

# INTERVIEW SPOTLIGHT

## DR. MARGARET MCKINNON

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Dr. Margaret McKinnon is a Professor and Associate Chair in the Department of Psychiatry & Behavioural Neurosciences and an Associate Member in the Department of Psychology at McMaster University. As a clinical neuropsychologist, Dr. McKinnon's research interest includes post-traumatic stress disorder amongst healthcare workers, military personnel, and veterans. Recently, Dr. McKinnon received a grant for \$2.96 million for the Healthcare Salute project, aimed to develop evidence-based resources for health-care personnel. *This interview has been edited for clarity and concision.*

PLEASE TELL US ABOUT YOUR BACKGROUND. HOW DID YOU GET INVOLVED IN PSYCHIATRY, MENTAL HEALTH, TRAUMA, AND BEHAVIORAL NEUROSCIENCE?

I'm the Homewood Chair of Mental Health & Trauma and a Professor and the Associate Chair of Research in the Department of Psychiatry and Behavioral Neurosciences at McMaster. I'm also a licensed clinical neuropsychologist. My interest in trauma and mental health research stands both from longstanding academic work and my own personal experience. Over 20 years ago, I was onboard an aircraft that ran out of fuel midway over the Atlantic and we were prepared for the ditching of the aircraft. Fortunately, we made it to a military airstrip where we made a rough landing. The back of the plane was on fire and we evacuated. I developed post-traumatic stress disorder (PTSD) following that incident. This shifted my area of interest from working in aging and dementia to mental health and wellbeing. I'm really grateful for

the treatment that I received but also the opportunity to give back. It's really important to challenge the stigma around mental health

WE NOTICED YOU HAVE A SPECIAL INTEREST IN MILITARY, VETERAN, PUBLIC SAFETY, AND HEALTHCARE WORKER POPULATIONS. EXPANDING ON THIS POINT, COULD YOU TELL US MORE ABOUT YOUR RESEARCH IN THIS AREA?

The Trauma and Recovery Research Unit consists of 45 members in three different streams of research. Our first area of research focuses on better understanding the impact of the COVID-19 pandemic on the mental health and wellbeing of public safety personnel and healthcare workers. Another area of research focuses on developing novel treatment interventions for trauma-related illnesses. Here, we focus on what are often ignored aspects of PTSD and trauma –for example, dissociation, feelings of guilt and shame, moral injury, moral distress. Those particular areas are often not the subject of treatment interventions in developing and testing new treatments. Finally, we have a military mental health and wellbeing stream where we're focused on areas of particular importance to the Canadian Armed Forces (CAF). For instance, characterizing experiences of military sexual trauma in equity-deserving groups and developing interventions. We travel to CAF bases to deliver training around trauma-informed approaches and methods of taking disclosures of sexual trauma. We also focus on women's experiences in the military –particularly female veterans. So, we've really been trying to develop a lot of research surrounding the experiences of equity-deserving groups in the CAF.

WE NOTICED THAT A VITAL COMPONENT OF YOUR WORK HINGES ON DEVELOPING TREATMENT INTERVENTIONS TO TREAT TRAUMA-RELATED CONDITIONS. HOW DO YOU TRANSLATE YOUR RESEARCH AND KNOWLEDGE INTO REAL-WORLD TREATMENTS? HOW DO YOU DEVELOP AND TEST THESE INTERVENTIONS?

Although I enjoy being a researcher, I think it's really important to collaborate with people with lived experience; for example, individuals who have experienced trauma and clinicians who work with these individuals. The first treatment intervention we became involved in was cognitive rehabilitation using the Goal Management Training approach developed at Baycrest Centre in Toronto. As a clinical neuropsychologist, I would talk to patients about their cognitive difficulties that they lacked treatment for. We began conducting randomized control trials for Goal Management Training in public safety personnel receiving inpatient care at Homewood Health Centre. We plan on completing pre- and post-treatment neuroimaging to offer treatment options for difficulties in memory attention and executive functioning. Right now, we're also working on a psychoeducation approach involving "bottom-up" therapy for post-traumatic stress symptoms. We're providing people with strategies to help regulate bodily arousal and get them back to an optimal zone where they're able to process information without feeling distressed or underwhelmed. 30% of individuals with post-traumatic stress conditions may present as having a dissociative subtype, where they don't feel present in their body but are present in the world around them and have a hyperarousal presentation. For example, the typical symptoms of PTSD include high levels of arousal and irritability. We're trying to target both facets of post-traumatic response through bodily regulation and grounding either the traditional term.

CAN YOU DESCRIBE YOUR FEDERALLY-FUNDED \$2.96 MILLION DOLLAR STUDY, HEALTHCARE SALUTE, TO OUR READERS? WHAT IMPLICATIONS AND FINDINGS IN THE FIELD OF PTSD RESEARCH DO YOU HOPE TO FIND?

This stemmed from an initial donation that we received from Home Health Centre to understand the mental health and wellbeing impacts of the pandemic on healthcare workers. I was very fortunate to provide mental health support on ICU and COVID units regionally to understand the experiences of our healthcare performers. We wanted to first identify the problem to characterize the experiences of healthcare workers and public safety personnel over time. We discovered that many healthcare workers were experiencing a lot of moral distress around the pandemic. For example, healthcare workers would turn away visitors from a critically ill child or provide care for families holding on to hope, not knowing if invasive or painful treatments would be effective. We wanted to develop a suite of online tools and resources for health care workers. Through funding from the Public Health Agency of Canada, we developed Health Care Salute, a website that's available to anyone who would like to access it. Here, we have educational material about moral injury and moral distress. We have an approach

to help cope by providing education around symptoms and expected responses to high levels of trauma. We talked about how to provide trauma-informed care to healthcare workers and other individuals who have experienced trauma. There are tools to monitor how one is doing and when to reach out to help. Importantly, we have a navigator model which provides access to information on free resources across Canada to support the mental health and wellbeing needs of healthcare workers.

WHAT ADVICE DO YOU HAVE FOR READERS THAT MAY BE INTERESTED IN EXPLORING THIS FIELD IN THE FUTURE?

Follow your passion. When I was in graduate school, I wanted to do something that I could go to a dinner party or talk to people about, and I would feel really passionate about. I spent a lot of time trying to figure out how to do that kind of work that I was most interested in. That same passion has allowed me to carry on with my career because I really love what I do. I want to use research as a way to give back and to serve. Often research can be framed as somebody who is trying to build a career with publications and grants and so on. All that's true, but in our lab, we focus on service. So how can we serve those who serve us across Canada? How do we help women who have experienced early life developmental trauma, sexual trauma, for example? Wanting to give back through research. When you have a greater purpose surrounding your research where you can see the tangible impact it has on others –that's another way of moving forward with your career. Whether that involves traveling to military bases and doing intervention work or developing new treatments. Really, it's important to not only characterize the impacts of trauma but to try to do something about it. We want to try to help shape policy. We want to look at problems that are major issues for our country. How can we use research to help with those problems? That's been our orientation or our approach. For those who are starting out, it's important to volunteer or be involved in research labs during your undergraduate training. Thinking about when you're applying to graduate school or medical school, what sort of experiences can you talk about? You want to be reflecting upon your learning. So if somebody asks you, "what did you learn from that experience?" you can respond to that question: what did patients teach you? Because patients are our best teachers. And be persistent. Many of the graduate students in my lab are people who email me many, many times. So I would say also be persistent around you know, being interested in working somewhere.