Are routine child health visits really necessary? The state of children's development in BC

It is the last week of August. I am seeing Susan (a fictitious patient) in my office as a referral from her family doctor. Susan is about to start kindergarten and her mom is worried about her daughter's asthma. I ask a few questions about Susan's general health and development and examine her. She has not attended preschool and her mom reports that she is very shy and she cried when she went to her new school for a visit. Susan has not learned her numbers or letters and cannot yet print her name. When she does eventually speak, her words were soft and hard to understand. It is becoming clear that Susan is not ready for kindergarten.

Almost one-third of BC children eligible for kindergarten are not developmentally ready. Such children are described by Dr Clyde Hertzman as having "developmental vulnerability." They exhibit significant delays in their physical, socio-emotional, or language-cognitive development. A child's early development, of course, has a significant influence upon that child's health, well-being, learning, and behavior, and the effect spans the child's life course. Here are some facts about the state of children's development in British Columbia:

- "Today only 71% of BC children arrive at kindergarten meeting all the developmental benchmarks they need to thrive both now and in the future."[1]
- "29% are developmentally vulnerable."[1]
- "At three times what it could be, the current vulnerability rate signals that BC now tolerates an unnecessary brain drain that will dramatically deplete our future stock of human capital."[1]
- Childhood vulnerability is rising. In 53 of 59 BC school districts, 30.35% of kindergarten children were vulnerable, up from 28.5% in 2008/9.[2]
- "Unnecessary early vulnerability in BC is costing the provincial economy a sum of money that is 10 times the total provincial debt load."[1]
- Vulnerable children come from all walks of life. It is a middle-class problem, not just poverty related.[1]
- Most childhood vulnerabilities are avoidable and preventable.[3]

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Helping children to be as healthy as they can be is hardly a new concept. The public health movement (1880–1920) brought in reforms that had an immediate and positive effect on the well-being of Canadian children and "came to regard youngsters as its most important clients."[4] With prevention as the aim, the movement led to the establishment of two specialized services: one targeting infants and the other targeting school-age children. By the end of World War One, English Canadians came to recognize that intervention needed to occur prior to age six, and physicians, along with social workers, teachers, and psychologists, began to focus on the preschool years as well as the school-age years. Canada emerged as a nation characterized as having a "preoccupation with training its infants and preschoolers for proper citizenship."[5]

A century later our own government acknowledges and has planned action to reduce childhood vulnerability. In the report, *15 by 15: A Comprehensive Policy Framework for Early Human Capital Investment in BC,* it is recognized that supporting children in their early years is crucial. The report illustrates the importance of early human capital investments, and as a result the Government of British Columbia's 2009 Strategic Plan committed to "lowering the provincial rate of early vulnerability to 15% by fiscal year 2015/16."[1]

Healthy children are more likely to become healthy adults, thereby contributing to the future workforce and economy; as we so often hear, children are our future. Through routine health assessments, family physicians will, no doubt, encounter children with developmental issues that merit concern. By way of a systematic approach, family physicians are perfectly positioned to identify and assess children with developmental vulnerability and assist in providing interventions that will ultimately lead to a reduction in this vulnerability. The American Academy of Pediatrics, for example, recommends children be seen routinely for "health supervision" visits. The timing and purpose of each visit is well detailed in the AAP Policy Statement and clearly organized in the AAP publication *Bright Futures: Guidelines*

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must either send the sample to a centralized testing facility, which can take several days, or make an educated judgment and administer an antibiotic cocktail. Both options have serious negative and occasionally fatal consequences.

SFU graduate students Mona Rahbar and Suman Chhina developed the first set of prototypes, which were tested in labs in India last year.

The researchers from India visited SFU and spent two weeks working with the graduate students and performing tests using nonpathogenic bacterial strains provided by SFU researcher Fiona Brinkman.

The prototype chips were then tested in India using the real bacterial strains, and the results helped formulate the next generation of chips. The new chips have been sent to India for more detailed testing and may move on to field trial.

Dance wins writing award

The *BCMJ* is pleased to announce the winner of the 2009 J.H. MacDermot Prize for Excellence in Medical Journalism: Dr Derry Dance. Dr Dance was a UBC medical student when he was the lead author of "Removal of ear canal foreign bodies: What can go wrong and when to refer" (2009;51[1]:20-24), coauthored with Drs M. Riley and J.P. Ludemann.

The MacDermot Prize, which comes a $1000 cheque, honors Dr John Henry MacDermot (1883–1969), who became the editor of the *Vancouver Medical Bulletin* at its formation in 1924. He remained at the helm until 1959, when it became the *BC Medical Journal*. He was editor of the *BCMJ* until he retired in 1967. Dr MacDermot was also past president of both the VMA and the BCMA.

Congratulations, Dr Dance.

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for Health Supervision of Infants, Children, and Adolescents, third edition, which includes helpful screening questionnaires.[6]

As a pediatrician in British Columbia, I only encounter those children who have been referred to me by my family physician colleagues. As such, I am limited in my ability to reduce childhood developmental vulnerability. I look to you to help in this regard. Children may be only 25% of the population, but are 100% of our future.

—Wilma Arruda, MD, FRCPC
Chair, Child and Youth Committee

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Trevor J.G. Thompson, MD

Dr Trevor J.G. Thompson 1925–2010

Trevor Thompson was born in Kingston, Ontario, and graduated in medicine from Queen's University in 1950. He was a life member in the College of Family Physicians of Canada. He studied tropical medicine in Portugal, served as a missionary in Kenya, and on return to Canada worked in BC and Ontario. He retired many times, but continued to make house calls and worked most recently with the Trillium Gift of Life. He enjoyed working with people from all over the world, from different backgrounds, cultures, and religions. He is survived by Patricia, his wife of 55 years, five sons, 16 grandchildren, and two great-grandchildren. His main interest and passion outside of medicine was the love of his family and church. He also loved music, theatre, and ballroom dancing. He was a member of the Christian Medical and Dental Association, the Chess Association of Canada, Kin Canada, and Rotary International, being a Paul Harris Fellow. He loved the things many of us take for granted.

—Patricia O'Meara
Kingston, ON