



Presidential Address

Canadian Academy of Child & Adolescent Psychiatry 35th Annual Meeting – Quebec City

October 4th-6th, 2015

It's my pleasure and privilege to say, "bienvenue" to beautiful Quebec City, and a warm welcome to all of our members including our French speaking non-members who are visiting with us at this 35th Annual meeting of the Canadian Academy of Child and Adolescent Psychiatry. First, I want to thank my colleagues; Drs. Marie-Claude Potvin-Girard of the Local Arrangements team, and Ashley Wazana and Kathleen Pajer, Chair and Co-Chair of the Research and Scientific Program Committee, for making this all possible. Together they have organized an excellent program this year focusing on the theme of "Evidenced-based Child Psychiatry in the Electronic Age". Now, the electronic age includes this era of social media which we take for granted, with its many devices such as Twitter, Facebook, Instagram, Ipads and many other handheld mobile devices. These advances in technology have changed how we communicate, and in some cases, our neurobiology, and we are certainly better connected than ever before. However, the paradox of modernity is that even though we are better connected, we are also feeling more alone. See the CIHI 2015 report, released in May of this year, which highlights a record number of children and youth visiting our hospital emergency rooms across the country. Another example of our literal isolation is seen in the dramatic decrease in the number of people living in our households over the last 60 years. It is estimated now that one third of North Americans lives alone and social studies have also shown profound social and civic disengagement.

According to a recent report by Neilson statistics, the amount of time North Americans spend per day with some form of digital device, such as TV, Internet games, phone etc., the average was about 11 hours. Now many of us take pride in the illusion we are able to multi-task successfully but their research showed that there was also a 40% drop in productivity when we multi-task, as evidenced by us making approximately 50% more mistakes and taking 50% longer to complete the task. Additionally, it was also estimated that multi-tasking was responsible for a drop in our functional IQ by about 15 points. This is 3 times more than when we are using recreational drugs such as THC. Now, as 25% of youth often combine the two, using pot and texting on cell phones, it appears that many youth may be courting disaster and we can anticipate, metaphorically, a crash on the road of life, or at the very least a charge of distracted driving!

As President of CACAP and a lapsed pediatrician, I know all too well about the importance of brain development and the way the brain develops in a use-dependant way. So, what effect does this have on our children's brains, in particular on the neuro-biology of attachment, the stress response system, the reward system and our addictive behaviors? Well, interestingly, in 2010 a birth cohort study from 1938

to 2007 was published, showing an increase in psychopathology scores in 63,000 young American college students and 13,000 high school students, using MMPI measurements. They found a 5-fold increase in scores, using a temporal analysis of the MMPI scores. In particular, they found increased scores of depression, hypomania, paranoia and antisocial behaviors. The conclusion was this was not a response bias, but a cultural shift towards extrinsic goals such as materialism and status, and away from the traditional intrinsic goals such as purpose and meaning, affiliation, and a sense of community.

Another sobering reminder of this cultural shift occurring in our community, affecting the families and the children we see, was published in 2008, consisting of a study of 13,000 American college students between 1979 and 2009, showing a 30% drop in dispositional empathy and perspective-taking. These may be some of the factors underlying the increasing numbers of youth we are seeing in our hospital emergency rooms across Canada. The CIHI report showed between 2006 and 2014 there was a 45% increase in hospital ER visits, with a 37% increase of inpatient hospitalizations of youth, in particular suffering with emotional dysregulation such as acute distress, aggression, self-inflicted injuries and drug use, which, if it includes Fentanyl, can be fatal with the first exposure.

What is clearly apparent in our specialty of child and adolescent psychiatry, is that the personal participation with another human being is absolutely essential for normal human development. No matter how good the TV programs are, or how good the graphics become in the vast supply of video games available to the stressed and overworked young families that we see, normal psychological development does not occur in the absence of personal relationships. Further evidence of this eco-bio-developmental perspective that we are the metabolic end-products of our sensory experiences, is available from the seminal work by Vince Felitti and Rob Anda and the adverse child events study. This retrospective study of some 17,000 patients in San Diego, skillfully illustrates the concept of toxic stress resulting from a dose-dependent effect from a variety of psychosocial stressors. These range from neglect, abuse of all sorts, including exposure to domestic violence or the presence of a parent with mental illness such as addiction. The presence of any or all of these conditions was, in a dose-dependent way, strongly associated with later medical service utilization and the prevalence of depression and addiction 50 years later. This phenomenon has become known as the traumatic spectrum disorders, manifesting in an increase of the non-communicable diseases such as heart disease, diabetes, respiratory lung disease, liver disease and some cancers.

The modern world seems to have forgotten our evolution, and that our relational neurobiology developed within a family clan structure of about 40 people, consisting of multiple care givers of different generations, usually 4 adults to one child, very different to the modern day care ratio of one adult care provider to 4 or 5 children or more. It appears, therefore, a greater threat to our families and children in Canada is the relational poverty, rather than the material poverty we worry so much about. Now, in a corporatists and consumer society, it makes sense to replace labor and time spent working, (parenting is work after all), with goods such as TV or money; increasing discretionary spending with our adolescents to assuage our guilt is common enough. But no amount of treats or digital devices for our children will make up for the absence of age-appropriate, healthy, stable relationships with parents, relatives and friends. This absence of relationships, together with the lack of purpose and profound alienation of many youth in our society, is a factor in the anomic suicides we see, especially in our

aboriginal youth; a group with a 6-fold increase in suicide rates over our non-aboriginal adolescent suicide rates. But if we find it hard to relate to our aboriginal youth, let's look at the US, which has had 45 school shootings in the last 274 days. Another reason why Canadian child and adolescent psychiatrists need to advocate for our children and youth with politicians and policy makers; in order to have good fire arm regulation and to remind our citizens of the importance of the social determinants of health. Especially supporting policies that promote employment, education, access to recreational services, good housing for the most vulnerable of our population in Canada, such as our First Nations, new immigrants, refugees or single-parent families living in poverty.

So please enjoy this annual meeting in Quebec City, a temenos, within the only walled city in North America, with its long cultural history since 1608 of being a creative meeting place between the old and the new. In this forum we can examine the problems of adverse child events, neuroscience, and epigenetics within our culture, and look for solutions that promote resiliency for the children and adolescents we serve, and return home renewed and energized, determined to make the world a better place for children and adolescents. To this end, I remind you all to join us next year in 2016 on Sept 18 to 22nd in Calgary, for the next CACAP conference where we are also hosting, for the first time since 1954, (a time before CACAP was formed), the International Child and Adolescent Psychiatry and Allied Professionals Congress.

Dr Chris Wilkes
President, CACAP, (2014-2016)

References:

- 1) Neilson statistics. www.statista.com/chart/1971/electronic-media-use/ Infographic: Americans use electronic media 11 plus hours a day. March 2015
- 2) Jean Twenge et al. Birth Cohort increase in psychopathology among young Americans 1938-2007. A cross temporal analysis of the MMPI. *Clinical Psychology Review*. 2010. Vol 30 .pages 145-154.
- 3) Canadian Institute for Health Information. Care for Children and Youth with Mental Disorders. May 2015
- 4) Sara Konrath et al. Changes in Dispositional Empathy in American College Students Overtime. A meta analysis. *Pers.Soc.Psychol.Rev*. Published on line August 5th 2010. DOI: 10.1177/108886831/0377395.
- 5) Durkheim, E. (1897/1951). *Suicide; A study in Sociology*, New York. Free Press.
- 6) Alberta's worsening Fentanyl crisis. [www.cbs.ca/news/Sept 2015](http://www.cbs.ca/news/Sept/2015)
- 7) Deaths involving Fentanyl in Canada 2009-2014. www.ccsa.ca/CCSA-CCENDU
- 8) Robert Anda et al....The enduring effects of abuse and related adverse experiences in childhood. A convergence of evidence from neurobiology and epidemiology. *Eur Arch Psychiatry Clin. Neurosci* (2006) 256;174-186.