HISTORICAL OVERVIEW OF THE MCGILL BAFFIN PROGRAM, 1964-1997

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As the 1996 Canadian recipient of the J.A. Hildes Medal in Circumpolar Health, I would like to document for this journal an overview of the contributions of McGill University during the second half of the 20th century to the delivery of health care to the Inuit living in the Eastern Canadian Arctic – the Baffin Zone, Northwest Territories (NWT). McGill University is the oldest university in Canada. It was established as a college in 1819 and conferred its first degree as a university, a medical degree, in 1833. The university is a leader in Canada for medical education and research and is recognized regionally, nationally and internationally as a center of excellence. Its contributions to Canadian northern studies over the years are varied, extensive and significant.

Preamble

Original peoples of the Americas began to migrate across the Bering Strait region from Asia during the last ice age. The ancestors of the generations of Inuit that I attended first roamed across the treeless arctic regions more than 10,000 years ago. They lived as coastal nomads who survived by hunting and fishing. Their medical needs were attended by either practical individuals or by the shaman (medicine man, witch doctor) who used magic to treat illnesses, foretell the future, and control spiritual forces (1). Their isolation protected them from infectious diseases. The early arctic explorers and whalers describe them as being strong, healthy people, but these nomadic people had very limited immunity and even exposure to a common cold could be disastrous. After the 19th century contacts with Europeans brought along a series of epidemics of pertussis, typhoid, measles, poliomyelitis, and tuberculosis which almost lead to their extinction. In the 1930's - 1950's nearly every Inuk had tuberculosis and 10% of our Inuit population were patients in sanatoria in Southern Canada separated from their families, friends, community and culture. All this changed by the late 1950's, when tuberculosis became manageable in the north with the advent of the antituberculosis drugs and BCG vaccine (2).

During World War II, at an uninhabited site, later to be known as Frobisher Bay, now known as Iqaluit and since 1999 the capital of Nunavut, Canada's new territory in the Arctic, an airport "Crystal II" was constructed by the U.S. Military as part of the "Crimson Air Route" to Europe in support of allied efforts. During the Cold War with Russia, radar lines were constructed across our North and the U.S. Military upgraded the facilities at Frobisher Bay to support North American Air Defence. The activities at these military sites attracted Inuit from their camps to work for wages which was something novel for them. In 1953, the Canadian military began to use the facilities at Frobisher Bay, and in 1963 the U.S. military withdrew and Frobisher Bay became the administrative center for the Canadian Government in the Baffin Zone; a vast land area of well over 200 000 square miles with an Inuit population at that time of approximately 5000.

By the mid-1960's, tremendous social and economic changes occurred among the Inuit. They abandoned their nomadic way of life and in the Eastern Canadian Arctic they moved into 14 widely separated settlements. They became urbanized because of their drastic death rate, their search for ongoing health care, for meaningful employment, for security, and for the benefits of Canada's social programs if their children attended school. They had to learn to live in permanent housing, to use new foods and to adapt to another culture. The 20th century was figuratively speaking parachuted upon them. The transition was traumatic and among its effects were again disease, malnutrition, overcrowding, widespread venereal disease, abuse of alcohol and drugs, frequently leading to violence and suicide, loss of traditional role models and lack of purpose among the youth. The children in the most suffered from impetigo, rampant dental caries, acute and persistent otitis media (discharging ears), recurrent respiratory infections, gastroenteritis, pneumonia, meningitis, etc. A quagmire of medical, social and economic issues emerged and by the mid-1960's, the Inuit needed urgent help with their health problems.

The McGill Baffin Program (1964-1997)

With the opening in 1964 of the Frobisher Bay General Hospital (FBGH) the Department of Northern Affairs Canada approached McGill University to provide specialized medical services to the FBGH, and the McGill Baffin Program was established. This was logical at that time as all commercial air flights to the Baffin Zone were based at Dorval Airport/ Montreal. Also McGill University hospitals had been long providing tertiary medical assistance on an adhoc basis. Because of widespread health problems priorities had to be addressed, particularly among the younger Inuit, in pediatrics, ophthalmology and otolaryngology.

Pediatrics

A symbiotic relationship developed between the FBGH and the Montreal Children's Hospital (MCH). In July 1965, the MCH began to send a senior pediatric resident each month to serve at the FBGH and this arrangement continued for the next 32 years. At the MCH, an Inuit Affairs Committee was constituted to supervise the treatment of Inuit patients evacuated to the hospital.

At that time, the infant death rate in the North per 1000 live births was 6 ½ times and that for children one to four years of age 15 times that for the rest of Canada. Respiratory tract infections, gastroenteritis and meningitis were the greatest death causes (3). While these statistics have greatly improved over the years, they still remain the highest in Canada.

Pediatric residents in the North attended to those children that were admitted to the FBGH requiring special medical care. This often reduced evacuations south for treatment. The residents also ran baby clinics, worked in the outpatient department and did follow-up care to those children who had returned from the MCH. They laid the foundation for ongoing pediatric care in the North (4, 5, 6) and were a critical and important part of the program. At the MCH, all residents adopted the program and they took this knowledge and commitment wherever they went and whether or not they were involved with the North again. It brainwashed hundreds of young doctors in the ideals of medicine.

Ophthalmology

What evolved in their eyes is interesting. Prior to the 1960's, primary angle closure glaucoma was the major cause of blindness among the Inuit

in Canada as the majority of them had shallow anterior chambers in their eyes. By the late 1960's, approximately 15% of the urbanized Inuit children in Canada were myopic (near-sighted) in spite of the fact that their parents were seldom myopic. Cass thought that the change in nutrition was the cause of their myopia. High carbohydrate content in their new diet may have had something to do with the competence of the collagen fibres which in turn had something to do with the way the eye is able to hold the pressure within it. (7, 8).

From the late 1960's to 1997, "eye teams" from McGill University regularly visited the Baffin Zone to consult, treat and monitor ophthalmological problems affecting the population.

Otolaryngology

Prior to their urbanization discharging ears were rare among the Inuit children in the Baffin Zone. With urbanization discharging ears were so common by the 1960's that Inuit mothers have been known to take a child with normal ears to see the doctor because the ears were not discharging. In the early 1970's, otolaryngology became involved because the educators in the primary school at Frobisher Bay did not know if their Inuit pupils had hearing problems or learning problems. This lead to three decades of providing otolaryngologic services and I was privileged to conduct clinical research regarding the etiology and management of their ear disease (9, 10).

I observed over the years that the inflammatory ear disease in younger Inuit undergoes spontaneous healing in greater than 33% of those affected (9). The surgical success rate in a large series of tympanoplasties performed in the Western Canadian Arctic (1968-1973) was only 39% (9). I contend that medical or conservative treatment should be applied to chronic otitis media in the children and that reconstructive ear surgery be deferred until later in their lives in those cases that have not spontaneously healed. The importance of identifying children with inadequate hearing as early as possible and applying remedial measures is emphasized. There is now evidence that the prevalence of middle ear diseases in the Baffin Zone is decreasing with the passage of time (11). Most adult male Inuit have high tone sensorineural hearing loss secondary to snowmobile and firearms noise.

Other medical, surgical and paramedical services

As the McGill-Baffin program matured in the 1970's and progressed into the 80's and 90's, the call for the involvement of other specialties and for help with laboratory, paramedical services and biomedical engineering arose and more than 30 disciplines became involved. These were in the medical specialties anaesthesia, adult and pediatric cardiology, adult and pediatric dentistry, dermatology, internal medicine, adult and pediatric neurology, pneumology and rheumatology. In the surgical specialties these were general surgery, obstetrics and gynaecology, oral surgery, adult and pediatric orthopedics, and urology. In the laboratories services were biochemistry, hematology and blood bank management, pathology and microbiology. In the paramedical services these were audiology, early childhood intervention program, electroencephalography, occupational therapy, physiotherapy, rehabilitation, respiratory therapy, speech therapy, social services, nutritional program and technical support. A major strength of the program was an ability to work through the entire McGill network to find the right person for a particular need (12).

McGill Baffin program-administration and support facilities (Montreal)

From 1964 the Budget for the McGill Baffin Program was by contract with the Departmental of Northern Affairs Canada and later with Health Canada. By the late 1970's, the Department of Health N.W.T. became responsible for health care in the Baffin Zone and for the next twenty years, funding was by an annual contract with them.

As the demands for varied consultants and services became more complex by the 1980's, an administrator/coordinator was appointed at McGill and a halfway house, Baffin House, was opened in Montreal. This facility coordinated patient visits; i.e. lodgings, hospital admissions and discharges, consultant visits, interpreters, social workers and transportation in Montreal.

Termination of the McGill Baffin program contract

In the early 1990's, political changes occurred devolving more autonomy to the Baffin Region of the N.W.T. This resulted in newfound regional power to make major decision including those involving health care and the awarding of contracts. In 1997, the Baffin Regional Health and Social Services Board (BRHSSB), whose membership was predominantly Inuit including representatives from each of the 14 widely scatter settlements, in a cavalier manner, (13), terminated their longstanding contract with McGill University to provide medical services and negotiated a contract with the University of Ottawa. By the spring of 1998, the McGill Baffin Program was dismantled and Baffin House in Montreal was closed.

The BRHSSB never acknowledged the contributions of McGill University for over three decades of medical services to the people of the Baffin Zone. In October 1997, a primary care physician/anaesthesist, who practiced in Iqaluit wrote the following "open letter to McGill medical specialists and administrative staff" that was published in the Nunatsiaq News, the local Iqaluit weekly newspaper that I quote "*now that the Baffin McGill contract for medical specialist and other services has been terminated by the Baffin Regional Health Board, I would like to say thank you to the many physicians and others who have provided the people of Baffin with high quality and dedicated service for almost thirty years. There are many specialists who have given years of expert advice, help and care to us. This has been given in a spirit of cooperation and often with a genuine belief that their help can make a difference to individual lives. I believe it has made a difference to many people and has been a demonstration of the best in medical idealism.*"

Articles in a recent issue of the Medical Post, a Canadian newspaper for physicians, paint an unattractive picture of the current Nunavut Health care system and point out criticism among the local professionals regarding the Nunavut-Ottawa health service arrangement (14, 15).

Concluding remarks

I first treated Inuit from the Baffin Zone in Montreal in the 1950's as an otolaryngologist on staff at the Montreal Children's Hospital and for more than 30 years, starting in the 1970's, was involved on a regular basis as a consultant otolaryngologist/clinical researcher in the Baffin Zone, in Northern Quebec, on the Labrador coast of Newfoundland and Labrador, and elsewhere in Canada. I have published extensively and have served on a Government Commission concerning an aboriginal health matter (16, 17).

The historical perspective is revealing – it took over 30 years - a medical generation – to establish the McGill Baffin Program, to

develop the depth of knowledge of Inuit health problems, to develop the administrative experience in the operation of an integrated health service delivery programs of huge logistical complexity, to find committed, hard working, interested physicians and other health professionals, weeding out those only interested in medical tourism, to realize that supporting the local physician population was the appropriate role rather than co-opting their role. Developing the knowledge to operate an effective system, at all levels, takes a long time and huge human resources. It is not difficult to be fooled into thinking that providing services to such a small population is a simple matter.

The history of the McGill Baffin Program is a credit to McGill University. It was highly successful in many areas. It is also a credit to many individuals. It's abrupt termination and the difficulties replicating it could well serve as a history lesson to others.

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