

Looking to the future: Addressing the health concerns of youth today

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Pediatric medicine is a broad field of medicine that encompasses the care of neonates, infants, children, adolescents, and even young adults. At these various milestones and life stages, numerous unique health challenges present themselves; it is therefore no surprise that there exists an increasing number of recognized pediatric subspecialties in Canada and across the globe. These emerging subspecialties include pediatric rheumatology¹, anesthesiology², critical care medicine³, and child maltreatment⁴.

This UBC Medical Journal (UBCMJ) issue brings together a wide array of exciting featured articles that aim to address several emerging trends and ideas that drive the way we are practicing pediatric medicine and care for the health needs and concerns of youth. We begin with a compelling commentary from Dr. Barbara Fitzgerald, a developmental pediatrician and Medical Director at the Alderwood Family Development Centre. In her piece, Dr. Fitzgerald shines a light on the socioeconomic disparity for children, the subsequent health consequences, and the role that she—and all other physicians—must fulfill as health advocates for their young patients. Next, we have an article written by Dr. Suzanne Vercauteren, a clinician–investigator and Director at the B.C. Children’s Hospital BioBank. Dr. Vercauteren illustrates the workflow of a “biobank”, its role in translational and clinical research, and the inception of Canada’s first pediatric site–wide biobank here at B.C. Children’s Hospital. Our final featured article comes from Dr. Kirk Schultz, Director of the Michael Cuccione Childhood Cancer Research Program at the B.C. Children’s Hospital. Dr. Schultz begins with a historical overview and the mechanisms underlying cancer immunotherapies, and highlights the role of B.C. Children’s Hospital as a world leader in hematopoietic stem cell transplantation. Finally, he describes the use of chimeric antigen receptor T cells as an emerging therapy as well as new leukemia and neuroblastoma immunotherapy clinical trials that are underway in British Columbia.

During the preparation of this issue, the UBCMJ was contacted by the B.C. Cancer Agency’s Journal of Family Practice Oncology. We were approached about sharing two articles that pertain to our theme on medicine of youth, and describe recent changes in the way that Human Papilloma Virus (HPV) is managed in British Columbia. In the first article, “HPV Related Cancers: Tip of a Very Large Iceberg,” Dr. Margaret Smith provides a brief overview of the disease presentation, variety of strains, pathophysiology, and Canadian epidemiological data about HPV⁵. In the second article, “HPV Vaccine Program for Grade 6 Boys Now Available in B.C.,” Dr. Monika Naus highlights changes to the HPV vaccine program in British Columbia beginning this 2017/2018 school year. As many practitioners may be aware, the HPV vaccine program has been available for girls in grade 6 since

2008. However, this year, it has expanded to include boys in grade 6. Dr. Naus continues to provide the evidence and rationale behind this new provincial expansion⁶. Both articles are available in full–text at our online News & Letters section (<http://ubcmj.med.ubc.ca/news-letters/>) along with a link to the original articles in the Journal of Family Practice Oncology.

With such a broad field of medicine, one can expect an approach to the care of youth to be multidisciplinary and complex. A World Health Organization survey estimated the leading causes of death in children under the age of five to be pneumonia, diarrhea, malaria, neonatal pneumonia or sepsis, preterm delivery, and asphyxia at birth⁷. Moreover, a majority of these global early childhood deaths, which are caused by communicable disease, occur in African countries⁷. It is thus clear that the care of youth necessitates global considerations. Closer to home and in stark contrast, an issue that plagues Canada and much of North America is childhood obesity. As national rates of childhood obesity continue to climb, youth face a number of health consequences, either now or in the future, including increased risk of type 2 diabetes, hypertension, coronary artery disease, stroke, dyslipidemia, and several cancers⁸. Approaches to target obesity and these related chronic conditions involve nutrition and dietary management. Stemming from the topic of diet, other health concerns of youth can be explored. For instance, poorer diet in children and adolescents has been linked poorer mental health outcomes⁹, another complex area of pediatric care in itself. Undeniably, the topics in medicine of youth are far–reaching.

Throughout your exploration of this issue of the UBCMJ, you will come across a variety of manuscripts that explore challenges and opportunities in the health care of youth such as those mentioned above. Our authors united in the belief that securing our future means investing in the lives, particularly the health and well–being, of young people today. We hope this issue will spark meaningful discussion for medical trainees, physicians, and the public alike.

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