

INTERVIEW

WITH KRISTEN BURROWS AND OHOOD ELZIBAK

HOW MCMASTER IS FULFILLING THE NEED FOR PHYSICIAN ASSISTANTS IN CANADA

Interviewer: Sophia Khani

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ABSTRACT

The Physician Assistant (PA) profession has been growing over the past decade in Canada, and McMaster University was the first institution in Ontario to establish a PA program in 2008. The PA profession occupies a niche in the health care field and is needed to extend physician services contributing to the improvement of patient care. McMaster's PA Education Program (PAEP) fosters collaboration and problem-based learning (PBL) in order to provide students with skills that are transferable to the workplace. McMaster's PBL approach arms graduates with life-long learning skills that are practical in a clinical setting. The following interviews with PAs provide a more comprehensive understanding of the development of the PA niche and proffer a glimpse into how McMaster's PAEP equips its graduates with practical skills, which will allow them to excel in the workforce.



Kristen Burrows, BSc, BHSc (PA), MSc, CCPA

Kristen Burrows is the Assistant Dean of McMaster's PAEP, and was interviewed on the pedagogical principles behind the program and the importance of the PA profession. She was a member of McMaster's PAEP class of 2010 and is currently completing her Ph.D. on the benefits of and barriers to PA integration into the field of health care.

► What is a Physician Assistant?

Physician Assistants, or "PAs", are trained health care providers that help extend various health care services by working under the supervision of a physician. PAs are trained in the medical model to take a medical history, conduct a physical examination, order diagnostic tests, interpret results, diagnose and/or treat medical conditions, counsel, and manage patients.

► Describe the need for PAs in the health care field.

PAs are needed to help increase patient access to health care and to provide cost-effective services to patients. Although Physicians, Nurse Practitioners, and other advanced clinicians currently provide exceptional care, hospital and clinic wait times are still long and the current system might not always be the most cost-effective. PAs are trained to extend physician du-

ties and can fill a number of gaps in our current delivery of health services.

► **Is there any research, especially at McMaster University, on the impact of the integration of PAs in Canada's health care field?**

There is very little literature regarding the impact of PAs in Canada compared to other jurisdictions, such as the USA, where PAs have been fully integrated for decades. Graduates from McMaster's PAEP have published a few studies, such as on the impact of PAs on resident workloads, improving health care efficiency, and the role of PAs in health advocacy. I am currently conducting research on the benefits of and barriers to PA integration as part of my Ph.D. dissertation.

► **Describe the pedagogical principles of McMaster's PA program.**

McMaster's PA Education Program (PAEP) is part of the Michael DeGroot School of Medicine, in the Faculty of Health Sciences. It is a bachelor's program (BHSc Physician Assistant) that consists of 24 months of intensive clinical training. The program is modelled after the undergraduate medical school curriculum, with the first year comprising of problem-based tutorial cases, simulations, large group sessions, professional competencies, an emphasis on clinical skills, and communication courses. The second year of the program is comprised of various core and elective clinical rotations ("clerkship") where PAs observe certain procedures and learn to assist with them under the supervision of a clinical practitioner. PA students are integrated into clinical teaching units across the province in Emergency Medicine, Internal Medicine, Family Medicine, General Surgery, Psychiatry, Geriatrics, Pediatrics, and various other specialties.

► **How are these principles integrated into the education system for PAs?**

The PAEP's pedagogical approach has allowed for a flexible program that can be adapted based on where PAs are working and feedback from stakeholders. For example, a core rotation in Geriatrics was established in 2018. This was integrated into the program following community and stakeholder feedback regarding the importance of ensuring that our PA graduates have a strong skill set to apply holistic care to an aging population. The PAEP's educational strategy helps PAs appreciate lifelong learning and is an excellent way to learn about collaborative patient management.

"PAs help increase patient access to health care"



Ohood Elzibak, BHSc, MPAS, CCPA

Ohood Elzibak is a PA who practices in Orthopedic Surgery and was interviewed to describe how her training at McMaster successfully translated into her PA profession. Ohood currently holds an appointment at McMaster University as an Assistant Clinical Professor (adjunct) and is involved in musculoskeletal clinical teaching as well as a preceptorship in Orthopedic Surgery.

► **What is Orthopedic Surgery?**

Orthopedic Surgery is a specialty in medicine that involves the diagnosis and treatment of conditions of the musculoskeletal system, including bones and articulations of bones (joints), muscles, tendons, ligaments, cartilage, bursae, and nerves.

Orthopedic Surgeons are specialized physicians who complete medical school followed by a five-year residency and one or two years of fellowship training in a specific area of practice (e.g. arthroplasty, trauma, or sports). Orthopedic Surgery PAs are clinicians who work alongside Orthopedic Surgeons to evaluate and treat patients with musculoskeletal complaints. PAs complete undergraduate studies and then enrol in a professional PAEP, completing 12 months of a focused didactic program. This is followed by 12 months of hands-on rotations in a variety of practice areas (e.g.

Family Medicine, Emergency Room (ER), Internal Medicine, Surgery and Surgical Subspecialties, Psychiatry, and Pediatrics). As collaborative providers, PAs work with increasing autonomy to improve clinical efficiency and participate in all aspects of patient care (e.g. history taking, physical examination, diagnosis, nonoperative treatment, surgical treatment/first assist, and preventive care).

Orthopedic Surgeons and PAs are becoming increasingly sub-specialized to provide care in focused areas of practice, such as sports medicine, joint replacement (arthroplasty), or trauma. Additionally, many clinicians focus their practice on a subset of anatomical regions or populations (e.g. foot and ankle, upper extremity, spine, hip and knee, or pediatric versus adult populations) to provide up-to-date evidence-based care using advanced treatments.

“McMaster's PBL model allowed me to identify gaps in my knowledge and skill set”

► What does your role as a PA look like on a day-to-day basis?

I work in the field of sports orthopedics and arthroscopy; most of our patients present with shoulder pain (e.g. rotator cuff or labral tears), knee pain or instability (e.g. ACL tears or meniscal tears), elbow or wrist conditions (e.g. tendonitis), and occasionally, early stages of osteoarthritis.

My role is divided between the outpatient clinic, fracture clinic, and operating room. At the outpatient clinic, I complete consultations, follow-up assessments, and pre- and post-operative evaluations of patients with pain, instability, or stiffness. I take a history to better understand the nature of the patient's condition, perform a physical examination, review diagnostic reports and images (e.g. X-ray, CT scan, and MRI), discuss treatment options, and administer treatments (e.g. provide a physiotherapy referral, perform a joint injection, apply a cast, prescribe NSAIDs, or discuss surgery). Patients who are undergoing complex procedures or require a more specialized care have the opportunity to spend more time with my supervising physician or surgeon. This is to ensure that they understand the technical aspects of the surgery and have a clear understanding of surgical outcomes.

► How do you think the PBL model of McMaster's teaching transfers to and benefits your work life in Orthopedic Surgery?

I was first exposed to the PBL model in my undergraduate years in the Bachelor of Health Sciences program and had the opportunity to further utilize this style of learning in PA school. The first year of the PA Education Program at McMaster is heavily reliant on PBL; students participate in tutorial sessions to explore topics and generate questions. They then independently search for answers to fill any gaps in their knowledge. Afterwards, students re-group to discuss their newly acquired information and clarify concepts.

When I first started working in Orthopedic Surgery, I had to actively participate in learning both, on the job and on my own time after work. McMaster's PBL model allowed me to identify gaps in my knowledge and skill set, retrieve appropriate evidence-based resources to address those gaps, and apply theoretical concepts to my day-to-day practice. My past experience and comfort level with the PBL model simplified this process of knowledge acquisition. This enabled me to maintain my clinical efficiency while also participating in continuing medical education and ongoing learning.

CONCLUSION

PAs are fulfilling a unique role in health care by extending physician services and improving quality of care. McMaster University is making a significant contribution to the future of health care in Canada with its PAEP, which is designed after the undergraduate medical school curriculum. Kristen Burrows is a pivotal leader in this movement as a McMaster alumnus, current dean of the McMaster PA program, and a Ph.D. candidate for PA integration. The PBL model of the PAEP equips future PAs with the tools they need to be successful in the workforce, as illustrated by Ohood Elzibak's journey as a PA in Orthopedic Surgery. Since the role of a PA is relatively new to Canada, more pedagogical research and advocacy is needed in order for PAs to become fully integrated into the health care system and imbue it with benefits.