analyses. The gaps in the reliable evidence base ultimately affect the availability of the intervention, affecting patient care. As such, we have undertaken to study the efficacy of yoga as a manualized therapeutic modality for youth with symptoms of anxiety. Our quasi-experimental pilot using the InCYT-Y manual is currently in progress and we intend to present our preliminary results, with discussion of future research directions.

# #25 Working with Youth Who Use and Misuse Substances Special Interest Study Group

Dr. Selene Etches, Dalhousie University; Mr. Jeff Thoms

Learning objectives: Explore risk and protective factors for youth concurrent disorders and how to employ strength based formulations in treatment planning; Discuss stages of change matched treatment interventions of adolescent substance use disorders (including youth who are precontemplative) with respect to changing risky behaviours; Explore evidence based interventions to support the subgroup of substance-using adolescents who are street-involved and in-care

Drug and alcohol misuse affects a substantial proportion of youth and directly contributes to the precipitation, exacerbation and perpetuation of comorbid mental health issues. Homeless and street-involved youth in Canada carry a proportionally larger burden of mental health and substance use concerns that directly impact their functioning and wellbeing. Often these adolescents have a high prevalence of past trauma, sexual risk behaviours, and physical health needs but are often reluctant to seek or accept treatment. Interactions and relationships with health care and housing providers can directly affect youth help seeking and change behaviours. For the past four years, the IWK Health Centre in Halifax, Nova Scotia has operated a Concurrent Disorders Specific Care Clinic with one of the clinic's mandates being to provide outreach initiatives to precariously-housed adolescents. This includes providing psychiatric consultation and therapeutic support to youth directly but also implementing an innovative model of supporting the work done by youth-based group home employees. Competency and capacity has been developed in part by training residential care providers in motivational interviewing followed by ongoing motivational interviewing supervision and concurrent disorders education sessions. Such work has fostered growth on both individual and systems levels.

# #27 Post-Secondary Student Mental Health: A Primer for Canadian Psychiatrists Workshop

Dr. Andrea Levinson, The University of Toronto

Co-Author(s): Dr. Catharine Munn; Dr. Natasha Snelgrove

Learning objectives: Discuss the importance of providing mental health care to post-secondary students (PSS) and transition-aged youth (TAY); Describe some of the systems, services, approaches and policies used on Canadian campuses to care for the mental health of PSS; Consider how to better support and facilitate efficient, effective, evidence-based care for TAY from participant

Over 80% of youth in Canada will attend college or university for some period of time, usually during the transitional period of late adolescence and early adulthood, often considered to be between ages 18 to 29. This transitional period is both exciting and challenging; successful navigation has significant positive socioeconomic implications and influences on adult health and well-being. Given that the majority of psychiatric disorders emerge prior to the age of 25, the transitional age is a critical but overlooked time of risk. Historically the mental health needs of emerging adults have not been recognized, understood or prioritized, and involvement and leadership by psychiatrists on campuses has been limited. Consequently, there is limited research available to inform practice and service delivery to this group. In this presentation, three psychiatrists who work exclusively with students on two university campuses (University of Toronto and McMaster University) will discuss with participants the importance of better understanding and serving this population of youth, focusing on a continuum of care from primary prevention to intervention and on the application of collaborative care models. Additional policies and processes like academic accommodations, which enable the successful delivery of care in a post-secondary setting, will be highlighted. Innovative programs and need-to-know tips for all psychiatrists working with transitional age youth and case discussions will be incorporated. With improved collaboration, research and knowledge translation by psychiatrists, mental health care can be significantly improved for transition-aged youth and post-secondary students.

#32 Challenges and Strategies for Managing Complex Needs in Inpatient Psychiatry Special Interest Study Group Dr. Lila Amirali, Dr. Andrew Hall Co-Author(s): Dr. Stephanie Greenham

Learning objectives: Discuss and identify common challenges on child and adolescent inpatient psychiatry units; Use case-based discussion to explore common challenges and potential practical strategies; Discuss the utility of clinical pathways for Canadian child and adolescent inpatient psychiatry units

Inpatient psychiatric services provide acute and tertiary care to children and youth with the most severe, acute and complex mental health needs. Despite wide variation in how inpatient care is defined and delivered 1 as well as a lack of national standards to guide care, inpatient providers face common challenges in the inpatient setting. These challenges include comorbid/concurrent clinical presentations, complex differential diagnosis and case conceptualization, and barriers to timely and seamless discharge and transition to outpatient and community mental health care. The objective of this proposed special interest study group is to illustrate these common challenges through several complex case studies and to discuss cases from the perspective of inpatient care-as-usual versus inpatient care via clinical pathways. Clinical pathways are not widely used in Canadian inpatient services, but can potentially improve care by defining efficient and effective multidisciplinary evidence-based practices, clearly established treatment goals and benchmarks for improvement, and documented patient outcomes.2,3 Building on previous discussion of their utility,4 clinical pathways are discussed as one of several practical strategies for managing complex patient needs in the inpatient context.

#41 Adolescent Predictors of Adult Outcomes in ADHD Research Symposium Dr. Lily Hechtman

<u>Learning objectives:</u> Determine which adolescent factors influence adult outcome in ADHD; Identify how childhood predictors of adult outcomes differ from adolescent predictors of this outcome in ADHD: List which adolescent predictors are the most important in influencing adult outcome in ADHD

Among individuals with ADHD, childhood factors such as ADHD symptom severity, comorbidity, and family adversity have modestly predicted adult outcome. Recently, several controlled prospective longitudinal studies have found that adolescence and not early childhood may be the "critical period" that influences adult outcome. The objective of this symposium is to explore the symptoms and functioning in the more temporally proximal, developmentally sensitive period of adolescence to determine if and how this "critical period" can influence adult outcome. Findings from two controlled prospective longitudinal studies will be described. Dr. Roy will report on Dr. Klein's 33 year follow-up of ADHD and control participants in the New York Study, highlighting adolescent predictors of adult outcome. Dr. Hechtman will address adolescent predictors of adult outcome in the Multimodal Treatment Study of ADHD (MTA). Both studies show that functioning in adolescence has an important impact on adult functional outcomes in educational, occupational, and emotional domains. Four important adolescent predictors emerge: persistence and severity of ADHD symptoms, low academic performance, low SES, and comorbidity, particularly Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD). Problems in adolescents with ADHD have an important impact on adult functional outcomes and thus need to be seriously addressed. These problems include persistence and severity of ADHD symptoms, comorbidity, particularly ODD and CD, academic difficulties, and low SES.

# Session #1: Adolescent Predictors of Adult Outcomes in ADHD: Results from the Longitudinal New York Study

<u>Learning objectives:</u> Determine which adolescent factors influence adult outcome in ADHD in the New York study; Identify how childhood predictors of adult outcomes differ from adolescent predictors of this outcome in ADHD in the New York study; List which adolescent predictors are the most important in influencing adult outcome in ADHD in the New York study

RATIONALE: Little is known of the long term outcomes of Attention-Deficit/Hyperactivity Disorder (ADHD) or of factors predicting poor adult outcomes. The New York study is the longest controlled prospective study of ADHD, having followed participants for 33 years to mean age 41, and is thus particularly poised to explore childhood and adolescent predictors of adult outcomes of childhood ADHD. OBJECTIVES: To determine childhood and adolescent factors that influence adult outcomes of children with ADHD METHODS: The New York study included 207 white boys with ADHD aged 6-12 years (mean age, 8), free of conduct disorder, who were followed up in adolescence (mean age, 18), early- (mean age, 25), and mid-adulthood (mean age, 41). At the first follow-up, 178 age and SES matched boys from the same community were recruited. Childhood measures included IQ, reading abilities, ADHD severity, and conduct problems. Adolescent measures included school dropout, severity of inattentive, hyperactive and impulsive symptoms, number of anti-social behaviors, non-alcoholic substance use, educational and work goals, and parental mental health. At mean age 41, outcomes included educational and occupational attainment, social and global functioning, and DSM-IV mental disorders. Regressions were used to determine associations between childhood and adolescent factors and adult outcomes. RESULTS: Childhood factors were not significant predictors of outcome at mean age 41. In contrast, multiple adolescent functions were associated with adult dysfunction: school drop-out, severity of hyperactivity and inattention, and antisocial behaviors in adolescence were significantly associated with the persistence of ADHD into adulthood. School dropouts, antisocial behaviors, conduct disorder diagnosis, non-alcohol substance use disorder, poor job functioning, poor social functioning and parental APD all predicted antisocial personality disorder at follow-up. Severity of inattention symptoms during adolescence was associated with relatively poorer educational and occupational attainment. Dropping out of school predicted other negative outcomes including relatively worse overall function. A lifetime parental history of substance use problems was associated with worse occupational attainment in the offspring. Positive educational and occupational goals expressed during adolescence predicted better function in adulthood. CONCLUSIONS: Multiple adolescent factors influence adult functioning of children with ADHD who are free of conduct disorders. Adolescent features include the development of conduct/antisocial problems, dropping out of school, non-alcohol substance use disorders, and educational goals. Knowledge of these predictors should improve identification of at-risk individuals, and inform the development of secondary prevention.

# Session #2: Adolescent Predictors of Adult Outcome in ADHD: Results from the Multimodal Treatment Study of ADHD (MTA)

<u>Learning objectives:</u> Determine which adolescent factors influence adult outcome in ADHD in the MTA study; Identify how childhood predictors of adult outcomes differ from adolescent predictors of this outcome in ADHD in the MTA study; List which adolescent predictors are the most important in influencing adult outcome in ADHD in the MTA study

OBJECTIVES: To explore the importance of Adolescent functioning in predicting adult functioning in participants with and without ADHD. METHODS: In the MTA 576 participants with and 258 without ADHD were followed prospectively for 16 years to mean age 25. Occupational, educational, emotional functioning, sexual behavior, and justice involvement were assessed in adulthood. Adolescent predictors explored included, household incomes, parental job loss and being on public assistance, parental separation /divorce, academic abilities (reading, spelling and math) ADHD symptom severity, and Comorbidity (ODD/CD) RESULTS: Occupational functioning in adulthood was measured by total job losses, receiving public assistance or not, and income levels. Higher adolescent ADHD severity was associated with higher adult job losses. Lower household income and lower academic abilities (math) in adolescence was related to receiving public assistance in adulthood. Receiving public assistance and lower academic abilities (math) in adolescence was associated with lower income levels in adulthood. In terms of educational functioning, adolescents with lower academic abilities (math) were less likely to obtain a bachelor's degree in adulthood. Emotional functioning was measured by emotional lability in adulthood and was associated with higher ADHD symptom severity, and higher ODD symptom as well as lower academic abilities (math) in adolescence. Risky Sexual Behavior was measured by age of first sexual contact and number of sexual partners. Younger age of first sexual contact and higher number of sexual partners were associated with lower household income and higher ODD symptoms in adolescence. Justice involvement in adulthood (number of police contacts) was associated with poor academic abilities (math) in adolescence. Generally the predictive associations were similar for participants with and without ADHD. CONCLUSIONS: Important adolescent predictors of adult functional outcomes include: severity of ADHD, comorbidity, e.g. severity of ODD, low household income or SES, and low academic abilities which may reflect lower IQ. Thus intervening in these areas in adolescents is important to promote more positive adult outcome.

#46 Applying Evidence-Informed Practices to the Selection of Future Child & Adolescent Psychiatrists Special Interest Study Group

Dr. Chetana Kulkarni, Hospital for Sick Children, University of Toronto, Dr. Raj Rasasingham, MD, FRCP

<u>Learning objectives:</u> Describe the evidence for the use of a Modified Personal Interview (MPI) to replace standard personal interviews in medical admissions; Summarize how the University of Toronto Child & Adolescent Psychiatry subspecialty program identified key "attributes" on which to base the selection of trainees; Discuss how evidence-informed practices can be applied to the admissions process at their centre

The first Royal College-accredited Child & Adolescent Psychiatry (CAP) subspecialty training programs in Canada started in July 2012. Since that time, a total of 16 Canadian programs have been accredited, with each program developing its own admissions process independently. This SISG will provide an opportunity for CAP programs from across the country to discuss trainee selection and how evidence-informed admissions practices can be applied in their setting. The University of Toronto experience will be shared as an example of applying evidence-informed practices in the selection of CAP trainees. The University of Toronto CAP program has been working on applying evidence from the medical school admissions literature in order to increase transparency and reduce bias in the selection of CAP subspecialty residents. In 2017, the program used a Modified Personal Interview (MPI) to replace the more traditional personal interview that was previously used. In 2018, the program will incorporate key "attributes" for trainee selection that were determined using a collaborative and evidence-informed process. Advantages and potential drawbacks of these changes will be discussed.

#49 Disruptive Mood Dysregulation Disorder: A Case-Control Actigraphy Study Research Symposium Dr. Jean Marc Guile Co-Author(s): Delaplace R, Lecoeuvre M, Garny de La Riviere S, Lahaye H

<u>Learning objectives:</u> Identify clinical characteristics of Disruptive Mood Dysregulation Disorders; Review the association between suicidal behaviors and sleep disturbances; Discuss using actigraphy devices in research

Objectives: To explore the clinical characteristics and the motor profile of suicidal children and adolescents presenting with Disruptive Mood Dysregulation Disorder (DMDD). Methods: Thirty youths followed for suicidal behaviors in a child psychiatry outpatient clinic wore a wrist actigraph for nine consecutive days (including both school days and non-school days). DMDD youths were paired with non DMDD youths according to age and gender. None of the participants was taking medication during the study. The following parameters were registered: activity count and amplitude, sleep latency, sleep efficiency, and the number and duration of periods of wakefulness after sleep onset (WASO). We divided the night-time actigraphy recording sessions into three sections, and compared the first and last thirds of the night. Results: on non-school days, bedrest onset and activity onset were shifted later by about an hour. In the DMDD group, there was no significant difference between school days and non-school days with regard to the total sleep time. Sleep efficiency was significantly greater on non-school days. Sleep was fragmented on both school days and non-school days. Relative to the first third of the night, we observed a significantly greater number of episodes of WASO during the last third of the night in the DMDD group. Conclusion: exploring activity and sleep profile through actigraphy, might provide relevant insights in diagnostic characteristics and clinical needs of youths with DMDD.

# #52 Defining the Complexity of the Paediatric Consultation-Liaison (CL) Psychiatry Population Research Symposium

Dr. Claire De Souza, Hospital for Sick Children, Hana Saab, Hina Ansari

<u>Learning objectives:</u> Identify the demographic characteristics, reasons of referral, and complexity of patients served by CL Psychiatry; Discuss and assess the significant resource burden of this patient population in comparison to the average hospital inpatient; Discuss implications for service planning and delivery

Introduction: Psychiatric disorders are an important driver of increased hospital resource consumption. Consultation-Liaison (CL) Psychiatry is well-positioned to serve this growing population within hospital settings. There is a scarcity of literature describing the pediatric CL Psychiatry population. Methods: Using hospital administrative data, we identified inpatient admissions where patients aged 0-18 years were served by CL Psychiatry at our hospital between fiscal years 2012/13 and 2016/17. Sociodemographic characteristics, utilization volume, reasons for referral, referring services, comorbidities, Case Mix Group (CMG), length of stay (LOS), readmission rates, and costs were analyzed using descriptive statistics. Results: The number of in-patients referred to CL Psychiatry increased by 31% in 2016/17 as compared to the previous 4 year mean. More than 80% of patients were between ages 8 to 18, of whom 50% were transitional age. Approximately 90% of patients had a primary medical diagnosis, with co-occurring psychiatric conditions. Patients with 6 or more documented diagnoses comprised 65% of admissions. The mean LOS and readmission rate were 3 times longer than that for the average hospital inpatient (LOS: 20.3 days vs 6.3 days; re-admission rate: 16.9% vs. 6.0%). The mean cost per CL Psychiatry patient was 3.5 times higher than the mean cost of a typical hospital inpatient. Conclusions: Characterizing the Paediatric CL Psychiatry population, and their associated medical and mental health complexity is essential to better align CL Psychiatry services with the unique demands of this complex patient population. It is also vital for health system planners to support sufficient resource allocation.

# Session #1: CL Psychiatry – A Descriptive Study of the Patient Profile

<u>Learning objectives:</u> Identify the demographic characteristics of patients served by CL Psychiatry; List the referring sources and the reasons for referral to CL Psychiatry; Discuss the medical versus psychiatric composition of the patients

Introduction: Consultation-Liaison (CL) Psychiatry serves a rapidly growing and highly complex patient population, characterized by co-occurring medical and mental health conditions. Our study objective is to describe the profile of patients served by CL Psychiatry at an Ontario Paediatric hospital. Methods: Using hospital administrative data, we identified inpatient admissions where patients aged 0-18 years were served by CL Psychiatry at our hospital between fiscal years 2012/13 and 2016/17. Sociodemographic characteristics, utilization volume, reasons for referral, referring services, and diagnosis composition were analyzed using descriptive statistics. Results: The number of admissions referred to CL Psychiatry services increased by 31% in 2016/17 as compared to the previous 4 year mean. The most common hospital services to request CL Psychiatry inpatient consult services were Pediatrics, Neurology, Oncology, Bone Marrow transplant and Critical Care. Overall, approximately two-thirds of the patients were females, however there were proportionally more males among patients under 8 years of age. More than 80% of patients were between ages 8 to 18, of whom 50% were transitional age. Approximately 90% of patients had a primary medical diagnosis, with co-occurring psychiatric conditions, in contrast to 10% of patients who were admitted for a primary psychiatric condition. The 5 most prevalent reasons for referral in 2016/17 were somatization, anxiety, challenging behaviour(s), risk of suicide, and depression. Conclusions: Our data serve to characterize the patient population that is served by CL Psychiatry within a paediatric hospital setting. Understanding the patient population is a key step towards informing and tailoring CL service delivery.

# Session #2: CL Psychiatry—Patient Complexity and Hospital Resource Utilization

<u>Learning objectives:</u> Discuss the extent of comorbidities faced by patients served by CL Psychiatry; Quantify the length of stay and resource use of patients served by CL Psychiatry; Identify the significant burden of this patient population in comparison to the average hospital inpatient

Introduction: Our study objective is to describe the complexity of CL Psychiatry patients and highlight the intensity of their resource utilization on an Ontario Paediatric hospital. Methods: Using hospital administrative data, we identified the inpatient admissions where patients aged 0-18 years were served by CL Psychiatry at our hospital between fiscal years 2012/13 and 2016/17. Comorbidities, Case Mix Group (CMG), length of stay (LOS), readmission rates, and costs are analyzed using descriptive statistics. Results: Approximately 90% of patients had a primary medical diagnosis with co-occurring psychiatric conditions. Patients with 6 or more documented diagnoses comprised 65% of admissions. The mean LOS was 3 times longer than the average hospital inpatient (20.3 days vs 6.3 days). The younger age group (<1 year old patients) was associated with the longest LOS. The three most resource intense CMGs associated with our population were liver/pancreas/duodenum transplant, infant cardiovascular intervention, and bone marrow/stem cell transplant. In 2016/17, the re-admission rate was 16.9%, where 60% of the readmissions were for urgent reasons. The total costs incurred by the hospital in 2016/17 due to the patient population served by CL Psychiatry amounted to \$19.04 million dollars. The mean cost per patient within our patient population was 3.5 times higher than the mean cost of treating a typical inpatient at our hospital. Conclusions: Our data illustrate that CL Psychiatry serves a severely ill and highly resource-intense patient population. Findings will help establish resource utilization norms for this population, and inform service planning and delivery.

# #53 Meeting the Complex Needs of the Medical/Mental Health Population Special Interest Study Group

Dr. Claire De Souza, Hospital for Sick Children, Dr. Kelly Saran, Dr. Tyler Pirlot, Dr. Roberto Sassi, Dr. Javeed Sukhera, Dr. Sophia Hrycko, Dr. Ruth Russell, Dr. David Lovas, Dr. Selene Etches

<u>Learning objectives:</u> Describe complex cases in the medical/mental health population; Compare and contrast different service delivery models in CL Psychiatry; Make a case for building CL Psychiatry programs across the country

The literature cites difficulties with coordination of Paediatric Consultation-Liaison (CL) Psychiatry (PCLP) services and variability in funding, service structure and service delivery (Shaw and DeMaso 2006). Offering opportunities for collaboration, support and mentorship are important in order to recruit and sustain the workforce. During CACAP 2010, a Special Interest Study Group (SISG) in PCLP brought together colleagues from across Canada. This facilitated the development of a Steering Committee in PCLP in Canada. PCLP group membership is interdisciplinary and comprises clinicians, researchers, educators and administrators working in Paediatric CL Psychiatry services across Canada. The aim of the group is to advance PCLP in Canada by developing a network for sharing expertise in clinical care, research, administration and teaching in order to establish best practices. The group meets monthly via phone conference and collaborates on academic/clinical initiatives. There has been a SISG in PCLP most years since 2010 at CACAP which has enhanced collaboration across sites, and has grown the listserv and directory of colleagues in PCLP. During this SISG, an overview of case complexity and service delivery models in CL Psychiatry are summarized. Presentations of complex medical/mental health cases from CL Psychiatry programs across the country reflecting the breadth of the population are discussed, along with how CL Psychiatry services are organized to address the need. Discussion centers on the importance of CL Psychiatry services and the need for adequate staffing with the hope of building CL Psychiatry programs across the country.

#56 PANS/PANDAS: Bridging the Divide Between Research and Clinical Practice Workshop

Dr. Susan Baer, BC Children's Hospital, University of British Columbia; Dr. Megan MacFadden; Dr. Evelyn Stewart; Dr. Clara Westwell-Roper MD PhD

<u>Learning Objectives:</u> Review emerging evidence of connection between acute-onset neuropsychiatric syndromes and autoimmune disorders; Review of the newly published treatment guidelines for PANS/PANDAS; Identify practical strategies to approach the clinical management of children with suspected PANS/PANDAS

In recent years, there has been increased awareness of Pediatric Autoimmune Neuropsychiatric Disorders associated with Streptococcal infections (PANDAS) as well as Pediatric Acute Onset Neuropsychiatric Syndrome (PANS) in the public. Much of the awareness has been driven by parent advocacy groups. Unfortunately research in the area has lagged behind, leaving clinical questions unanswered and dividing some parents and medical professionals into "believers" and "non-believers." In this workshop, we will examine the current research base in PANS/PANDAS, with a particular focus on the emerging connections between obsessive compulsive disorder (OCD) and tics and autoimmune disorders. We will review the recently published treatment guidelines. Through the use of video and case presentations, we will present the parent and patient perspective. We will examine media reports about the disorders and highlight the existing gaps in the literature. Finally, we will discuss practical strategies and ideas for approaching the clinical management of children and youth with acute onset OCD and tic disorders, highlighting medical and psychiatric interventions as well as parent supports. The workshop will be co-led by clinicians with experience in treating PANS/PANDAS (Dr. MacFadden and Dr. Baer) along with Dr. Stewart, a clinician-scientist who has studied PANS/PANDAS and is a long-standing member of the Pandas Physician Network

	LINE COURSE STORY C	`EPTIFIC	MOITA			
	JIOKI C	JEKTII IC/				
H.	BEAIN ARCHITECTURE	SERVE AND RETURN	UR TRAFFIC CONTROL			
	The District of Seral new Improved and in the General Seral Ser	The Court	-year year person in make			
	30t	JULIAN IS ADDICTIONS	ADDICTION TREATMENT			
	STRESS  Home produce, solar solar and train some strain she change source for	A deciminal formation of the Life of the professional control of the Life of t	trisese districtions (1)			
	/	7	A	-		
	ading experts abou					
development Eligible for pr	and its impact on li rofessional accredita	felong health. ation.	SIGN UP FO THE COURS NOW	DR SE		
www.Alberta	aFamilyWellness.or	g/training				

#60 Prediction and Prevention of Psychopathology in Developmental Cohorts Research Symposium Dr. Rudolf Uher, Dalhousie University

<u>Learning objectives:</u> Discuss the implications of developmental origins of health and disease for the practice of child and adolescent psychiatry; Describe types and give examples of developmental continuities in psychopathology; Evaluate the potential for pre-emptive early interventions to prevent mental illness

The traditional views that child disorders are time-limited problems and major mental illness starts in early adulthood have been challenged by evidence from long-term cohort studies demonstrating strong continuities of psychopathology over the individual development. In view of developmental evidence, mental illness appears more predictable than previously thought, raising the possibility of targeted prevention. If mental illness is a predictable continuation of child-hood disorders, can pre-emptive interventions targeting childhood psychopathology prevent mental illness? The present symposium brings together new developments in the developmental cohorts that extend the continuities to antenatal factors, establish clinically meaningful predictors of major mood and psychotic disorders and apply the knowledge of antecedents to the development of pre-emptive early interventions. Dr Wazana will show new combined data from multiple cohorts on how antenatal environment shapes the risk of child psychopathology depending on genetic susceptibility and sex. Dr Uher will demonstrate how the onset of severe mental illness can be predicted from childhood psychopathological antecedents. On the example of anxiety, Dr Pavlova will demonstrate how a predictive antecedent is addressed in pre-emptive early interventions in a trial within cohort design. In light of the new findings, we will invite the audience to discuss the future directions in life-course research and the necessity, ethics, timing and nature of pre-emptive early interventions.

## Session #1: Gender-Dimorphic Effects of Antenatal Maternal Distress on Offspring's Psychopathology Dr. Ashely Wazana

<u>Learning objectives:</u> Identify data harmonization practices recommended for conducting research involving multiple large, diversely designed, independent research studies with the goal to facilitate reproducibility and generalizability of findings; Review a developmental model that incorporates environmental, biological and gender-specific factors as well as influential theories of developmental psychopathology (i.e., fetal programming, differential susceptibility) that has the potential to inform more targeted prevention and intervention strategies to alleviate maternal distress during pregnancy and identify offspring that may be particularly vulnerable for developing mental health issues.

Introduction: In line with the fetal programming hypothesis maternal distress during pregnancy can have lasting effects on the offspring's mental health. Nevertheless, not everyone exposed to antenatal adversity will go on to develop psychopathology, suggesting an important role for individual differences, including genetic susceptibility. Animal studies provide evidence that males and females might be differently affected by fetal programming. Here we ask if antenatal maternal distress interacts with the offspring's genetic susceptibility to influence their risk of developing psychopathology during childhood. Methods: We used data from three birth cohorts of DREAM-BIG research network: the ALSPAC study (UK; N=11,612); the Generation R study (Netherlands; N=7,946); and the MAVAN project (Canada; N=408). Measures of prenatal maternal depression, anxiety and pregnancy-reactions were examined to construct comparable maternal distress latent factors across the three cohorts. Childhood psychopathology was assessed repeatedly (4-8 years) using multi-informant reports, which were used to extract a general psychopathology factor and a more specific internalizing and externalizing factors. Polygenic risk for depression was derived from genome-wide genetic data based on an independent genome-wide association study. Results: Significant associations between antenatal maternal distress and the child psychopathology replicated across cohorts. Interaction effects of antenatal maternal distress-by-offspring genetic susceptibility will be presented in relation to risk for psychopathology and contrasted between boys and girls. Conclusions: In addition to providing insights into the specific links between antenatal adversity, genetic susceptibility and offspring mental health, this study is a powerful example of harmonizing measures across longitudinal studies to facilitate reproducibility and generalizability of findings.

# Session #2: Transdiagnostic Antecedents Predict Onsets of Major Mood and Psychotic Disorders in Youth Dr. Rudolf Uher, Dalhousie University

<u>Learning objectives:</u> List transdiagnostic childhood antecedents of major mood and psychotic disorders Quantify the predictive value of antecedents in childhood and adolescence in estimating the risk of major mood and psychotic disorders. Evaluate the potential of antecedents as targets for pre-emptive early interventions

Introduction: We need to identify individuals who are at risk for developing psychotic and mood disorders to enable pre-emptive interventions. We aim to test the predictive value of psychopathological antecedents including affective lability, anxiety, psychotic symptoms and basic symptoms in the context of family history of mental illness. Methods: In a cohort of 223 youth, including offspring of parents with schizophrenia, bipolar disorder and major depressive disorder, we assessed affective lability, anxiety, psychotic and basic symptoms at age 9 to 21 years. We invited participants for annual assessments over 1-4 years to identify new onsets of mood and psychotic disorders with diagnostic interviews. Results: In 520 annual follow-ups of youth at risk (mean age 15 years; S.D. 4 years; retention 92%), we identified 31 new onsets: 3 schizophrenia, 4 bipolar disorder and 24 major depressive disorder. One onset occurred in the 153 follow-ups of youth without prior antecedents and 30 onsets occurred in the 367 follow-ups of youth with one of more antecedents (odds ratio 11.3, 95%CI 1.8 to 52, p=0.003). Affective lability, anxiety, psychotic and basic symptoms were associated with an increased risk of new onsets with odds ratios 1.8, 5.5, 4.0 and 1.9 respectively. The risk of new onsets increased proportionately to the number of antecedents (odds ratio 1.8, 95%CI 1.3 to 2.4, p<0.001). Conclusions: The combination of family history and psychopathological antecedents offers an efficient early risk identification strategy and may help select youth for targeted preventive interventions.

# Session #3 Anxiety in Developmental Context: From Prediction to Prevention

# Dr. Barbara Pavolva

<u>Learning objectives:</u> Describe anxiety in the developmental context Evaluate the role of anxiety in the development of major depressive disorder, bipolar disorder and psychosis Discuss the pros and cons of pre-school vs adolescent timing of pre-emptive early interventions targeting anxiety in youth

Introduction: Anxiety disorders are the most common co-occurring condition in individuals with major depressive disorder and bipolar disorder. Anxiety disorders are also common in individuals with psychotic disorders, including schizophrenia, and there is a continuum of psychopathology from anxiety to delusions. The onset of anxiety is typically in childhood or early adolescents, years before the first major mood or psychotic episodes. We aim to experimentally probe the role of anxiety in the development of major mood and psychotic disorders. Methods: In a cohort of youth at familial risk, we are testing two forms of anti-anxiety interventions. The Courageous Parents Courageous Children intervention (COACH; NCT03224845) aims to pre-empt the development of childhood anxiety disorders through a two-stage cognitive-behavioral and parenting interventions in anxious parents of children with behavioral inhibition. The Skills for Wellness (SWELL, NCT01980147) targets anxiety in older children and adolescents with the explicit aim of preventing the onset of major mood and psychotic disorders. The long-term effects of the two interventions are being tested using the Trial-within-Cohort (TwiC) design embedded within the Families Overcoming Risks and Building Opportunities for Well-being cohort. Results: Early experience suggests that anti-anxiety interventions are acceptable and effective in non-treatment seeking youth. Conclusions: Anxiety is a potential targets for early intervention that may modify the risk for developing major mood and psychotic disorders. The relative advantages of preventing the development of anxiety disorders in the preschool age and intervening early in the course of anxiety disorders in late childhood and adolescence inform intervention selection and timing.

#64 Lean Learning in Halifax: System Change in Outpatient Mental Health Academic Perspectives Dr. Alexa Bagnell, IWK Health Centre, Dalhousie University

<u>Learning objectives:</u> Identify the components of Lean Health Care in system change; Review ways to improve access to evidence based treatment including capacity building with clinicians and flow mapping in service design; Highlight key lessons learned in the importance of implementation science and engagement in success of lean endeavors, and system-level changes.

As mental health awareness is increasing, so are the demands on existing services and limited mental health resources. Long wait lists for child and adolescent mental health services are a major problem in Canada, and internationally. Challenging the waitlist by creating a continuous improvement environment while implementing new lean practice models within child and adolescent outpatient mental health has shown success in helping increase access to care. There are challenges in the implementation of new practice models and service design within child and adolescent mental health and addictions, including the human resources required around changing clinician practice. The IWK Mental Health and Addictions Program started the process of implementing the Choice and Partnership Approach (CAPA) (http://www.capa.co.uk/) in 2012, as a multi-component strategy for improving mental health care service delivery for children and adolescents, and their families. As part of this process, skill set mapping for clinicians and identification and addressing of areas required for capacity building in evidence based treatments was integrated within outpatient services. In July 2016, additional training in Lean Health Care methodology and behaviour change implementation supports for clinicians and clinical leaders was initiated. This has provided increased system outcome transparency, improved monitoring of outcomes, increased capacity in evidence based treatments, and new ways to use clinician and client feedback to inform system change.

# <u>Session #1 Lean Methodology and Outcomes in Outpatient Mental Health Care</u> Maureen Brennan, Onur Pakkanlilar

<u>Learning objectives:</u> Review of Lean Health Care and Choice and Partnership Approach (CAPA) in mental health system change; Identify how to apply Lean Health Care principles in outpatient mental health clinics; Review improvements in access and wait time to mental health outpatient services with Lean Health Care approaches.

CAPA and Lean Health Care are complimentary approaches to system change. One of the benefits of CAPA and Lean Health Care is a reduction in wait times for care. This is accomplished by managing patient demand, increasing the flow of patients through the system, ensuring that an organization's list of services matches the population's needs, and matching clinicians' skills to patients' problems. Central to the CAPA philosophy is the perspective that the patient and family are experts in their lives and must be actively in engaged in the process of care including shared clinical decision making. Lean Health Care focuses on emphasizing value-added steps in care provision from the stance of the patient and family, and minimizing non-value-added steps. This process is facilitated by engaging all staff in identifying opportunities for change. Lean is built into the CAPA framework, but through the intense focus on the Lean quality improvement work, we have discovered new ways to pull these elements out to lead towards greater improvement. Leadership and diverse skill sets within the leadership team are important in success. Access to care and decreased wait times based on referral data to first appointment improved with CAPA in the first few years, but had plateaued until introduction of the Lean Health Care strategy realizing further significant improvements in wait times over the past two years.

# Session #2 Building Capacity in Evidence Based Treatments: Using Expertise Wisely Dr. Sabina Abidi, Dr. Alexa Bagnell

<u>Learning objectives:</u> Review models of capacity building within Lean Health Care approach; Discuss innovations in integrating specialty clinics with community mental health to increase capacity in evidence based treatments; Review of capacity building models for eating disorders, OCD, early psychosis and addictions.

Lean thinking is a system wide approach to improving resource utilization and achieving goals, while improving care. In essence, the goal is to provide the right service, at the right place, at the right time according to the goals identified by the patient and family. Receiving care close to home, is preferred by most patients and family as this reduces cost, travel time, missed work and school and decreased impact on families. However, for some youth, the treatment they need may not be available at their community clinic due to not having a clinician with that specific therapeutic expertise or skills set, or requiring a more intensive treatment than can be provided locally. This then often requires a referral to specialty clinics at a tertiary hospital, which decreases access for many patients and families as they may have too far to travel, or the waits for these clinics are very long. At the IWK, when CAPA was introduced and utilizing Lean Health Care principles, the specialty clinics were re-organized to work towards bringing more training and capacity building to treat mild to moderate mental illnesses within the community clinics. Eating disorders, obsessive compulsive disorder, early psychosis, and addictions have developed training models utilizing Lean Health Care principles. Through education initiatives, training clinics, innovative consultation models and supervision there has been improved access to evidence based care.

# Session #3 Implementation Science and Clinician Engagement in System Change Dr. Sharon Clark, Dr. Jill Chorney

<u>Learning objectives:</u> Identify challenges in implementing mental health system service delivery change; Review implementation science and importance of clinician engagement in behavioural and system change; Discuss experience of implementing Lean system change in outpatient mental health setting and how to incorporate clinician and physician engagement as key components of long term success in system improvement

Over the system improvement processes of the last 7 years, we have asked our clinicians to engage in new models of care and service delivery as a means of improving access to care and excellence in service delivery. Shifting models within an established system can be a challenge and engaging clinicians to make the change requires new ways of thinking. Often leaders of the change are not prepared for managing the degree of change required and systems have under-estimated the impact of leadership during these system change processes. Lean health care system change has shown to have a human resource cost within teams making these investments. At the IWK, wait-times have progressively improved and client satisfaction has increased with CAPA and Lean improvements. However, clinician and physician engagement declined with increased demands, and there were increasing concerns regarding recruitment and retention. Implementation science and engagement in behavioural change were key components in improving this process. Results indicate that multi-methods of system change and clinician active engagement in the process, resulted in increased patient flow, reduced wait-times, and increased family engagement in care. With the increased focus on behavioural change we are beginning to understand differently the parallel processes of change – engagement with clients, staff, and leaders to optimize system-level improvements.

# #65 Psychotherapeutic Approaches to Supporting Trans\* Youth with Body Dysphoria Workshop

Dr. Sue Zinck, Dalhousie Department of Psychiatry, Division of Child and Adolescent Psychiatry

<u>Learning objectives:</u> Identify the variety of experiences of body dysphoria in trans\* and gender diverse youth, within a developmental context; Discuss and determine the intersection between social anxiety disorder and depression symptoms and the experiences of gender and body dysphoria; Identify specific psychotherapeutic techniques to assist youth who experience gender and body dysphoria, with and without co-morbid depressive and anxiety disorders

Gender dysphoria that is either distressing or persistent in youth is best alleviated with psychosocial interventions (social transition, including changes to legal name and gender marker), and for many, 75% or more, also hormone and surgical treatments. The evidence is strong that these treatments improve well-being of trans\*identifying and non-binary people. The period from referral to medical and surgical services can be a period of increased distress and can even include increased self-harm ideation. The experience of waiting, while dysphoric, is difficult. The distress caused by having bodily characteristics that do not yet match the youth's ideal presentation often leads to difficulty with self-esteem, mood reactivity, lower concentration, and if severe, can lead to school absenteeism or refusal and social withdrawal. Understanding the experiences of gender and body dysphoria, their fluctuating nature and how they intersect with typical identity emergence, can assist the clinician to not only support dysphoric youth, but also to teach skills that the youth can apply to reduce the intensity of the distress and impairment caused by body dysphoria. Using cognitive-behavioural therapy skills as a foundation, this workshop will teach specific techniques to explore gender and body dysphoria. These techniques help youth to express themselves authentically and to achieve their necessary developmental tasks while they strengthen their emergent identities. The workshop will use case examples, along with didactic slides, first-voice videos, and art to demonstrate these approaches.

#66 4-Phase Approach to Treating Somatization Special Interest Study Group Dr. Tyler Pirlot, Alberta Health Services / Alberta Children's Hospital Co-Author(s): Dr. Claire De Souza

<u>Learning objectives:</u> Review the historical challenges facing patients and their families in diagnosing and treatment Somatic Symptom Disorders (SSDs); Review a new integrated, collaborative approach to working with this patient population; Gain practical experience with this approach while working through a case example

CACAP practice parameters for working with Somatic Symptom Disorder (SSDs) call for collaborative care, yet most institutions do not yet practice this. Historically, families caring for children with SSDs in our hospital systems have been referred back and forth between subspecialties without a coherent plan or message or even diagnosis. This SISG will review a systematic approach to SSDs using 4 phases, authored by members of the Canadian Pediatric Consultation Liaison Psychiatry (members Dr. Pirlot, Dr. De Souza). Specifically, a pilot integrated somatization clinic using this approach is improving poor engagement and delays in diagnosis and it shares the burden of costs with pediatrics, rehabilitation medicine and mental health (MH). The integrated clinical team includes a physiatrist, pediatrician, psychiatrist, physiotherapist, education consultant and psychologist. Co-management by rehabilitation and MH assists with role clarification, helps improve role clarity between specialists and creates a more rewarding work experience when working with SSDs. In the SISG, we will work through a case example, going through the 4 Phases of Somatization Treatment after describing to the audience the content of these Phases: Confusion, Mind Body Connections, Integrated Treatment and finally Recovery and Relapse Prevention.

# #67 Emerging Family and Genetic Studies of Childhood-Onset Obsessive-Compulsive Disorder Research Symposium

Dr. S. Evelyn Stewart, University of British Columbia

<u>Learning objectives:</u> Examine genetic markers contributing to obsessive-compulsive traits in a large community sample; Discuss risk markers for emergence of childhood-onset OCD; Explore prevalence of comorbid immune and inflammatory conditions in childhood-onset OCD

The proposed symposium will focus on familial and genetic aspects of childhood-onset Obsessive-Compulsive Disorder (CO-OCD) and OC traits. While OCD is known to have genetic underpinnings, specific genomic markers and their mechanisms of influence on eventual OCD emergence remain elusive. Three presentations will describe recent molecular genomic, endophenotype and family studies related to pediatric OCD, followed by an interactive discussion period. The first presentation will report on genomic markers in a community-based sample with defined OC traits (n=5,366). It identifies common variants and rare copy number variants and the first genome-wide significant finding for OC traits. Interestingly, the identified genes were implicated in central nervous system development and increased OC traits were associated with duplications of brain expressed genes. The second will report on new findings regarding trait markers of OCD risk in a sample of 89 OCD-affected youth, 61 unaffected at-risk siblings and 72 healthy controls, neurocognitive testing, physical examination and parent report measures of sensory responsiveness and executive functioning were conducted. Planning, neurological soft signs and executive function impairment were identified as endophenotypes, while sensory responsiveness and spatial recognition memory were identified as OCD state markers. The third study follows emergent evidence implicating immune and inflammatory-related factors in mental illness. Self-reported prevalence rates of comorbid diseases were examined in two cohorts comprising 1615 probands with CO-OCD and were compared with highest available national population estimates. Findings suggest higher than expected rates of specific infectious/inflammatory comorbidities in CO-OCD.

# Session #1 Spit for Science: Genomics of Pediatric OCD in the Community

Dr. Paul Arnold

# Co-Author(s): C.L. Burton, B. Xiao, M. Zarrei, L. Erdman, D. Merico, C. Marshall, S. Scherer, J., Crosbie, R. Schachar

<u>Learning objectives:</u> Examine for common genomic variants associated with OC traits in a community population; Examine for rare copy number variants associated with OC traits in a community population; Discuss putative OC pathways implicated by the above

Introduction: There is substantial evidence that obsessive-compulsive (OC) traits are widely distributed in the general population and share genetic risk with clinical OCD. In the "Spit for Science" study we set out to discover genes conferring risk to childhood OCD through examining quantitative OC traits in a large population-based sample of children and adolescents. Methods: We collected quantitative data on obsessive-compulsive (OC) traits using the Toronto Obsessive-Compulsive scale (TOCS) from 17,263 youth (ages 6-17 years) seen at the Ontario Science Centre. We genotyped unrelated Caucasians (n=5,366) using Illumina HumanCoreExome beadchips. We conducted hypothesis-driven genome-wide association analyses (GWAS-HD) to identify common genetic variants and also examined the association of increased OC traits with overall burden of rare copy Number Variants (CNVs) and specific CNV types. Results: We identified the first genome-wide significant finding for OC traits which replicated in an independent sample of youth screened for OCD. Genes involved in central nervous system development were significantly associated with OC traits. Increased OC traits was associated with duplications of genes expressed in brain or with brain function. Conclusions: We identified the first genome-wide finding for OC traits and identified a potential biological pathway involved in OC traits. Results to date demonstrate the feasibility, power and utility of using a quantitative-trait based approaches in a community sample to help uncover the underlying genetic architecture of childhood OCD. Identification of genes and biological pathways associated with OCD may enable development of novel treatments and precision medicine approaches to this common and debilitating disorder.

# Session #2 State and Trait Markers in Pediatric OCD

Dr. S. Evelyn Stewart, University of British Columbia

# Co-Author(s): Juliana Negreiros PhD, Fern Jaspers-Fayer PhD, Laura Belschner MSc, Sarah Lin MSc and Diana Franco Yamin MSc

<u>Learning objectives:</u> Discuss the relevance of putative endophenotypes (intermediate markers of genetic risk) in pediatric OCD; Examine neurocognition domains and function in pediatric OCD and at-risk siblings; Explore physical markers including neurological soft signs and sensory responsiveness in pediatric OCD and at-risk siblings

Introduction: Pediatric OCD has notable genetic influence, such that siblings of affected youth have a multiple-fold increased risk of developing the disorder. While this fact is well known, limited evidence is available to guide identification of specific individuals who will become affected. The identification of endophenotypic risk markers may help in this regard. Methods: Study participants recruited between 2013 and 2017 included 89 youth with a confirmed DSM-IV diagnosis of OCD, 61 unaffected at-risk full biological siblings of an OCD-affected youth and 72 youth without mental illness or OCD/tic disorder family history. Neurocognitive CANTAB testing, physical examination and parent report measures of sensory responsiveness and e xecutive functioning were conducted. Results: Significant differences were identified in OCD and SIB groups when compared to the healthy control group with respect to planning task performance (F=4.97, p=0.009), parent reports of daily executive function impacts (F=38.3, p<0.001) and the presence of neurological soft signs (F=11.95, p=0.001). Visual recognition memory and sensory processing (F=5.06, p=0.022) differences from healthy controls were present in OCD but not SIB groups. Conclusions: Planning and executive function impacts and neurological soft signs appear to be trait markers of risk for OCD, while visual recognition memory and sensory over-responsiveness appear to be OCD state markers.

# Session #3 Immune-Mediated Comorbidities in Childhood-Onset OCD: Multi-Site Study of Lifetime Prevalence Dr. Clara Westwell-Roper MD PhD

# Co-Author(s): S. Evelyn Stewart MD FRCPC and the Obsessive-Compulsive Genetic Association Collaborative (OCGAS)

<u>Learning objectives</u>: Examine prevalence of autoimmune, inflammatory and infectious disease in CO-OCD; Examine clinical correlates of the above comorbidities in CO-OCD; Compare the above findings across cohort samples and with national population estimates

Introduction: Despite speculation about common genetic and environmental risks, little is known about autoimmune, inflammatory, and infectious comorbidities in childhood-onset obsessive-compulsive disorder (CO-OCD). This study evaluated the lifetime prevalence of immune-mediated diseases in two cohorts of patients with CO-OCD. Methods: Medical questionnaires were completed by 1401 probands in the multi-site OCD Collaborative Genetics Association Study (OCGAS) and 214 patients attending the BC Children's Hospital Provincial OCD Program (BCCH-POP). Lifetime prevalence was compared to highest available national population estimates and reported as a point estimate with 95% adjusted Wald interval. Worst-episode severity was assessed with the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS).Results: OCGAS probands reported higher than expected prevalence of encephalitis or meningitis (1.4 [0.9-2.1]% vs. 0.1-0.4%, p<0.000, n=1393), scarlet fever (4.0 [3.1-5.2]% vs. 1.0-2.0%, p<0.0001, n=1389), rheumatic fever (0.6 [0.3-1.2]% vs. 0.1-0.2, p<0.0001, n=1390), and rheumatoid arthritis (1.1 [0.6-2.0]% vs. 0.2-0.4%, p<0.0001, n=949). A history of frequent ear or throat infections was associated with contamination/cleaning symptom severity. BCCH-POP participants reported high prevalence of Crohn's disease (1.9 [0.4-5.8]% vs. 0.5-0.1%, p=0.008, n=155), eczema (36.5 [29.4-44.3]% vs. 10-20%, p<0.001, n=156), and chronic urticaria (9.9 [5.9-16.0]% vs. 0.5-1%, p<0.001, n=142). There was no association between comorbidity status and worst-episode severity. Conclusions: These data suggest high rates of specific infectious/inflammatory comorbidities in CO-OCD. Limitations include reporting bias, power, and absence of a clinical control group. Further multi-center studies are needed to characterize disease clusters and their interactions. This work may improve our understanding of CO-OCD pathogenesis and aid in the development of adjunctive immune-modulating therapies.

# Poster

# Presentations



# #1 Alleviating Procedural Stress in Children with Complex Medical Needs

Dr. Benyamin Rotberg, Hospital for Sick Children

Co-Author(s): Dr. Jean Wittenberg, Dr. Jake Crookall

<u>Learning objectives:</u> Describe the definitional framework of children with complex medical needs; Discuss ways to assess procedural stress in children with complex medical needs; Propose ways to alleviate stress from medical procedures for children with complex medical needs.

Children with complex medical needs form 1 % of all children needing pediatric care. They endure multiple hospitalizations, intrusive treatments and painful interventions both at home and in hospital. Many also suffer from neurological impairments and intellectual disabilities. They often show evidence of distress secondary to these necessary, life sustaining interventions and procedures. When stress is chronic, repetitive and not buffered enough it might become toxic stress. There is evidence that toxic stress is detrimental to brain development and harmful to other bodily systems. Children with complex medical needs might be especially vulnerable to experience toxic stress as they are having many stressful procedures on a daily basis, they are more fragile and they have lower resources to buffer the stress in comparison to children with normal development. However, it is very challenging to assess stress in children with complex medical needs as they are often nonverbal and their behavioral manifestations of stress are individual and idiosyncratic in contrast to the more predictable appearances of stress in normal development children. In our presentation, we will report a case series of young children with complex medical needs and the interventions we used to alleviate the stress they had been experiencing from medical procedures. We will also describe a bedside scale that we are developing in order to measure stress from medical procedures in children with complex medical needs.

# #2 A Realist Evaluation of Implicit Stigma Reduction Curricula

Dr. Javeed Sukhera, Western University

Co-Author(s): Ms. Kristina Miller, Ms. Christina Scerbo, Ms. Alexandra Milne, Dr Rod Lim, Dr. Chris Watling

<u>Learning objectives:</u> Identify how implicit social cognition research was applied towards the development and evaluation of stigma reduction curricula; Review results from a realist evaluation of implicit stigma reduction curricula; List future directions for stigma reduction research

Introduction: Mental illness stigma has disastrous consequences for patients. Better approaches to reducing mental health stigma in health care professionals are required. Implicit bias recognition and management is an emerging area of research that may inform the design of stigma reduction programs. We describe the evaluation of a novel stigma reduction workshop for health professionals that was built on this research. Methods: We conducted a realist evaluation using a longitudinal multiple case study approach. We first established an initial conceptual model for our intervention based on previous research. We then conducted three case studies with physicians and nurses (n=69) at a Canadian academic hospital. Within each case, we collected pre and post attitudinal scales and analyzed qualitative data from semi-structured interviews. Consistent with realist evaluation principles, we analyzed context-mechanism-outcome configuration patterns to modify, elaborate and revise understanding of our initial model. Results: Our intervention produced statistically significant changes in participant attitudes in two out of three contexts. The qualitative evaluation revealed discrepancy from quantitative data, describing the perceptions of sustainable changes in perspective and practice. The degree to which individual participants learned with and worked among interprofessional teams influenced outcomes. Conclusions: Implicit bias recognition and management is a useful strategy for reducing stigma; however, the degree to which individuals learn with and among team members influences the outcomes of implicit stigma reduction education. Once implicit stigma is recognised, curricular interventions may promote behavioural change by encouraging explicit alternative behaviours that are sustained through social reinforcement within interprofessional teams.

# #6 Maintenance Pharmacological Treatment in Pediatric Bipolar Disorder: A Systematic Review Dr. Caitlin S. Yee, Resident Physician

Co-Author(s): Dr. Gustavo Vazquez, MD, PhD, Professor, Department of Psychiatry Queen's University

Learning objectives: Critically analyze the value of open-label trials versus RCTs along with the limitations of each; Identify and compare the response rates of various pharmacological agents for the long term treatment of pediatric bipolar disorder; Identify the prevalence of side effects and main reasons for discontinuation of various pharmacological treatment options for pediatric bipolar disorder

Introduction: Current guidelines on the maintenance treatment of pediatric bipolar disorder (PBD) were mainly developed based on evidence from adult studies. However, existing evidence regarding the relative effectiveness of various pharmacological interventions is predominantly based on short-term studies, without adequately addressing the long-term effectiveness. Objective: Present a systematic review and pooled analysis on the effectiveness of monotherapy and combination maintenance pharmacological treatments for PBD, focusing on randomized control trials (RCTs) and open-label studies >/=24 weeks. Method: A systematic literature search was conducted in PubMed, OVID Medline, Embase and PsycInfo databases from inception up until December 2017 to identify RCTs and open-label studies assessing the use of maintenance pharmacological strategies (>/=24 week treatment duration) for the long-term treatment of PBD. This review complied with the PRISMA statement guidelines. Results: Systematic computer-searching yielded 18 studies suitable for analysis of recurrence rates and their association with treatments (N=2131, BD-I 97.2%, mean age: 13.2  $\pm$ 2.2 years, mean duration of studies: 42.72 weeks, 83.4% were open label studies and 16.6% were RCTs). The mean relapse rate was 44.4  $\pm$ 22.7%. The overall pooled drop-out rate was 45.9  $\pm$ 24.2% and the discontinuation rate due to side effects was 11.5%  $\pm$ 7.4%. Conclusion: A majority of the pharmacological treatments, including lithium, valproate and several second - generation antipsychotics, showed evidence versus placebo to prevent relapses of pediatric bipolar disorder. However, control of relapses among young patients with BD remains particularly unsatisfactory.

# #7 Advanced Dialectical Behaviour Therapy Program Clinical Training and Research Initiative Dr. Alex Hocko, London Health Sciences Centre

Co-Author(s): Dr. Chloe Hamza, Dr. Sandra Fisman, Brenda Davidson, Dr. Raymond Egan, Dr. Shannon Stewart, Jennifer Wilson, David Bogart, Dr. Javeed Sukhera, Patrizia Travis, Dr. Alex Hocko

<u>Learning objectives:</u> Assess the effectiveness of DBT on adolescent patient care and recovery; Review the assessment scales used to evaluate adolescent functioning, emotions, self-harm and suicidal ideation; Discuss the use of descriptive statistics in preliminary data analyses

There is a paucity of studies for adolescent Dialectical Behaviour Therapy (DBT) in Ontario. This longitudinal study examines whether DBT influences adolescent care and recovery through measurements of emotional regulation and functioning. Adolescents in out-patient treatment involved in the DBT program, at two London Ontario hospitals, participated in the study. Three study assessment points include: start of DBT; end of the DBT; and 3-month follow-up. Assessments include: Multidimensional Scale of Functional Impairment for Children and Adolescents (MAFS), Difficulties in Emotion Regulation Scale (DERS), InterRAI ChYMH—Severity of Self-Harm Clinical Assessment Profile Items Only (CAP), and Brief Impairment Scale (BIS). Descriptive analyses are performed as the n-size is under 30. Twenty-one participants (n=21) completed the DBT program. Assessing self-injurious ideation or attempt: pre-treatment mean, 3.29 (SD=1.23); post treatment mean, 3.00 (SD=1.12), and the follow-up mean, 2.85 (SD=0.63). Assessing social and family functioning on the BIS: pre-treatment mean, 2.6 (SD=0.63). Assessing social and family functioning on the BIS: pre-treatment mean, 2.61 (SD=0.53). Participant retention is a challenge. Although the n-size did not permit analyses for significance, preliminary findings indicate DBT may play a role in decreasing suicidal ideation, suicide attempts, self-injury, emotional dysregulation and behavioral impairment. Slight improvement showed from pre-to-post-treatment on overall adolescent functioning.

### #8 Assessing PTSD in Haitian Children Post-Earthquake: a Pilot Study Dr. Audrey Mc Mahon, Université De Sherbrooke

Co-Author(s): Dr. Fritzna Blaise, Mrs. Claudia Thomas Riché, Mrs. Claudine Larocque, Dr. Gilles Delatour, Dr. Jean-François Lemay, Dr. Yves-Marie Mérat, Dr. Lucie Brazeau-Lamontagne

<u>Learning objectives:</u> Review the evidence and current literature on the prevalence of PTSD among Haitian children before and after the 2010 earthquake; Highlight challenging and essential aspects of the culturally sensitive adaptation of research tools; Identify the prevalence of PTSD, the types of traumatic events and how trauma manifests in these children, in order to propose comprehensive and socio-culturally adapted interventions.

Introduction: In the last decade, various studies have reported post-traumatic mental health problems following varied natural disasters in children. To our knowledge, only four studies investigated child psychological trauma following the devastating 2010 Haiti earthquake. The pilot study objectives were: 1) to determine the feasibility/acceptability of our project; 2) to validate the creole version of the questionnaire chosen; 3) to determine the prevalence of post-traumatic stress disorder (PTSD) in primary school children in Port-au-Prince (PAP); and 4) to gather data exploring trauma types and manifestations among participants. Methods: In late 2017, this cross-sectional study recruited 73/104 children (70%) aged 7-12 after obtaining their parents' consent. The questionnaire, UCLA-PTSD Reaction Index for Children/Adolescent DSM-5, was translated and adapted in creole, with permission, and used to gather qualitative and quantitative data amongst recruited children. Results: Results reveal that the study design is feasible and well-accepted by parents and children. The creole questionnaire is validated. Preliminary results show that at least 15 children meet criteria for PTSD and more than 50% have some PTSD symptoms. Assorted types of trauma are identified, with domestic and intra-community violence in the environment being the most common. Exposure to the earthquake is mentioned but interestingly not the predominant theme. Conclusion: PTSD among exposed children of PAP seems to be prevalent. This pilot study prepares the ground for a culturally-adapted, larger-scale study in Léogâne-epicenter of the 2010 earthquake-aiming to propose culturally-sensitive interventions for the care of mental health issues among affected children.

# #9 Primary Care Contact of Children Referred for Urgent Psychiatric Assessment Dr. Marcelo Crespin, Queen's University Department Of Psychiatry

Co-Author(s): Dr. Marcelo Crespin, Ms. Karen Gillis, Ms. Leanne Repetti, Dr. Nasreen Roberts

<u>Learning objectives:</u> Discuss access to primary care amongst children and adolescents with mental health problems; Share knowledge of recommendations made by primary care for child and youth mental health crisis; List and discuss possible solutions to over-referral to ED and Urgent Psychiatric services.

Aim: a) Study the source of referral for children and adolescents assessed during a 6-month period. b) Review number of patients seen in primary care prior to referral to Urgent Psychiatric Clinic. Method: This is a 6-month prospective study of all assessments completed by the CAMHUCC. This hospital based clinic has a referral rate of 30-40 new patients/month. Data is gathered on demographic and clinical variables including source of referral. For this study, additional data will be gathered on: 1. Whether the patient has a primary care physician/pediatrician 2. Whether they reported their mental health problems to them. 3. Whether primary care physicians recommended: medication, children's mental health services or directed to the ED. Descriptive statistics will be used to present the findings. Results: We expect to assess 160-180 patients during the study period. Source of referral and gender distribution will be reported. Percentage seen by primary care physicians prior to referral for urgent consult will be reported. We will report on percentage of patients/parents who reported their emotional or behavioral problems to their primary care physician/pediatrician and were given recommendations for follow-up. Conclusion: Both General ED and PED are the primary portal of accessing mental health assessment for non-urgent common symptoms. The limited access to primary care and pediatrics may lead to inappropriate use of the Emergency Department and subspecialty clinics for common non-comorbid disorders. Increasing access to primary care and continuing medical education may assist in improving management and triage of common non-comorbid child and adolescent psychiatric disorders.

# #10 Prevalence of ASD in the Inpatient Adolescent Psychiatric Population Dr. Graciela Kriegel, Ontario Shores Centre for Mental Health Sciences

Co-Author(s): Dr. Graciela Kriegel, Ms. Riley Whitchurch, Dr. Alexandra Hernandez, Ms. Kate Leonard, Dr. Paul Sandor

<u>Learning objectives:</u> Examine the prevalence of ASD in a psychiatric adolescent population vs. general adolescent population.; Review potential risk factors associated with ASD; Examine rates of psychiatric comorbidities associated with ASD and discuss implications to care.

Introduction: The epidemiology of autism spectrum disorder (ASD) (1) has been changing. Prevalence has increased in the past decades, but the cause is unclear. This is the first study exploring the prevalence of ASD in Inpatient Adolescent Units in Ontario. We look into several factors identified as associated to ASD, as well as comorbid psychiatric conditions. Methods: 173 adolescent psychiatric inpatients were recruited from Ontario Shores Centre for Mental Health Sciences and Youthdale Treatment Centre to determine the prevalence of ASD, the association with prenatal and perinatal factors, advanced paternal and maternal ages, maternal place of birth, and psychiatric conditions comorbid with ASD. Results: The prevalence of ASD was 11.56% (20 of 173) compared to 1.06% to 1.47% (2), in the general population despite the fact that not all clients with ASD participated. No significant differences between centers were found, except patient age. Contrary to previous findings (3,4,5,6), prenatal or perinatal factors, paternal and maternal age, and maternal place of birth were not significantly associated with ASD. Finally, 75% of ASD patients at Ontario Shores had a psychiatric comorbidity versus 33% at Youthdale. Conclusions: The prevalence of ASD is significantly higher in the inpatient psychiatric than general population. The difference in rate of comorbidity at the centres may be related to different populations. The results may provide insight into the high inpatient prevalence of ASD and can be instrumental in planning for adequate services for the ASD population.

# #12 Diffusion Tensor Imaging in Autistic, Dysphasic, and Healthy Control Children Dr. Iva Dudova, MD, PhD, Associate Professor

Co-Author(s): Prof. Michal Hrdlicka, Charles University Second Faculty Of Medicine; Ing. Jan Sanda; Prof. Tomas Urbanek; Prof. Pavel Krsek; Prof. Vladimir Komarek

<u>Learning objectives:</u> Gain insights into brain structure and function in neurodevelopmental disorders; Identify the uses of diffusion tensor imaging (DTI) in child and adolescent psychiatry; Investigate the concept of brain connectivity as it relates to autism and developmental dysphasia

Introduction: Diffusion tensor imaging (DTI) is one of the most powerful tools for investigating brain anatomical connectivity (Aoki et al., 2013), and has been used to study individuals with autism (Travers et al., 2012; Ismail et al., 2016) as well as those with specific language impairment or developmental dysphasia based on the International Classification of Diseases, 10th ed. (ICD-10) (Vydrova et al., 2015). The aim of our study was to compare brain connectivity among children with autism spectrum disorders (ASD), developmental dysphasia (DD), and healthy controls (HC). Methods: Our sample consisted of 63 children aged 5–12 years (46 boys, 17 girls) divided into three groups: ASD (n=21), DD (n=30), and HC (n=12). Diagnoses were based on the ICD-10. DTI images were collected using a 1.5T Phillips Achieva MR imaging system. We focused on four tracts: arcuate fasciculus (AF), inferior frontal occipital fasciculus (IFOF), inferior longitudinal fasciculus (ILF), and uncinate fasciculus (UF). Results: Tract-based spatial statistics (TBSS) revealed a statistically significant decrease of fractional anisotropy (FA) in the ASD group compared to the HC group in all four tracts bilaterally (p<0.05). TBSS differences between DD and HC were not significant. Detailed analyses of FA revealed significant differences among ASD, DD, and HC groups in AF left (p=0.015) and right (p=0.007), IFOF left (p=0.015), and ILF right (p=0.025), but not in UF. Conclusions: The connectivity pattern in ASD differs from connectivity patterns in DD and HC. Supported by the Ministry of Health, Czech Republic (grant No. 16-31754A).

# #14 The Role of Antidepressants on Isolated Sleep Paralysis: Case Report Dr. Ewa Bieber, Mayo Clinic

Co-Author(s): Dr. Magdalena Romanowicz, Dr. Jennifer Vande Voort, Dr. David Biebe, Dr. Alastair McKean

<u>Learning objectives:</u> Recognize classifications of parasomnias and associated psychopathology in adolescents; Review risk factors for sleep paralysis; Examine current literature of antidepressant effects on sleep, assess limitations and determine directions for further study

Introduction: Antidepressant medications have been linked to insomnia, hypersomnolence, and parasomnias (1). Outside of REM behavior disorder, little is written about medication-induced parasomnias, especially in youth. J is a 15-year-old young woman with major depressive disorder who experienced recurrent episodes of sleep paralysis following the abrupt discontinuation of bupropion. Methods: J's chart was reviewed. Articles regarding antidepressant effects on sleep, specifically parasomnias were reviewed. Results: Following treatment failure with SSRIs and one SNRI, J was trialed on 300 mg extended-release bupropion for major depressive disorder. Bupropion was abruptly discontinued following a single seizure. Over the next month, off all medications, J experienced four brief episodes of inability to move or speak upon awakening, despite being aware of her surroundings. Another two episodes occurred following initiation and discontinuation of mirtazapine 15 mg, but none otherwise. No evidence of a seizure disorder or narcolepsy were found. Sleep patterns were analyzed through actigraphy and polysomnography. Conclusions: Isolated sleep paralysis is a relatively common phenomenon though little is written about it in the pediatric and adolescent population. It is particularly prevalent in anxiety disorders and in those with poor sleep hygiene (2), placing adolescent patients at high risk. It may herald other sleep disorders and warrants clinical attention (3). There is a lack of current evidence to directly associate sleep paralysis to antidepressant use. However, this may be due to a dearth of research, particularly for atypical antidepressants (4).

# #16 Building Resilience and Attachment in Vulnerable Adolescents: A Pilot Study Dr. Clare Gray, University Of Ottawa

Co-Author(s): Dr. Allison Kennedy, Ms. Paula Cloutier, Dr. Mario Cappelli, Ms. Alicia Biafore, Mr. Michael Ranney

<u>Learning objectives:</u> Identify the components of a novel brief group intervention for suicidal teens; Determine the importance of quick accessibility for patients and families in crisis; Identify the challenges in conducting a randomized controlled trial of a group intervention

Introduction: Suicide is the second leading cause of mortality for Canadian adolescents1. Providing timely and appropriate follow-up for youth who present to emergency departments with mild to moderate suicidal ideation (SI) is challenging2. This study evaluated the efficacy of a novel brief group intervention for adolescents with mild to moderate SI and their caregivers drawing from two evidence based interventions: Dialectical Behaviour Therapy and Attachment Based Family Therapy. Methods: Adolescents presenting for mental health crisis services with mild to moderate SI were invited to participate in the study with their caregivers. The group treatment consisted of six weekly, 90 minute adolescent and caregiver group therapy sessions that ran concurrently. A battery of measures was completed during the study intake and exit interviews. Results: 27 youths (26 females and 1 male, aged 13-17) and 36 caregivers participated in the group intervention and completed both intake and exit interviews. Adolescent SI, depression, anxiety and perceived stress improved significantly following treatment ( $p \le .01$ ). High overall satisfaction ratings for both the caregiver and adolescent groups were reported throughout treatment. Conclusions: This study demonstrates that adolescent SI significantly improved following a brief group intervention for vulnerable adolescents and their caregivers. High satisfaction ratings coupled with positive outcomes suggest that adolescents and their caregivers were engaged in and benefited from the treatment. Clinical elevations on post-treatment measures indicate that some participants may require further intervention following the brief group treatment.

# #17 Intergenerational Indian Residential School Attendance Predicts Early-Onset Youth Suicide Risk Mr. Flint Schwartz, Dalhousie University

Co-Author(s): Dr. Amy Bombay, Dr. Robyn Jane McQuaid, Mr. Alex Thomas, Dr. Hymie Anisman, Dr. Kim Matheson

<u>Learning objectives:</u> Review the intergenerational effects of parental Indian Residential School (IRS) attendance on First Nations children and youth; Discuss variation in youth suicidal thoughts and attempts among on-reserve First Nations children and youth in relation to parental IRS attendance; Determine how the results of this study may inform a greater understanding of risk factors and culturally relevant early intervention strategies for Indigenous children and youth who have experienced intergenerational trauma.

Introduction: Generations of Indigenous children in Canada have been exposed to chronic childhood adversity within Indian Residential School (IRS), with far-reaching consequences for subsequent generations. The current study investigates suicidal ideation among First Nations youth living on-reserve who have/have not been exposed to intergenerational trauma via parental IRS attendance. Method: The proportion of suicidal thoughts and attempts are examined in a representative Canadian sample of First Nations youth living on-reserve using data from the 2008-10 First Nations Regional Heath Survey (N=2,883). The analysis is conducted using logistic regression with cross-tabulations to assess the interactions. Results: There is a significant interaction between parental IRS attendance and age predicting suicidal thoughts and attempts, with a greater proportion of younger (age 12-14) versus older (age 15-17) youth having thought about and/or attempted suicide in the past year. Likewise, an examination of suicidal ideation in the past year revealed a significant 2-way interaction between parental IRS attendance with age and sex, such that effects of having an parent who attended IRS were greater among females. There is also a significant interaction between age and sex such that younger females were at greater risk for a suicide attempt. Conclusion: These findings suggest that examining the developmental stage of symptom onset relative to intergenerational trauma exposure may be important for identifying risk and protective factors among Indigenous youth. The results underscore the need for culturally-relevant early interventions for the large proportions of Indigenous children and youth who are intergenerationally affected by IRS and other collective traumas.

# #18 Somatization in the Pediatric Emergency Department: Engaging Families with Psychoeducation Dr. Jacob Ellis, BC Children's Hospital

Co-Author(s): Dr. Amrit Dhariwal, Mr. Punit Virk, Dr. Andrea Chapman, Dr. Quynh Doan

<u>Learning objectives:</u> Identify the prevalence of a component of somatization within the PED environment as determined by screening tool completed by PED clinician; Evaluate the acceptability of the proposed intervention from the perspective of families; Determine the feasibility of the proposed intervention from the perspective of PED clinicians.

Introduction: Somatization is psychological distress experienced as unintentionally produced physical symptoms, in the absence or presence of verifiable physical illness¹. Somatization is common within the general pediatric population², causes substantial morbidity³ and is associated with high utilization of health resources⁴. Pediatric Emergency Department (PED) clinicians are ideally placed to identify somatization; however, operationalized PED screening tools are non-existent. Methods: This prospective cross-sectional study aims to 1) determine the proportion of BC Children's Hospital PED attendances with a somatization component and 2) explore the feasibility and acceptability of a psychoeducational intervention introduced in the PED. A 5-item somatization screening tool for use in the PED was developed through expert consensus. Screen-positive is defined as 'Yes' OR 'Maybe' responses to the item 'Do you suspect that your patient's presentation is linked to somatization?' The PED clinician is then guided to introduce the somatization concept to screen-positive families using a script. A psychiatrist will then complete a structured assessment considering suitability for a follow-up parent information session. Data collection will take place over 12 PED shifts,April-June 2018. Results: Proportions of screen-positive patients will determine prevalence. Intervention acceptability will be determined by proportion of: families agreeing to meet with psychiatrist, identified as suitable for the information session and attendance at the information session. Feasibility will be explored through feedback from PED physicians. Conclusions: This pilot study aims to improve understanding of the burden of somatization on the PED, develop clinician skills in identifying and communicating somatization, and engage families through supportive psychoeducation.

# #21 Canadian Children/Adolescents with ADHD+comorbidities Receiving Guanfacine Extended-Release: Chart Review Dr. Kenneth Handelman

Co-Author(s): Dr. Simerpal Gill, Dr. Christopher Reaume, Dr. Judy van Stralen

<u>Learning objectives:</u> Review real-world data on the clinical use of GXR for children/adolescents with ADHD; Review Canadian data showing that GXR is used in Canada for patients with ADHD, including those with common comorbid conditions, requiring additional ADHD treatment; Discuss additional safety data on GXR obtained from a retrospective chart review study

Introduction: Guanfacine extended release (GXR) is used to treat attention-deficit/hyperactivity disorder (ADHD) in children/adolescents (1,2); some patients with ADHD have complex needs. We present post-hoc analyses from a retrospective chart review study, categorizing changes in clinical outcomes among children/adolescents with selected comorbidities prescribed GXR for ADHD in Canadian routine clinical practice. Methods: Chart data from children/adolescents (6-17 years) with ADHD prescribed GXR (monotherapy/adjunct therapy) with ≥6 months' follow-up data were extracted. Changes in ADHD symptoms and functionality (home-life/school performance) based on physician assessments were classified as improvement, no change or worsening, and analyzed overall and among patients with specific comorbidities. Treatment-emergent adverse events (TEAEs) were recorded. Results: 330 patients with ADHD were included. After GXR initiation, 70%, 63% and 65% of patients overall had improvements in ADHD symptoms, home-life, and school performance, respectively. Among those with oppositional defiant disorder (92/330), 70%, 55% and 59% had improvements in ADHD symptoms, home-life and school performance, respectively. Among those with earning disability (70/330), 74%, 69% and 73% had improvements in ADHD symptoms, home-life and school performance, respectively. Among those with anxiety (53/330), 74%, 68% and 72% had improvements in ADHD symptoms, home-life and school performance, respectively. Among those with anxiety (53/330), 74%, 69%, 60% and 69% had improvements in ADHD symptoms, home-life and school performance, respectively. TEAEs were reported by 45% of patients. Conclusion: In a Canadian population (real-world setting), GXR treatment improved ADHD symptoms and functioning at home/school in patients with ADHD, including those with common comorbidities. Funding: Shire Development LLC

# #22 Children Diagnosed with ADHD via Urgent Psychiatric Consult: Clinical Characteristics Dr. Marcelo Crespin, Queen's University Department Of Psychiatry

<u>Learning objectives:</u> List the factors which influence mental health crisis visits to the pediatric ER and psychiatric urgent consult clinic.; Identify the clinical characteristics of children diagnosed with ADHD via psychiatric urgent consult clinic vs. their Non-ADHD peers.; Discuss how children with ADHD (without acute safety concerns) might be better served by community & school programs vs. urgent psychiatric clinic.

Objectives: To examine the clinical characteristics of children aged 5 to 12 years referred to a hospital-based pediatric psychiatric urgent consult clinic and diagnosed with attention-deficit hyperactivity disorder (ADHD; study group). Methods: This was a 12-month retrospective study that compared the ADHD group with non-ADHD peers from the same clinic. Variables under study included age, sex, reason for referral, diagnosis, individualized educational plan (IEP), Community Mental Health Agency (CMHA) involvement, and outcome. Data analysis included descriptive statistics, as well as Pearson's chi-square test, and Fisher's exact test for associations between dichotomous variables of interest. Results: In 2016-2017, 140 assessments were completed; 61.4% of referrals were from the pediatric ER, 22.1% from primary care, and 16.5% from schools and CMHA. Of those assessed, 57% (N = 80) were diagnosed with ADHD. The ADHD group was associated with being male ( $\chi$ 2 (1) = 12.37, p < 0.001), having no suicidal ideation ( $\chi$ 2 (1) = 6.75, p = 0.009), having an IEP (p < 0.001, Fisher's exact test), having CMHA involvement ( $\chi$ 2 (1) = 4.41, p = 0.036) and brief follow up in the urgent clinic ( $\chi$ 2 (1) = 9.55, p = 0.002). Conclusion: More than half of the referrals for an urgent psychiatric consultation met criteria for ADHD but were unlikely to present with acute safety concerns. Education for primary care physicians, pediatricians, schools, and community agencies may improve community-based services to address the needs of these children. This would reduce crisis visits to the pediatric ER and psychiatric urgent consult clinic.

# #24 Parenting Stress and Infant Screen time, Screen Time with Food Dr. Katherine Tombeau Cost. The Hopsital For Sick Children

Co-Author(s): Dr. Daphne Korczak, Dr. Alice Charach, Dr. Catherine Birken, Dr. Jonathon Maguire, Dr. Pat Parkin, Dr. Peter Szatmari

<u>Learning objectives:</u> Discuss the prevalence of screen time and screen time with food in a large sample of children 7-18 months of age; Review the association of parenting stress with infant screen time; Identify predictors of screen time with food in children 7-18 months of age

Introduction: Exposure to screen time (SCR) and screen time with food (SCR+F) for infants and toddlers is associated with multiple poor health outcomes. The existing literature addresses demographic and home media environmental factors. Our objective was to explore the association between parenting stress with child SCR and SCR+F at 7-18 months. Methods: Participants were from The Applied Research Group for Kids (TARGet Kids!), a longitudinal cohort in Canada. Parents completed the Parenting Stress Index when children were 7-18 months of age. Typical weekly child SCR and SCR+F as well as clinically relevant maternal and child characteristics including child age, temperament, and family income were assessed with parent-completed questionnaires. Two separate multiple linear regression models were used to determine the independent association of parenting stress with SCR and with SCR+F. Results: In our sample, 75.7% of children aged 7-18 months had SCR and 39.1% had SCR+F in a typical week. We found that parenting stress was not associated with SCR (n=525, p=0.513) or SCR+F (n=587, p=0.826). Self-reported income less than \$100,000 per year (p<.001) and child negative affectivity (p=0.019), were associated with higher SCR+F. Child age was not associated with higher SCR+F (p=0.057). Conclusions: We did not find that parenting stress was associated with screen time or screen time with food in our sample. Future research may focus on more diverse samples, the ubiquity and normalisation of SCR for children under the age of 2 years, and child characteristics such as gender in the use of SCR and SCR+F.

# #26 Defining a "Good Outcome" in Autism Spectrum Disorder Dr. Katherine Tombeau Cost, The Hopsital For Sick Children

Co-Author(s): Dr. Terry Bennett, Dr. Eric Duku, Dr. Mayada Elsabbagh, Dr. Stelios Georgiades, Dr. Pat Mirenda, Dr. Isabel M. Smith, Dr. Wendy Ungar, Dr. Tracy Vaillancourt, Dr. Joanne Volden, Dr. Charlotte Waddell, Dr. Anat Zaidman-Zait, Dr. Lonnie Zwaigenbaum, Dr. Peter Szatmari

<u>Learning objectives:</u> List 2 different ways to quantify "good outcome"; Discuss the prevalence of the 2 metrics of "good outcomes "in 5 domains: social, communication, activities of daily living, internalising, and externalising in children with ASD at 8-10 years of age; Discuss congruence, independence, and stability of these 2 metrics "good outcomes" in children with ASD at 8-10 years of age

Introduction: The Pathways in Autism Spectrum Disorder (ASD) study identifies factors associated with good outcomes in children with ASD. Taylor1 outlines two definitions of a "good" outcome: "Proficiency" sets a threshold of competence, whereas "Growth" sets an amount of improvement. Our objectives are to examine "good" outcomes with these metrics. Methods: Recruitment occurs in autism clinics in 5 Canadian provinces (N=421). Time 1 (T1) is soon after ASD diagnosis (mean age 3.4 years). Time 2 (T2) is at 8.7-10.8 years of age. Outcomes are subscales from the Vineland Adaptive Behaviour Scales (VABS-II) and Child Behaviour Checklist (CBCL). Good outcomes are quantified as: Proficiency, scoring in the typical range; and Growth, improvement in T1 to T2 score of at least 1 SD. We examined the prevalence, congruence, stability, and independence between these 2 metrics using unweighted Kappa. Results: At T2, 20-49% of children attain Proficiency; 13-35% attain Growth. Proficiency and Growth are not congruent within a domain. Proficiency in any domain is not stable from T1 to T2. In Proficiency, non-independence is moderate (k=0.43-0.45) between domains within an instrument, but not between instruments. In Growth, moderate non-independence (k=0.43-0.45) is between 2 VABS domains and between CBCL domains. Conclusions: "Good" outcomes are not uncommon in a representative sample of 8-10 year old children with ASD. A child can be classified as Proficient and/or have Growth but these are not congruent classifications. Moreover, a child can be Proficient at one time point, but not another. The domains are somewhat independent of each other.

# #28 Quality of Life and Metabolic Side-Effects Within First-Episode, Antipsychotic-Naïve Youth Ms. Nicole MacKenzie, Centre For Addiction And Mental Health

Co-Author(s): Dr. Araba Chintoh, Nicole MacKenzie, Dr. Mahavir Agarwal, William McIntyre, Dr. Gary Remington, Dr. Margaret Hahn

<u>Learning objectives:</u> Review how even agents considered to be of lower/medium metabolic liability can rapidly induce metabolic changes in this young population; Consider judicious prescription of these agents given negative impact on metabolic health; List implications for clinical presentation and quality of life.

Introduction Atypical antipsychotics (APs), though effective (1), are known to cause metabolic dysregulation, especially in youth in early treatment (2). This observational study aims to understand changes in clinical presentation and quality of life (QoL) within the context of metabolic changes in AP-naïve youth during their first 3 months of treatment. Methods 10 participants between ages 12 and 35 were followed throughout their first 3 months of treatment with an AP for any indication. Participants were evaluated on metabolic indices (i.e. weight, waist circumference, body mass index), QoL (Pediatric Quality of Life Index and General Well-Being Scale) and clinical presentation (Clinical Global Impression scale). Descriptive and nonparametric tests were conducted to compare significant changes across these variables. Results Metabolic indices are found to significantly worsen over the first 3 months of treatment, as seen through weight gain, waist circumference increase, and BMI increase. Clinically, participants show an improvement in their clinical global impression. However, QoL remains unchanged within all subcategories, including psychosocial and general well-being. Conclusions AP-related metabolic side-effects may not impede upon early clinical improvement or impact QoL. Also, there does not appear to be a relationship between clinical presentation and QoL, where QoL is shown to remain neutral to positive. These findings suggest that clinical presentation and metabolic side-effects may not influence patient-perceived QoL. These results are clinically relevant as they encourage clinicians to attend to the interplay between treatment, metabolic health and related QoL.

# #30 Mental Health Problems Among Young Women Dr. Ellen Lipman, Mcmaster University

Co-Author(s): Dr. Ryan Van Lieshout, Calan Savoy, Heather Whitty, Dr. Alison Niccols, Dr. Susan Jack, Dr. John Cairney, Dr. Michael Boyle, Dr. Kathy Georgiades

<u>Learning objectives:</u> Review existing research on mental health problems among young mothers; Discuss the new Canadian research on mental health problems among young mothers; List service issues related to mental health problems among young mothers

Introduction: Young mothers, <20 years at first delivery, are an at-risk population characterized by psychosocial difficulties and elevated risk of mental health problems. Canadian data on this subject are sparse. We examine the prevalence of mental health problems among young mothers in Hamilton, Ontario, compared with mature mothers (> 20 years at first delivery), and nulliparious young women. Methods: Participants in the Young Mothers Health Study (YMHS) are 450 young mothers (English speaking, 15-20 years old, living in the Hamilton area, pregnant or ≤ 24 months since first delivery) recruited through community agencies (e.g., income assistance, public health, primary care), hospital clinics and public notices. Mature mothers were recruited similarly. Data on young women come from the 2014 Ontario Child Health Study. We examine the YMHS young mothers (total and subgroup of 100 15-18 years old), compared with mature mothers and young women (15-18 years old) respectively. Mental health problems were assessed using the Mini International Neuropsychiatric Interview for Children and Adolescents (MINI-KID). Results: Preliminary results suggest young mothers have higher rates of anxiety and externalizing disorders compared with young women (odds ratios 2.0-4.5), and compared with mature mothers (odds ratios 2.4-15.5). Conclusions: These results will be discussed, with consideration of research and service issues.

# #31 Aboriginal Youth in Crisis: Presentations to Pediatric Emergency Psychiatry Ms. Sinead Nugent, University Of British Columbia

Co-Author(s): Ms. Ellen Jopling, Dr. Amanda Degenhardt, Dr. Ali Eslami

<u>Learning objectives:</u> Review the mental health crises affecting the general youth of BC; Review the mental health crises specifically affecting Aboriginal youth population in BC; List areas in need of further intervention and research

Introduction: This study examined the presentations of Aboriginal youth admitted to the Child & Adolescent Psychiatric Emergency (CAPE) at BC Children's Hospital over an 8-year period. Methods: A retrospective chart review of admissions to CAPE between 2009 and 2016 examined and divided patients into subgroups of non-Aboriginal and Aboriginal cohorts. Information was collected using the Discharge Abstract Database and supplemented through manual review of electronic and paper charts. Demographics, reasons for admission, and psychiatric diagnoses were recorded for comparison between groups. Results: 2176 admissions were recorded totalling 1533 patients. 278 admissions and 188 individual patients were of Aboriginal descent, equalling 12% of the overall CAPE population. Suicidality (inclusive of ideation, attempts and threats) was a common reason for admission for both groups, accounting for 48% of non-Aboriginal admissions and 53% of Aboriginal admissions. Behaviour problems (such as aggression, dysregulation and homicidality) accounted for 30% of non-Aboriginal admissions and 42% of Aboriginal admissions. 50% of the non-Aboriginal group had diagnoses of Depression and/or Anxiety compared with 34% and 55% of the Aboriginal group. 3% of the non-Aboriginal group had a diagnosis of FASD compared with 25% of the Aboriginal group. The Aboriginal group also had higher rates of Cannabis/Alcohol Use Disorder and PTSD. Conclusions: 8% of the BC child population identifies as Aboriginal, yet a disproportionate number require emergency psychiatric admission for mental health crises. This highlights a critical need for further research into the mental health of this group and the development of culturally informed therapeutic interventions.

# #33 Telepsychiatry Training Needs of Child & Adolescent Psychiatrists Dr. Chetana Kulkarni, Hospital For Sick Children, University Of Toronto

Co-Author(s): Dr. Antonio Pignatiello, Dr. Katherine Boydell, Mr. Omar Ayad

<u>Learning objectives:</u> Describe the factors influencing Canadian CAPs decision to practice telepsychiatry; Assess the telepsychiatry training and orientation experience of Canadian CAPs; Discuss identified ongoing learning needs of CAPs in telepsychiatry.

Introduction: Telepsychiatry(TP) is an evidence-based service delivery model proven comparable to in-person models. Given limited availability of Child & Adolescent Psychiatrists(CAPs), TP use is increasing, especially in rural and remote areas. It is imperative training programs ensure graduating CAPs are experienced & prepared to practice TP. This project addresses the training of CAPs in TP by building on knowledge regarding best practices for teaching TP. There data evaluating residents' participation in a required TP experience are available, however there has been no assessment of its impact on recruitment to TP practice on graduation. Also, little is known about training in TP across Canada. This project aims to determine the aspects of TP training that are important for recruitment of CAPs to TP in Canada. Methods: 1.National survey of practicing CAPs to explore practice patterns & training experiences related to TP. 2.Focus groups at the Ontario provincial CAP TP hubs to further explore the TP experience during training and its impact on the decision to practice TP. Results: The study is currently undergoing REB approval and we expect that preliminary results will be presented at the CACAP meeting in Sept. Mixed-methods analysis will be used with survey results informing focus group themes. Results presented will include descriptive statistics and thematic analysis for the qualitative component. Conclusions: We anticipate that more intensive and formal experiences in TP during training will highly influence decisions to continue practicing TP. We also anticipate that more junior physicians will have more formal TP training experiences.

# #34 Are ASD and ADHD part of a Single Neurodevelopmental Disorder? Dr. Aneta Krakowski, University of Toronto

Co-Author(s): Dr. Katherine Tombeau Cost, Dr. Peter Szatmari, Dr. Russell Schachar, Dr. Jennifer Crosbie, Dr. Evdokia Anagnostou

<u>Learning objectives:</u> Discuss the importance of keeping phenotypic structure in mind when addressing ASD and ADHD comorbidity; Determine the role of factor analysis in exploring the phenotypic structure of combined ASD and ADHD symptoms; Identify how comparing different measurement models can enhance our understanding of neurodevelopmental disorders

Introduction: Few studies have examined the phenotypic structure of combined Autism Spectrum Disorder and Attention Deficit Hyperactivity Disorder symptoms(1-4). Our first aim is to determine the factor structure of combined ASD and ADHD symptoms in a sample of children with ASD and ADHD. Our second aim is to examine whether a hierarchical model with a general neurodevelopmental factor and orthogonal ASD and ADHD factors fit significantly better than a correlated factor model with ASD and ADHD factors. Methods: Study participants with a diagnosis of ASD (n=303) or ADHD (n=319) were selected from the Province of Ontario Neurodevelopmental Disorder network database. Parents completed the SCQ, a measure of autism traits, and the SWAN questionnaire, a measure of ADHD traits, on all 622 children. Principal component analysis of combined SCQ and SWAN symptoms was performed. Confirmatory factor analyses were then performed to compare the model fit of hierarchical and correlated factor models. Results: Combined SCQ-SWAN analysis reveals a four-factor solution composed of a social-communication factor, restricted, repetitive, behaviours and interests factor, inattentive factor and hyperactivity/impulsivity factor. There is no overlap between SCQ and SWAN items in any of the factors. Confirmatory factor analyses to compare the model fit of hierarchical and correlated factor models are underway. Conclusions: There is measurement independence between ASD and ADHD symptoms when they are examined together in a factor analysis. A hierarchical model comprising an over-arching "neurodevelopmental" factor may explain the high rates of comorbidity between ASD and ADHD in spite of measurement independence at lower levels.

# #38 Prescribing of Antipsychotic Medications to Children with ADHD in CPCSSN Ms. Rachael Morkem, Queen's University

Co-Author(s): Dr. David Barber, Dr. Richard Birtwhistle, Dr. John Queenan, Dr. Kenneth Handelman

<u>Learning objectives:</u> Create and validate an ADHD case definition within primary care EMR; Measure the frequency of antipsychotic prescribing to children with ADHD in primary care; Evaluate the change in prescribing levels of antipsychotics to children between 2008 and 2015.

Introduction: Attention Deficit Hyperactivity Disorder (ADHD) is the most commonly diagnosed mental disorder in children (1, 2). While the recommended first-line medications are stimulants, there are alternatives including atomoxetine, clonidine and guanfacine (2). Furthermore, several studies suggest that antipsychotics are being used to treat ADHD, particularly in those exhibiting aggression (3-5). The objective of this study is to develop and validate an electronic medical record (EMR) case definition of ADHD diagnosis; and evaluate antipsychotic prescribing to children with and without ADHD in primary care. Methods: An observational database study that uses patient clinical data contributed by primary care providers to the Canadian Primary Care Sentinel Surveillance Network (CPCSSN), a pan-Canadian repository of EMR data. An ADHD case definition was created and validated using a manual chart abstraction. Frequency of antipsychotic prescribing to children 4 to 17 years old with and without ADHD between 2008 and 2015 is described. Results: The ADHD case definition had a 95.1 (95% CI [89.0, 98.4]) sensitivity and 97.9 (95% CI [92.7, 99.7]) specificty. We identified 6672 of 195,601 children with ADHD. There was no significant change in antispychotic prescribing to children with ADHD between 2008 (6.9%, 95% CI [5.5, 8.6]) and 2015 (7.5%, 95% CI [6.6, 8.4]). There was a rise in antispychotic prescribing to all children (0.27%, 95% CI [0.24, 0.32] in 2008; 0.53%, 95% CI [0.49, 0.57] in 2015); 72.7% of which listed ADHD as the provisional diagnosis. Conclusions: Antipsychotics are increasingly being prescribed in primary care, most commonly to children with ADHD.

# #40 HPA Axis Hyporeactivity in Adolescent Girls with Conduct Disorder Dr. Kathleen Pajer, University Of Ottawa

Co-Author(s): Dr. Robert Rubin, Dr. William Gardner, Dr. Anna Taylor, Dr. Elizabeth Susman, Dr. Lorah Dorn, Dr. Andrea Lourie

<u>Learning objectives:</u> Name two types of HPA axis responses that have been reported in youth with CD; Identify three limitations with the current body of research in this field; Describe two findings about HPA axis reactivity in girls with CD.

Introduction: Adolescent girls with conduct disorder (CD) have lower daytime cortisol levels than girls without any disorder (ND). Little is known about HPA axis reactivity or the effects of comorbid internalizing disorders (INT). We investigated: 1) HPA axis reactivity in girls with CD compared to controls, 2) reactivity in girls with and without comorbid INT, and 3) whether human corticotropin releasing hormone (h-CRH) would eliminate group differences. Methods: 140 girls, 15-16 years old from the community were categorized into CD (N = 96) and ND (N = 37) groups. 57% of the CD group (N = 55) had comorbid INT. The Trier Social Stress Test (TSST) and a CRH Stimulation Test were administered over two days. Plasma levels of adrenocorticotropic hormone (ACTH) and cortisol were measured before, during, and after each test. HLM and linear regression analyses were used to test group differences in patterns of secretion and total amounts of each hormone. Results: CD girls had lower total secretion of ACTH and blunted cortisol reactivity to the TSST. Hormone response was similar between CD Only and CD + INT. The CRH Stimulation Test resulted in no difference in ACTH or cortisol responses in any group. Conclusions: CD girls displayed HPA axis hyporeactivity to the TSST. Comorbid INT did not mitigate this pattern. Exogenous CRH administration indicated that the pituitary and adrenal cortex had capacity in girls with CD to function normally. Directions for future research are discussed.

# #42 Children's Organizational Skills Improvement: Role of Parental Characteristics Ms. Julie Lapointe, Université De Montréal

Co-Author(s): Sylvie Normandeau, Lily Hechtman

<u>Learning objectives:</u> Review the effectiveness of interventions; Identify how parental characteristics can influence outcome variables; Discuss strategies to optimize benefits of multimodal interventions

Introduction Researchers emphasize the importance of assessing factors that moderate the effect of interventions for children, notably children with attention deficit disorder with or without hyperactivity (ADHD) (Bikic et al., 2016, Hinshaw, 2007). It is generally recognized that parental depression and high stress level can hinder parental ability to correctly implement educational strategies acquired during interventions (Chronis & al., 2004; Langberg & al., 2016; Reyno & McGrath, 2006). This study aims to examine the moderating role of parental stress and parental depression on the improvement of organizational skills following the participation of ADHD youths and their parents in a multimodal intervention. Methods Eighty ADHD youths (23 girls and 57 boys) and their parents were randomly assigned to either intervention groups (n = 36) or control group (n = 44). A two-dimensional questionnaire was used to measure organizational skills, i.e., Time Management and Planning (TMP) and Memorization and Material Management (MMM). Results Results showed that children's TMP and MMM skills, improved following their participation to the intervention. Fewer symptoms of parental depression were associated with a better improvement in TMP skills, but not with improvement in MMM skills. Parental stress was not a significant moderator of improvement in TMP or MMM skills. Conclusions Overall, the intervention was shown to be effective in supporting ADHD youths and their parents. The intervention was efficacious for families despite parents' level of stress. However, it would be important to identify means of dealing with symptoms of parental depression to optimize the benefits of the intervention.

# #43 Do Systematic Reviews and Meta-Analyses Meet International Quality Standards? Dr. Kathryn Bennett, McMaster University

<u>Learning objectives:</u> Discuss international quality standards for systematic reviews and meta-analyses; Discuss the methodologic strengths and weaknesses of systematic reviews and meta-analyses relevant to anxiety, depression and suicide related behaviours; Review how methodologic weaknesses can be remedied

Background: Systematic reviews and meta-analyses (SR/MA) about interventions for child and adolescent mental disorders are increasingly available. When conducted using rigorous methods they provide a gold standard information source that can inform healthcare decision-making and future research priorities. We applied SR methods to evaluate the quality of SR/MA about child and adolescent anxiety, depression and suicide interventions and make recommendations to improve rigor. Objectives: (i) What proportion of eligible SR/MA meet minimum quality standards defined using AMSTAR criteria? (ii) Did SR/MA quality improve after AMSTAR was introduced? (iii) Does journal impact factor predict SR/MA quality? Methods: Pre-specified inclusion criteria identified eligible SR/MA. Two trained raters applied AMSTAR to document review quality. Minimum quality was defined as an AMSTAR score  $\geq 5/9$  (SR) or  $\geq 6/11$  (MA). Results: Of 85 eligible reviews, 49.4% achieved a minimum quality rating. Failure rates for three AMSTAR criteria associated with high risk of bias were: funding source/conflict of interest (68.2%); assessment of study quality (67.1%); consideration of study quality in conclusions (62.4%). A statistically significant improvement in AMSTAR scores was observed for reviews published after the introduction of AMSTAR compared to before. A statistically significant correlation (r=0.25) between AMSTAR scores and journal impact factor was found. Conclusions: Quality gaps exist in SR/MA about interventions for child and adolescent anxiety, depression and suicide. Fortunately, the weaknesses identified can be remedied through increased attention to international quality standards by authors and journal editors, and intensified review author collaboration to reduce the burden associated with time/resource intensive standards.

# #44 Brain Grey-White Matter and Mental Illness Risk in Youth Mr. Vladislav Drobinin

Co-Author(s): Holly Van Gestel, Ms. Alyson Zwicker, Mr. Carl Helmick, Ms. Lynn MacKenzie, Ms. Emily Howes Vallis, Ms. Victoria Patterson, Ms. Jill Cumby, Dr. Lukas Propper, Dr. Sabina Abidi, Dr. David Lovas, Dr. Alexa Bagnell, Dr. Chris Bowen, Dr. Barbara Pavlova, Dr. Martin Alda, Dr. Matthias Schmidt, Dr. Rudolf Uher

<u>Learning objectives:</u> Identify how we measure earlier antecedents; milder manifestations of psychopathology in childhood and adolescence; Discuss how antecedents relate to onset of mental illness; List what effects they have on the developing brain

Introduction: Longitudinal research suggests that most cases of mental illness are preceded by earlier antecedents. We have identified affective lability, anxiety, psychotic symptoms and basic symptoms as potential antecedents to mood and psychotic disorders(Uher et al. 2014). We are beginning to see a dose-response relationship between the number of antecedents and the degree of risk for mental illness. It is not yet known if a similar dose-response relationship is present between the number of antecedents and measures of brain morphology and integrity. Methods: We collected 3T MRI scans from 102 youth [mean age = 14.6, SD = 3.9], 31 of whom had no antecedents, and 71 with one or more psychopathological antecedent. Scans were processed with validated open-source methods (Glasser et al. 2013). We implemented mixed-effect linear models to examine the relationship between antecedent burden and cortical grey matter volume, thickness, surface area, gyrification, as well as white matter volume and fractional anisotropy while controlling for the effects of age, sex, and other covariates. Results: Greater number of antecedents was related to lower regional grey matter volume and surface area in the pericalcarine (X2 = 12.06, B= -0.26, 95%CI [-0.11 to -0.41] p = 0.0005, corrected p=0.02). Furthermore, the number of antecedents was related to decreased fractional anisotropy in the anterior thalamic radiation (X2 = 12.28, B = -0.21, 95%CI [-0.09 to -0.46], p=0.0005, corrected p=0.004) Conclusions: Antecedents for psychotic and mood disorders are associated with lower grey matter volume and lower white matter integrity in youth before illness onset.

# #45 CAYACC: Improving Acute Mental Health Care for Children and Youth Dr. Alice Charach, Hospital For Sick Children

Co-Author(s): Adair Roberts, Natasha Golding, Dr. Krista Lemke, Dr. Amy Cheung, Dr. Peter Szatmari, Dr. Molyn Leszcz

<u>Learning objectives:</u> Describe a learning health care system; Describe a novel interagency bed access system for children and youth in need of acute mental health and addictions care; Demonstrate increased system collaboration through engagement in a multi–site quality improvement initiative.

Introduction: Access to mental health and addictions (MHA) care for children and youth often has gaps in care and lengthy waitlists.(1) In Ontario, youth increasingly come to Emergency Departments (EDs) first for MHA services.(2) In 2015, the Child and Youth Acute Care Collaborative (CAYACC) was initiated to address poor access to acute MHA care in Toronto. Overarching goals are to implement: i) a community of practice; ii) integrated data collection; and iii) processes for quality improvement (QI) initiatives. Methods: CAYACC's first QI initiative is implementation of daily phone calls and standardized protocol for transfers from EDs to inpatient beds at other sites when needed. The primary indicator of site engagement is daily participation rates. Secondary indicators are data collection and attendance at annual meetings. Baseline needs assessment at 6 sites collected program descriptions and facilitators and barriers to inter-agency collaboration. Repeat interviews after 2 years noted changes. Results: Year 1 daily participation rates for 4 general hospitals range from 88% to 98% and for 2 specialty programs from 14% to 41%: Year 3 participation rates: general hospitals from 97% to 98%, specialty sites 30% to 83%. While data collection from daily contacts is consistent, obtaining annual indicators proves more challenging. After two years, teams note improved cooperation among sites and describe programmatic changes to improve access to care. Conclusion: Implementation of a system-wide community of practice with integrated data collection to facilitate QI initiatives shows promise as a model for improving access to acute MHA care for children and youth.

# #47 Family History of Mental Illness, Adversity and Psychopathology in Youth Ms. Alyson Zwicker, Dalhousie University

Co-Author(s): Mr. Vladislav Drobinin, Ms. Lynn Mackenzie, Ms. Emily Howes Vallis, Ms. Niamh Campbell, Ms. Victoria Patterson, Ms. Jill Cumby, Dr. Sabina Abidi, Dr. Lukas Propper, Dr. David Lovas, Dr. Alexa Bagnell, Dr. Barbara Pavlova, Dr. Martin Alda, Dr. Rudolf Uher

<u>Learning objectives:</u> List types of adversity that are associated with risk of psychopathology; Quantify relative contributions of adverse environmental exposures and family history to youth psychopathology; Discuss the implication of environmental adversity exposure for indicated prevention of mental illness.

Introduction: Family history of mental illness strongly predicts psychopathology. Environmental factors, such as childhood maltreatment, and bullying also contribute but each form of exposure is usually studied in isolation. Here we examine whether cumulative measure of multiple adversities adds to family history in predicting youth psychopathology. Methods: In 265 youth, age 9-24 years, we calculated a family history score as proportion of relatives affected with mood/psychotic disorders, weighted by relatedness. We constructed polyenvironmental adversity score as mean of 10 indicators (physical/sexual/emotional abuse, neglect, violence, bullying, parents' education, income, home ownership). We defined psychopathology burden as sum of affective lability, anxiety, psychotic and basic symptoms. Results: Family history of mood and psychotic disorders significantly predicted psychopathology burden in offspring (beta=0.13, 95%CI 0.03-0.23, p=0.0113), explaining 3.5% of variance in youth psychopathology. Polyenvironmental adversity score significantly predicted psychopathology burden in offspring (beta=0.23, 95%CI 0.13-0.33, p<0.0001), explaining 12.3% of variance in youth psychopathology. Both family history and polyenvironmental adversity made significant unique contributions, jointly explaining 14.8% of variance in youth psychopathology burden. Conclusion: Psychiatric family history and cumulative exposure to adversity combine to provide powerful prediction of psychopathology.

# #48 Cognitive-Behavioral Interventions for Prevention of Anxiety in Preschool Children Ms. Emily Howes Vallis, Dalhousie University

Co-Author(s): Ms. Alyson Zwicker, Dr. Rudolf Uher, Dr. Barbara Pavlova

<u>Learning objectives:</u> Describe the rationale for preschool intervention and prevention of anxiety; Explain the efficacy of cognitive-behavioral interventions for preschool children; Compare the efficacy of preschool anxiety based on parent involvement.

Introduction: Anxiety disorders are common and impairing throughout the life course (Hudson, 2017). Among preschool children, anxiety disorder prevalence rates range from 10-20% (Whalen et al., 2017) Anxiety disorders significantly impact the development of preschoolers (Ezpeleta et al., 2001) and are prospectively associated with increased risk of depression and bipolar disorder in adolescence and adulthood. Therefore, early targeted prevention and treatment may need to be considered (Hudson, 2017). Methods: We searched PsycINFO, PubMed, and Embase databases with terms related to anxiety, behavioral inhibition, intervention, and preschool. Studies were screened and selected based upon predetermined inclusion criteria. We completed a qualitative review of the selected studies. Data extraction for a random-effects meta-analysis is ongoing. Results: Full-text review identified 24 eligible studies. All interventions include behavioral or cognitive-behavioral components. Of the studies, 5 interventions focused on the parent, 4 focused on the child, and 15 focused on both child and parent. The majority of studies (n = 17) focused on treatment of preschool children with anxiety disorders while 7 studies focused on anxiety prevention in preschool children at increased risk. A synthesis of the 24 studies suggests that interventions delivered face-to-face to parents and/or children are effective. Conclusions: We found support for the efficacy of behavioral and cognitive behavioral interventions for the treatment and prevention of anxiety in preschool children. Interventions that focus on the child, parent, or child and parent are effective in reducing preschool anxiety.

# #50 Protocol: Validating a Parent Motivation Questionnaire in Anorexia Nervosa Dr. Anne Trépanier, Université Laval

Co-Author(s): Dr. Anne Trépanier, Mrs Chantal Mérette, Dr. Nathalie Gingras

<u>Learning objectives:</u> Acknowledge the relevance of developing a questionnaire to assess parent motivation in treating anorexia nervosa; Familiarize with a questionnaire to assess parent motivation in treating anorexia nervosa; 3. Learn target questions to assess parent motivation in treating anorexia nervosa

Introduction: Current evidence for the treatment of adolescents with anorexia nervosa indicates that parents must participate to promote healing and prevent relapse. Clinically, it seems that interventions with parents should be adapted to their motivation level in changing their behaviors. However, no such adapted and validated tool exists in literature that would allow to specifically assess this aspect in this population. Methods: This study main objectives are to assess and validate a questionnaire to measure the motivation level in parents in order to change for anorexia treatment. The study took place in Québec City with 11-19 year-old patients diagnosed with anorexia nervosa. The questionnaire targets changes asked from parents for treatment. The questionnaire is filled by parents twice, 1 week apart. The attending physician must identify his own perception of parent motivation. As for analysis, content validity is evaluated by an expert committee. The questionnaire construct validity, factorial validity, internal consistency, and long-term stability are also evaluated. Results: The study will allow the questionnaire adjustment to enhance its psychometric properties and optimize parent acceptability. The questionnaire could be used for future studies of parent motivation in anorexia nervosa treatment. Conclusions: This questionnaire fulfills the need for a tool assessing parent motivation to participate in adolescent treatment for anorexia nervosa.

# #51 Suicide Attempts in Pediatric Emergency Psychiatry Ms. Sinead Nugent, University Of British Columbia

Co-Author(s): Ms. Ellen Jopling, Dr. Ali Eslami

<u>Learning objectives:</u> Review the clinical presentation and demographic characteristics of youth admitted to a psychiatric emergency unit due to suicide attempt.; Discuss the importance of conceptualizing lethality of suicide attempt as both actual medical lethality and as potential lethality; List the factors contributing to increased lethality of suicide attempt in youth.

In the present study, we endeavour to investigate the prognostic value of various demographic and clinical features in predicting the medical lethality and potential lethality of suicide attempts in youth. Our sample (N=112) includes all patients admitted to the Child and Adolescent Psychiatric Emergency (CAPE) inpatient unit at BC Children's Hospital between 2009 and 2015. Information collected included sex, age, season of admission, type of attempt, both medical lethality and potential lethality of attempt (with ratings based on the Columbia Suicide Severity Rating Scale), primary diagnosis on discharge, and psychiatric co-morbidities. Descriptive statistics indicated a bi-modal pattern of seasonality with 12.5% of presentations each in April and October, and an over-representation of suicide attempts via self-poisoning (78.4% of admissions) and of MDD diagnoses among patients (36% of patients). 51.3% of suicide attempts resulted in some degree of medical damage, ranging from requiring medical attention to requiring medical hospitalization and intensive care. Linear regression analyses indicated that together, our predictors accounted for a significant proportion of the variability in both medical lethality and potential lethality of suicide attempt. Regarding individual predictors, presentation during the summer months and a diagnosis of borderline personality disorder independently predicted medical lethality of attempt while presentation during the summer months and male sex independently predicted potential lethality. These findings have direct implications both for the strategic care of adolescents admitted due to suicide attempt (reactive), as well as for all adolescents presenting with suicidal ideation (proactive).

# #54 Predicting Rapid Psychiatric Readmissions in Youth: A Five-Year Retrospective Cohort Dr. Brianna Turner, University Of Victoria

Co-Author(s): Dr. Ali Eslami, Dr. Brianna Turner, Sinead Nugent

<u>Learning objectives:</u> Describe demographic, diagnostic and clinical variables that predict psychiatric readmissions in children and youth; Discuss demographic, diagnostic and clinical variables that predict readmission within one month of discharge; Describe how care plans could account for these predictors to increase community support.

Introduction: Youth inpatient psychiatric admissions rose over 60% between 2006 and 2014, due in part to high readmission rates [1]. Within one year of discharge, 30-40% of youth require an additional psychiatric admission [2–4]. By the time they reach the age of majority, 11% of these youth will require 3+ psychiatric hospitalizations [1]. Understanding predictors of readmission could improve care planning. Methods: We examined a retrospective cohort of 1324 children and youth (55.6% female, MAge=13.66, SD=2.48) who were admitted to the Child and Adolescent Psychiatric Emergency (CAPE) unit at BC Children's Hospital, 01/01/2009-12/15/2014. 22% (n=292) were readmitted at least once during the study period. We reviewed medical records for demographics, primary psychiatric diagnoses, and reasons for admission. Results: Readmission is more likely among youth with a longer initial admission (OR=1.03, 95% CI=1.00-1.05, p=0.035), primary personality disorder (OR=2.37, 95% CI=1.02-5.51, p=0.046) and younger age (OR=0.92, 95% CI = 0.88-0.97, p=0.001), but is unrelated to gender or ethnicity. In our study population, 25% of readmissions occur within one month of discharge, is significantly more likely among girls ( $\chi$ 2=3.97, p=0.046), and youth with a primary substance use disorder ( $\chi$ 2=4.07, p=0.044) or anxiety disorder ( $\chi$ 2=9.37, p=0.002), and less likely in youth with a primary disorder first diagnosed in childhood ( $\chi$ 2=3.96, p=0.046). Conclusions: These findings can increase awareness of demographic and clinical features that increase risk for repeated psychiatric crises soon after discharge from inpatient care.

# #55 Trends in Psychiatric Seasonal Emergency Admission (TIPSEA) Dr. Ali Eslami, University Of British Columbia

Co-Author(s): Sinead Nugent, Ryan Yan, Samiaa Rahman, Matthews Vicky

<u>Learning objectives:</u> Describe demographic and clinical variables that predict an increase in psychiatric admissions due to a specific category of diagnoses in children and youth; Discuss seasonal (school period vs. school bread periods) variables that predict admission due to externalizing and internalizing disorders; Describe how care plans could account for these predictors to increase acute care support.

Introduction: Understanding trends in pediatric emergency admissions is important because the number of presentations for mental health crises is the fastest growing segment of pediatric ER visits[1–3]. Patients who are primarily suffering from Internalizing disorders are highly vulnerable to stress[4]. School year due to perceived academic and peer pressure, could increase potential acute presentations. Holiday periods could be challenging because caregivers may struggle to maintain structures necessary for management of patients with externalizing disorders[5], which could result in more emergency presentations during school breaks. Methods: We examined a retrospective cohort of 1776 admissions (56.3% female, MAge=13.66, SD=2.48) to the Child and Adolescent Psychiatric Emergency (CAPE) unit at BC Children's Hospital, 01/01/2009-12/15/2014. We reviewed medical records for demographics, primary psychiatric diagnoses, and reasons for admission. Chi-square statistic used to compare internalizing vs. externalizing disorders during school breaks vs. school year. Results: A Chi-square test of independence was calculated comparing the frequency of admissions due to externalizing disorders and internalizing disorders in school breaks vs. academic year. A significant interaction was found for admissions due to externalizing disorders during school breaks ( $\chi$ 2 (1, N=1776) = 10.23, p < .002), and a trend toward significance for admissions due to internalizing disorders during academic year ( $\chi$ 2 (1, N=1776) = 3.38, p < .07). No significant trends in various psychiatric crises that may require emergency admission in pediatric populations.

# #57 What is Call Like and How to Improve It? Dr. Kelly Saran, Bc Children's Hospital

Co-Author(s): Dr. Simon Davidson, Dr. Jana Davidson, Dr Ali Eslami, Dr. Patricia Frew, Dr. Julia Gibson, Dr. Ashley Miller

<u>Learning objectives:</u> Review the results of a Child and Adolescent Psychiatry on-call survey; Identify an approach to enhancing Child and Adolescent Psychiatry on-call services

Child and Adolescent Psychiatrists (CAPs) at BC Children's Hospital in Vancouver, BC provide on-call services 365 days a year. These on-call services include providing consultations to the emergency department, inpatients, and formal telephone consultation on weekdays via a provincial telephone consultation program (raceconnect.ca). It is important to understand the perspective of those delivering the on-call service, and to this end an on-call survey of CAPs was completed in the summer of 2017. The response rate was very high with most department CAPs participating. Key results of this survey will be presented in this poster and were presented during a psychiatry department meeting. There was clear consensus at that meeting that a working group or CAP "On-Call Committee" should be organized to further advance improvements in the on-call service. The CAP On-Call Committee members then had a number of meetings to reflect on the survey results and on possible improvements with a key goal being to improve patient care. The result of those meetings was a report with 18 recommendations. Key recommendations of the report will be highlighted in the poster. Along with sharing survey results and recommendations that other Child and Adolescent Psychiatry departments may find helpful, we are hoping this poster will stimulate conversations and connections around the topic of improving Child and Adolescent Psychiatry Call services across Canada.

# #58 Specialty Outpatient Clinic for Adolescent Eating Disorders: Experience with FBT Dr. Herbert Orlik, Dalhousie University Department Of Psychiatry

Co-Author(s): Ms. Jessica Wournell, Dr. Brynn Kelly, Ms. Kate MacPhee

<u>Learning objectives:</u> Define what FBT is; Discuss the power and effectiveness of intensive and sustained training of a manualized treatment for eating disorders, FBT; Reorganize a specialized outpatient clinic based on a model of care

Introduction: Eating Disorders in adolescence, especially anorexia nervosa, are conditions with high morbidity and mortality. A variety of treatments have been applied to these conditions with rather low response rates and high relapse rates. Family Based Treatment (FBT) currently has the highest level of evidence of effectiveness. The challenge in our medium-sized mental health program was how to provide the most effective treatment for this special population. Methods: A subspecialty clinic was designed to have its staff receive training in FBT through a workshop followed by ongoing training via weekly teleconference calls with an expert/trainer in FBT instructing staff to become certified or, minimally, to become learners in FBT. Each training session is followed by a team consultation meeting without the trainer. Results: 1 staff person was already certified. 2 additional staff have since been certified. 3 staff are currently being trained to be certified, and there have been 5 learners. Training is ongoing. Some of the training has been slowed by the departure of 2 staff and by maternity leaves, requiring the creation of a large enough number of FBT trained staff to continue to fulfill the demands for FBT. Rapid complete standardized assessment followed by almost immediate start-up of outpatient FBT has resulted in decreased hospital admission rates, shorter hospital stays, and weight restoration with good functioning in 2/3rds of cases after an average number of 21 sessions. Conclusions: Training and ongoing supervision/mentoring of staff in FBT, subspecialty clinic- directed, increased capacity for treatment and improved outcomes.

# #59 Subcortical Trauma-Treatment as an Adjunctive Treatment with Dialectical Behaviour Therapy Dr. Marjorie Robb

Co-Author(s): Ms. Yehudis Stokes, Ms. Heather Bragg, Mr. Michel Poirier

<u>Learning objectives:</u> Discuss the contribution of trauma as a complicating factor for many young people participating in DBT treatment; Examine the feasibility of Brainspotting, a mindfulness-based, subcortically-oriented therapy to assist in resolution of trauma-related symptoms as an adjunctive therapy; Evaluate acceptability of Brainspotting an adjunctive therapy for youth with trauma symptoms participating in DBT treatment.

Introduction Many young people who seek Dialectical Behaviour Therapy (DBT) for treatment of suicidal ideation (SI), non-suicidal self-injury (NSSI) and other

behavioural symptoms of emotional regulation have experienced physical, sexual, or psychological trauma (e.g. Ensink et al., 2015; Newnham & Janca, 2014; Artaes, 2004). BBT posits that Phase I of treatment focuses on skill development (mindfulness, distraction, emotion regulation, interpersonal effectiveness). Phase 2 of DBT is the phase in which trauma is addressed, once the young person has improved their self-regulation skills (Linehan, 1993). Unfortunately, it is often difficult for the adolescent to access treatment for trauma; especially in a timely warrainsporting (BBP) is a new therapy which addresses trauma symptoms, anxiety, and other symptoms by using eye positions to access the subcortical brain (Corrigan & Grand, 2013). Its main elements are focused mindfulness and relevant eye positions, allow stor rapid processing leading to decreased distress and symptom resolution. Methods in this study, we explore the feasibility and acceptability of offering four BSP sessions to adolescents participating in the DBT program at a children's hospital. The sessions will be offered to any participations who report experiencing trauma and may occur during the second half of DBT therapy or immediately after the completion of DBT. Standard measures (SIQ, CDI, DERS) are used to compare symptoms pre- and post-treatment. Results and Conclusions Results will be examined and discussed in context with the current literature.

# #62 DBT Efficacy in Adolescents with Eating Disorders; Retrospective Chart Review Ms. Priyanka Comfort, Mcmaster University

Co-Author(s): Dr. Jennifer Summers, Ms. Liah Rahman, Dr. Jennifer Couturier

<u>Learning objectives:</u> Review of current evidence-based psychotherapeutic modalities for eating disorders in youth; Review of available evidence supporting the role of dialectical behavioural therapy for eating disorders in youth; Discuss the findings from our retrospective chart review regarding the efficacy of dialectical behavioural therapy in treatment of eating disorders in youth

Introduction: Evidence suggests family-therapy models most effective for treating adolescents with Anorexia Nervosa, and Cognitive Behavioural Therapy (CBT) models most effective for adolescent Bulimia Nervosa. CBT, Interpersonal Therapy (IPT), Dialectical Behavioural Therapy (DBT) also theoretically promising. Research indicates focusing on emotions as valuable component in treating eating disorders (EDs). The day hospital ED program at McMaster Children's Hospital provides DBT-informed care. This includes daily hour-long skills group focusing on DBT skills for adolescents. We evaluated efficacy of this within day hospital program, and how it contributes to specific outcomes, measured at the start and end of day hospital treatment (weight, height, ideal body weight, body mass index, binge-purge event frequency, menstrual status, length of stay, psychiatric measures — Eating Disorder Inventory, Children's Depression Inventory, Multidimensional Anxiety Scale for Children, Eating Disorder Examination Questionnaire). Methods: Retrospective chart review was conducted at McMaster Children's Hospital of patients that participated in day hospital treatment and met inclusion criteria. Measures from18 pts were analyzed. The sample included patients upto the age of 18. Data was analyzed using paired t-test comparing specific variables from beginning and end of admission. Results: Preliminary analysis shows statistically significant results in depression and anxiety outcomes, as well as emotional dysregulation, and other eating disorder behaviors. Conclusions: In keeping with previous studies, our results show reduced behavioral symptoms of eating disorders and improvements in outcomes related to mood and anxiety with DBT-informed care. Further studies required to support use of DBT and other psychotherapeutic modalities for eating disorders in youth.

# #63 On-line vs. Live Multifamily Psychoeducation for Children with Psychiatric Presentations Dr. Shelinderjit Dhaliwal, Queen's University

Co-Author(s): Dr. Caitlin Yee, Dr. Sarosh Khalid-Khan, Amrita Pannu, Olivia Calancie

<u>Learning objectives:</u> Identify the effect of multifamily psychoeducation group therapy (MFPGT) for children with common psychiatric presentation; Identify the measures of changes by the intervention of MFPGT; Compare the effectiveness of online and live MFPGT

INTRODUCTION: According to the World Health Organization, 10-20% of children and adolescents worldwide experience mental heath disorders. In Canada, it is estimated that 14% (approximately 1.1 million) of children experience clinically important mental disorders. A study looking at wait times of agencies providing child and adolescent mental health services (CAMHS) across Canada showed that the mean wait times to be seen by a child psychiatrist of low, medium, high and severe clinical priority were 109.5, 75.8, 29.4 and 3.4 days respectively. This study also concluded that 34.2% of the agencies reported longer wait times compared to one year ago. Previous reviews have concluded that psychoeducation is effective in the treatment and prevention of relapse in various mental health conditions in the pediatric population. Psychoeducation panicularly MFPGT is suggested to be most effective for children younger than 12 years with mood and anxiety disorders. METHODS: We will compare both the groups before and after the MFPGT using questionnaires family members participated in this study. Workshops are going to be conducted in Hotel Dieu Hospital, Kingston Ontario. The following scales will be used before and after MFPGT to asses change in symptoms- Child Behaviour Checklist (CBCL) Clinical Global Assessment of Functioning, Clinical Global Impression- Severity scale and to assess transfer of knowledge -Expressed emotion adjective checklist , Understanding of Mood disorders questionnaire and Understanding of Anxiety disorders questionnaire. RESULTS: We hypothesize that there would be increase in knowledge and improvement in symptoms of children by both online and Live MFPGT interventions.



# About Purdue Pharma (Canada)

Pharma (Canada) is а research-based pharmaceutical and consumer healthcare company which has operated in Canada for over 60 years. employees are committed to improving the health and quality of life of Canadians. The company has a broad portfolio of prescription and non-prescription medications including: prescription treatments for pain, ADHD, chemotherapy-induced nausea and vomiting (CINV), various ophthalmic conditions and Consumer Healthcare products. The company supports evidence-based education for the safe use of its products. Its headquarters, located in Pickering, ON, include integrated research & development, formulation and manufacturing operations. Privately held and founded by physicians, Purdue Pharma (Canada) is independently associated with the worldwide Purdue/Napp/ Mundipharma network of companies. Learn more at www.purdue.ca

# 38th Canadian Academy of Child & Adolescent Psychiatry Conference Shire hope care admire And so we pursue support In the fight against rare disease, that next big breakthrough could drive change. At Shire we are committed to transforming the treatment persevere of rare diseases and championing the fight against them. Champion the fight against rare disease with us at shire.com carry on persist commit go further promise



With 40+ programs, Wood's Homes is a nationally-recognized children's mental health centre based in Calgary.

A therapeutic, research and training centre, we work with 20,000 children, youth and families every year from across

Canada and are nationally accredited by Accreditation Canada.

# Proud to be Gold Sponsor at the 38th Canadian Academy of Child & Adolescent Psychiatry Conference

Programs representing Wood's Homes at CACAP

# **Whole Family Treatment Program**

 A trauma-informed, intervention program that supports the whole family through complex mental health and crisis management challenges. Work is done over a series of weekends or a 5-day on-site stay.

# Phoenix Program

 A unique treatment program (typically one year) for young males, 12-17, who exhibit sexually intrusive behaviour. Youth and caregivers are provided informed supervision training to better manage sexual behaviour risk.

# **Exceptional Needs Program (ENP)**

A 30-day, crisis program that works in partnership with Alberta Health Services. ENP works
with adolescents and their families who are experiencing significant mental health issues
that can't be managed on an outpatient basis.

Visit our booth or woodshomes.ca for more information.



# THANK YOU TO OUR SPONSORS

**GOLD SPONSOR** 



SILVER SPONSORS











**BRONZE SPONSORS** 









**CONFERENCE SUPPORTERS** 



