The state of Canadian children’s health, 1998

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In my 1997 commentary on the state of Canadian children’s Health, I focused on four problems: neonatal mortality, childhood accidents, asthma and the prevalence of psychiatric disorders of children (1). Although each of these conditions remains a serious health problem in the paediatric population, in this article I want to discuss Canadian Aboriginal children. I shall use the term aboriginal to include indigenous (Indian and Inuit) inhabitants of Canada.

In 1991, there were approximately 362,000 Aboriginal infants, children and adolescent citizens of Canada, about 6% of the total population of children under age 15 years. The majority lived in rural and isolated northern regions of the country (2). Because most Aboriginal children live in remote areas, their health care is typically sporadic, and when available, is provided primarily by nurse practitioners and occasionally family physicians. Paediatricians are not routinely involved in providing medical care for Aboriginal children until the children are referred to a tertiary centre for specialized care. However, it is important to note that many university departments of paediatrics (and other clinical departments) have made significant contributions to the health care of aboriginal children across the nation for many years (3). More recently, Aboriginal leaders have moved away from the traditional medical model and are making plans to have Aboriginal health care workers have a greater influence on the health needs of their people. Respecting that trend, we must work together to enhance the health and welfare of Aboriginal children.

The health status of Canadian Aboriginal children is comparable with that of infants and children in many developing countries, and stands in stark contrast to the health status of non-Aboriginal Canadian children. For example, the infant mortality rate for Inuit children was 16.3 per 1000 live births and 13.8 per 1000 for Native infants in contrast with 7.3 per 1000 for all Canadian infants averaged over the years 1986 to 1990 (2). The reasons for the differences are complex, but most would agree that socioeconomic issues, particularly poverty, are critical underlying factors of these terrible outcomes.

Briefly I outline five health-related problems that are particularly common among Aboriginal children. Each problem adversely affects the health and welfare of these children, and most will result in a loss of productivity in adulthood.

FETAL ALCOHOL SYNDROME

It is well known that excessive alcohol intake, particularly during early pregnancy, can lead to devastating and irreversible abnormalities to the developing fetus known as fetal alcohol syndrome (FAS). Furthermore, fetal alcohol effects (FAE), also resulting from maternal alcohol abuse, may produce life long behavioural and cognitive abnormalities. The prevalence of FAS and FAE in the general population has been estimated to be one or two per 1000 live births. Many Canadian studies have indicated that FAS is more prevalent among Aboriginal than among non-Aboriginal children, with estimates ranging from 25 to 190 per 1000 live births (4,5). Although these studies have been challenged as biased and poorly formulated, it is clear that substance and drug abuse is an escalating nationwide problem, particularly among the aboriginal population (6).

DIABETES MELLITUS

Noninsulin dependent diabetes mellitus (NIDDM) is reaching near epidemic proportions in many Aboriginal communities throughout Canada. Before World War II the condition was rare, but by 1991, 6% of Canadian aboriginal people over age 15 years had developed NIDDM compared with 2% in the remainder of the population (7). Aboriginal children are not immune to developing NIDDM. Many of these children may remain asympto-
matic for years, but they may also present with symptoms and signs of insulin-dependent diabetes mellitus during childhood. It is critical to classify the type of diabetes at diagnosis because the management of the conditions is significantly different.

NUTRITION

Obesity and iron deficiency anemia are particularly common among Aboriginal children. To date, effective programs including sustained diet and exercise protocols have not been effective among the paediatric population for the treatment of obesity, particularly when all family members do not participate. However, iron deficiency can be readily identified and appropriately treated in a cost-effective manner.

INFECTION

Aboriginal children are much more likely to have serious infections, some of which are life-threatening. Infections include recurrent otitis media, bacterial pneumonia, tuberculosis, croup, bronchitis and, before the availability of a protective vaccine, *Hemophilus influenzae* type B meningitis. Many factors influence the increased risk of infections in Aboriginal children including poverty, poor nutrition, genetic predisposition, crowded living conditions with poor sanitation, and exposure to smoke from tobacco and wood fires.

SUBSTANCE ABUSE AND SUICIDE

Suicide is a significant problem of adolescents, particularly Aboriginal teenagers. The mean annual rate of suicide among Canadian aboriginal youth between 1986 and 1990 was 37 per 100,000, five times the rate of the Canadian adolescent population (2). There are many factors that contribute to the alarmingly high rate of suicide in Aboriginal youth, including poverty, joblessness, loss of cultural identity, feelings of helplessness and depression, and use of illicit drugs. Aboriginal youth report using substances such as lysergic acid diethylamide (LSD), hallucinogens, marijuana and solvents at a greater rate than non-Aboriginal youth (8). Solvent abuse capable of causing life long neurological and psychological sequelae is a particularly serious problem among Aboriginal children: the abuse can begin as young as four to five years of age.

What can Canadian paediatricians do to enhance the level of health care among Aboriginal children? On an individual level most of us can have little impact. But collectively we can help shape a better future for these children. The Indian and Inuit Committee of the Canadian Paediatric Society has worked hard to develop appropriate standards including a set of guidelines to identify and manage diabetes mellitus in children to improve the health care of Aboriginal children (9). Other groups have also made excellent contributions. For example, the College of Family Physicians of Canada has recently published an excellent report on the health needs of Aboriginal children (10), and the Canadian Institute for Child Health has issued a powerful profile of the health needs of all Canadian children, including the Aboriginal population (2). What is required is a joining of forces among all groups, government, paediatricians and family physicians, and Aboriginal leaders such as Mr Phil Fontaine, to develop evidence-based guidelines for the prevention, screening and management of many of the conditions listed above, guidelines that will be both cost effective and will apply to every Aboriginal community.

I further believe that the Canadian Paediatric Society can play a major leadership role to mount this effort on behalf of Aboriginal children. Think of the wonderful health-related benefits that will follow a united and collaborative effort on behalf of our children!