IHPME CONNECT 01.2018

SHIFTING THE CURVE: THE COST EFFECTIVENESS OF EARLY AUTISM INTERVENTION

The challenging gaps in evidence and the difficulties measuring outcomes in children were just some of the reasons Wendy Ungar, a professor in health economics at IHPME, was drawn to evaluating child health and in particular early autism intervention.

"There are maybe a handful of child health economists in the world," said Ungar, who is also a Senior Scientist at the Hospital for Sick Children, "and there is no one really doing this type of work on a large scale."

In April of this year, Ungar participated in a <u>TedX Salon</u> at York University on behalf of <u>Child-Bright</u>, a research network that aims to improve life outcomes for children with brain-based developmental disabilities. During the researcher lightning rounds Ungar presented a lifetime scale model showing the costs of early intervention over the course of a child's lifetime.

"The cost to society without intervention is around \$1 million over the individual's lifetime, with the majority of the costs arising during the many decades of adult life," said Ungar. By investing in early intervention in children at the pre-school age, the cost to society can decrease significantly as the more severely affected children are put on a path toward greater independence and eventually workplace productivity.



Early intervention can be highly intensive depending on the needs of the child, and may involve speech and behavior therapy, special education, and other forms of social teaching that help the child develop more skills and independence.

However, with early intervention costing upwards of \$70,000 annually per child, it becomes difficult to convince policymakers that this is the right economic course of action to take with regards to autism treatment. "One of the challenges with this particular type of intervention, is that the costs are very heavy in the early years, but the real benefits accrue much later in the child's life," said Ungar.

So how do you get policy makers to listen? Ungar makes certain that she engages with government policy makers and Directors of Autism Services for a number of provinces in the course of her research. "I believe as a scientist you need to include decision makers in all phases of research in order for them to utilize research evidence in policy discussions," said Ungar.

Furthermore, researchers are not assessing these programs in isolation. There is a growing public interest in autism treatment and an increasing population of highly engaged parents who are eager to hear about the kinds of evidence that might improve care or treatment for their children throughout their lives.

Recently, Ontario re-designed its autism programs in order to reduce wait times by centralizing the assessment centres by region. Previously, if a child under the age of 2 presented with symptoms, there would be an average 6 month wait time for the appropriate diagnostic testing and assessment, followed by an additional 6 months to 2 year wait time for treatment where the window for early intervention is most critical.

"There is also a strong interest in interventions that involve parents," said Ungar. In British Columbia a study is being

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conducted to determine what this type of intervention might look like, and the investment and training that would be required for parents to be involved. "This approach could solve a lot of problems and potentially be a cost-effective strategy to ensure early intervention," said Ungar.

The ultimate win-win situation would be to see more people with brain and communication disorders gainfully employed, a goal that Ungar is hopeful will eventually become a reality as provinces look to build on a collaborative policy for autism programs nation-wide.

KHALED ALMILAJI AWARDED GOVERNOR GENERAL'S MERITORIOUS SERVICE MEDAL

U of T Health Informatics Student Recognized at Ceremony by the Hon. Julie Payette



December 12, 2017 Ottawa, Ontario, Canada Her Excellency presents the Meritorious Service Medal to Khaled Ahmad Almilaji, M.S.M. Photo Credit: MCpl Vincent Carbonneau, Rideau Hall, OSGG

On December 12 in Ottawa's Rideau Hall, Dr. Khaled Almilaji a Master of Health Informatics student at the Institute of Health Policy, Management and Evaluation (IHPME), was awarded the Meritorious Service Medal (Civil Division) by the right honourable Governor General Julie Payette. He, along with Dr. Jay Dahman and former paramedic Mark Cameron were recognized for their civilian efforts in providing medical relief and educational training to disaster stricken areas around the globe, particularly Syria.

"I'm excited and honoured to have won this award," said Dr. Almilaji, who is also a Syrian physician. "Everyone who has helped in this effort and who continues to work on the ground in Syria deserves this award."

The ceremony honoured 23 recipients of the Meritorious Service Medal many of whom have found innovative solutions to challenges facing their communities or country.

In 2014, Dr. Almilaji and his colleagues, Dr. Dahman and Mr. Cameron, founded the <u>Canadian International Medical Relief Organization (CIMRO)</u> in order to provide much needed medical supplies - such as the life-saving drug tranexamic acid which stops bleeding in those who are critically injured - and training to other front line health care workers, often at great risk to their own lives.

Originally a specialist in otolaryngology (ear, nose and throat conditions), Dr. Almilaji quickly found himself in the role of a trauma physician tending to wounded civilians as the crisis in Syria worsened. In 2013 a polio outbreak spread throughout the country, rampant in areas where poor health conditions and government bans on the vaccination had been in place. In response, Dr. Almilaji spearheaded a polio vaccination program with the help of CIMRO, inoculating over 1.4 million children in a door to door campaign that involved over 8, 500 health care workers on the ground.

"We lost a lot of colleagues to the shelling going on in the area," said Almilaji, "so managing this vaccine program was certainly a collective effort. Without every person on the ground, going into these neighbourhoods and more isolated regions, we would not have been as successful."

This past June, after being caught in the throes of a U.S. travel ban on Syrian citizens, Dr. Almilaji joined the Institute of Health Policy, Management and Evaluation in the Dalla Lana School of Public Health to complete the Executive Master of Health Informatics degree.

"I was proud to see Khaled's work being honoured in the company of highly contributing Canadians," said Julia Zarb, Director of the Health Informatics program. "Working alongside his Canadian humanitarian partners – and also, in part, via his Master of Health Informatics program here at U of T – Khaled is helping to ensure that focused assistance is delivered where and when needed within the ongoing Syrian crisis."

Dr. Almilaji's work with CIMRO will continue as the group shifts their focus to monitoring and reporting on infectious diseases in Syria while he also pursues his EMHI degree at U of T. "I hope that all of my colleagues at IHPME and in the Dalla Lana School of Public Health, remember to focus on global issues and challenges," said Almilaji. "It is important that we find innovative ways to approach and solve these challenges especially in health care."

RESEARCH



U of T Researchers compare primary care in England and Ontario, find investment strategy helps reduce premature deaths

In 2004, England and Ontario had similar rates of premature mortality with just over 110 deaths per 100,000 people or about 15,500 premature deaths in Ontario. 8 years later, a new study by U of T researchers has found that England has reduced its premature mortality rate by more than 10%. Ontario has also improved, but at a slower rate.

Premature mortality is a measure of how many people die at an early age from infections or chronic conditions that normally they should be able to live with until they reach an older age (over 75 years).

"While both Ontario and England increased funding in primary care throughout the 2000's, England targeted their investment to reduce inequity, whereas Ontario supported enhanced primary care in all neighborhoods regardless of socio-economic status" said Walter Wodchis a Professor of health economics at the Institute of Health Policy, Management and Evaluation and Research Chair in Implementation and Evaluation Science at the Institute for Better Health at the Trillium Health Sciences Centre.

In the early 2000's reducing health inequity was a top priority for England's National Health Service (NHS), so they implemented a strategy that increased physician services to disadvantaged adults, such as those residing in low income neighbourhoods, in an effort to prevent premature deaths.

"We were already pro-poor in Ontario; we have more doctors in our disadvantaged neighbourhoods," said Wodchis, "But England is catching up in primary care physician supply and has surpassed us in achieving a reduced mortality rate for their disadvantaged population."

While the study suggests that an increased supply of physicians to these neighbourhoods may have resulted in a

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reduction in premature deaths, Wodchis also points to other factors that may have contributed, such as the fact that physicians in England are required to accept patients who live in their local areas, whereas such rules do not apply in Ontario.

While England improved health outcomes, in spite of having fewer physicians by population, the study also notes that more research is needed to determine the impacts of additional supports put in place in England aside from the targeted increase in primary care physician supply including a national priority on inequalities, guidance on secondary prevention of cardiovascular heart, diabetes and related conditions and a program of vascular risk assessments.

Could Ontario do even better? "Certainly," said Wodchis. The study has concluded that more research will be needed to determine which areas of primary care would benefit from the most investment in order to effectively reduce premature deaths, such as cardiovascular care or other diseases and risk factors like smoking and hypertension.

The study was funded by the NIHR in the U.K, and the Ministry of Health and Long-Term Care, ICES and HSPRN in Ontario and published in PLOS One.

NEW AWARD

Comparative Health Systems Award in Honour of Leslie Boehm

Thanks to the generosity of IHPME faculty member and alumni Leslie Boehm, a new award for students studying comparative health systems has been established.

This award, which recognizes a student who has provided outstanding leadership and made a significant contribution to the field of health policy and evidence informed decision-making, has been a long-time dream of Boehm's.

Throughout his research for his book "Toward the Health of a Nation: The Institute of Health Policy, Management and Evaluation – The First 70 Years," Boehm was drawn to the number of unsung heroes who have made significant contributions to the department and the health system such as Eugenie Stuart, F. Burns Roth and others.

"I began to wonder how I could also make a contribution to advance the department, and this award seemed like the perfect opportunity," said Boehm.

Comparative analysis in health policy is something that Boehm finds necessary when looking at ways to improve or innovate the health system. "When I teach my classes, I always encourage the students to look outward at other countries, because what might work in one in terms of a health system or best practice, may not work in another, and the important thing is to learn why," said Boehm.



With the launch of the North American Observatory on Health Systems and Policies (NAO) in February 2017 - led by Prof. Greg Marchildon - and this new award, Boehm is hopeful that more graduate students will be drawn to studying comparative health systems and produce greater research and publications in this particular area.

"I think IHPME is at the leading edge in all of its areas and disciplines, and I want to be part of supporting that momentum moving forward," said Boehm.

Candidates for the award can be self-identified or nominated by faculty, details on the application process are available on our website: http://ihpme.utoronto.ca/impact/awards/

The deadline for nominations is March 17, 2018.

FACULTY APPOINTMENTS

New Faculty

Dan Allman - Associate Professor, NB Cross Appointment
Jackie Bender - Assistant Professor, Status
Bruno da Costa - Assistant Professor, Status
Shivani Goyal - Assistant Professor, Status
Chitra Lalloo - Assistant Professor, Status
Frances Simone - Adjunct Lecturer

Renewal Faculty

Imtiaz Daniel - Adjunct Lecturer



New Program Director MSc/PhD Health Services Research

IHPME is pleased to announce that Professor Don Willison has taken on the role of program director for the MSc and PhD Programs in Health Services Research.

Prof. Willison has been a faculty member at IHPME for

many years, first as an Adjunct Professor and then as an Associate Professor. He has previously held the position of Interim Associate Director for the Clinical Epidemiology and Health Care Research program. His research is focused on information governance and in particular patient and public involvement in the design of research.

"The first six months have been a steep learning curve and a very rewarding experience. I particularly find the breadth and scope of the role to be very satisfying. It has given me a much fuller appreciation of the breadth of expertise in IHPME faculty and it has been most enjoyable getting to know even some of the many students who will be our future leaders. It is an exciting time to be in this role, as we plan for expansion in faculty complement and review our curriculum."

MSC/PHD DEFENSES

Clinical Epidemiology and Health Care Research

Husam Abdel-Qadir, PhD

Thesis Topic: The Spectrum, Impact, and Management of Cardiovascular Disease in Ontario Women with Early Stage

Breast Cancer Date: November 22, 2017

Saswata Deb, PhD

Thesis Topic: Surgical, Pharmacological, and Patient Factors Affecting Early and or Late Outcomes Following Coronary Artery Bypass Grafting Surgery Date: November 27, 2017

Andreanne Zizzo, MSc

Thesis Topic: Differentiating Autoimmune Hepatitis from Lupusassociated Hepatitis - What is the Ontology of Non-Infectious, Non-Toxic, Non-Genetic Causes of Hepatitis: A Paradigm Shift in Making Clinical Diagnoses Date: November 28, 2017

IHPME GSU Alumni Mentorship Program Launch

We are pleased to announce the successful launch of the IHPME GSU Alumni Mentorship Program.

The goal of this Alumni Mentorship program is to tap into the vast professional experience of our IHPME Alumni to help graduate students transition from student life, and help strengthen their vision and possibilities of their future. In the first year of the program, we rolled it out to the Health Service Research (HSR) stream.

We received a great amount of interest from both HSR Alumni and current MSc and PhD students. In fact, we have matched 17 mentor-mentee pairs! We recruited a range of mentors, from those who graduated over 20 years ago from the program to more recent graduates.



Our mentors come from a variety of sectors, including: consulting, acute care, academia, government, paragovernment, home care, and pharmaceuticals. We are confident that the experiences they share will be invaluable to your mentees. We thank all Alumni and students who took the time to fill out the survey, and would like to recognize our Alumni mentors: Shannon Sibbald; Karen Spalding; Patrice Lindsay; Malak Sidky; Kristen Pitzul; John Murphy; Heather Chappell; Sarah Munce; Yelena Petrosyan; Jenna Evans; Maude Laberge; Dara Zarnett; Aviroop (Avi) Biswas; Jocelyn Srigley; Jonathan Lam; Cara Murphy; and Stephanie Hylmar.

IHPME IN THE NEWS

Looking North: Can a Single - Payer Health System
Work in the U.S.? - Dr. Robert Reid quoted: https://www.
washingtonpost.com/national/health-science/lookingnorth-can-a-single-payer-health-system-work-in-theus/2017/12/18/

It's Time to Fix Medicare's Innovation Problem Op-ed by Dr. Andrew Boozary and Dr. David Naylor: https://www.thestar.com/opinion/contributors/2017/12/18/its-time-to-fix-medicares-innovation-problem.html

PUBLICATIONS

Deborah Kennedy, Amy Wainwright, Lucy Pereira, Patricia Dickson, Susan Robarts, <u>Fiona Webster</u>. A Qualitative Study of Patient and Family Education Needs for Hip and Knee Replacement. Submitted to BMC Musculoskeletal Disorders (2017) 18:413. DOI: https://doi.org/10.1186/s12891-017-1769-9

<u>Kathleen Rice</u>, <u>Fiona Webster</u>. Care Interrupted: Poverty, In-Migration, and Primary Care in Rural Resource Towns. Social Science and Medicine, 2017 Oct. 19 1:77-83 DOI: https://doi.org/10.1016/j.socscimed.2017.08.044

Michelle Panor Silver. Physician Retirement: Gender, Geography, Flexibility, and Pensions. CMAJ December 11, 2017 189 (49) E1507-E1508; DOI: https://doi.org/10.1503/cmaj.171302

IHPME GREEN CORNER

The IHPME Committe on the Environment, Climate Change and Sustainability recently "took the pulse" of the IHPME Community through an online survey focused on research and teaching in the areas of the environment, climate change and sustainability. Results from this survey will be made available in early 2018.

The staff members of IHPME have also recently launched a new recycling program for toner cartridges, and electronic waste materials in order to continue our goal of moving beyond the status of sprout to tree as outlined by the University of Toronto Sustainability Office. If you have materials for recycling, please visit our IT Coordinator Zita McWhinnie. Batteries can also be recycled in the lobby of the Health Sciences Building.

EVENTS

CCHE Seminar Series

Fridays | 10:00am - Noon | HS 108 | Free

Susan Horton, Sumit Gupta, Avram Denburg - January 19

Meghan McMahon - January 26

Collaborative Program in Public Health Policy Rounds

January 19 | 12:30pm - 2:00pm | HS 106 | Free

Social Innovation and Social Entrepreneurship: Applied Approaches to Policy Practice and Governance

Keynote Speaker: Dr. Michael Shier

Discussants: Dr. Carmen Logie and Denise Dubois

Health Services, Systems and Policy Research Seminar Series

January 24 | 4:00pm - 5:30pm | HS 412 | Free

Kathryn Oliver is interested in how scientific knowledge and expertise are constructed, owned and used. She will discuss "Network Analysis in Evidence-informed Health Policy," at our first HSSP seminar of 2018. Webinar also available, details at: http://ihpme.utoronto.ca/events/health-services-systems-policy-seminar-series-amanda-m-beacom/

Read the DLSPH BLOG



Toronto Thinks 2018 - Global Health Case Competition

January 27-28 | 12:00pm - 12:00pm | Health Sciences **Building | \$125**

Dalla Lana School of Public Health and Juxtaposition Global Health Magazine (University of Toronto) are partnering to host the Toronto Thinks 2018 Global Health Case Competition on January 27-28, 2018. This event is open to all undergraduate and graduate students from Canadian universities and colleges. Students must register in teams of 4-6 members.

Register Now: https://www.eventbrite.ca/e/toronto-thinks-2018-global-health-case-competition-tickets-38343752195

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IHPME Faculty Retreat

January 30 | 12:00pm - 5:00pm | Faculty Club | Free

Register Now for the IHPME Faculty Retreat

Join Acting Director Rhonda Cockerill, and your fellow IHPME faculty at the annual IHPME faculty retreat. This half-day event will be held at the University of Toronto Faculty Club, 41 Willcocks Street, Toronto, ON with lunch beginning promptly at 12:00pm and a reception to follow at 5:00pm.

Discussions will center around reviewing the strategic direction and implementation of the operational plan, with awards to conclude the end of the day.

SUPPORT IHPME

The Institute of Health Policy, Management & Evaluation, as part of the Dalla Lana School of Public Health, is the first Canadian public health school to launch its own fundraising campaign. With the support of our generous donors, our Boundless Campaign will enable IHPME to continue shaping training and research in health systems, management and policy.

For more information on how you can get involved, give annually, create a named fund, or consider the School in your estate planning, please contact Annette Paul, Director of Advancement at annette.paul@utoronto ca or visit IHPME **Donate** or **Support/Campaign**. Thank you for your support!

WE'D LIKE TO HEAR FROM YOU

We're pleased to receive submissions of 400 words or less for consideration in upcoming editions. If you'd like your event listed, please send full details.

Contact: rhonda.cockerill@utoronto.ca and

