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The Failure of Scientific Medicine: Davis Inlet as an Example of Sociopolitical Morbidity

SUMMARY

The social and economic history of a Labrador coastal town is reviewed with particular reference to the roles of the Church, the Hudson's Bay Company, and the medical profession. Objective indicators of the current health status of the community are presented, and the major causes of ill-health in Davis Inlet are discussed. Comparison is made with Rudolph Virchow's assessment of the causes of a typhoid epidemic in Upper Silesia in 1848. The subsequent evolution of medicine from a socio-political to a scientific model is reviewed briefly. The authors conclude that the medical profession has embraced the scientific model to the point of virtually excluding the socio-political one, even though social, political, economic, and cultural alienation remain major causes of morbidity and mortality. In so doing, the profession promotes ill-health. (*Can Fam Physician* 1987; 33:1649–1653.)

RÉSUMÉ

Cet article se veut une synthèse de l'histoire sociale et économique d'une ville de la côte du Labrador en faisant particulièrement référence au rôle de l'église, de la Compagnie de la Baie d'Hudson et de la profession médicale. L'auteur présente les indicateurs objectifs de l'état de santé actuel de ses habitants et discute de la cause principale du mauvais état de santé à l'anse Davis. On y compare la situation de ses habitants à l'évaluation faite par Rudolph Virchow sur les causes d'une épidémie de typhoïde survenue en Silésie du Nord en 1848. L'évolution subséquente de la médecine d'un modèle socio-politique à un modèle scientifique fait l'objet d'un bref examen. L'auteur conclut que la profession médicale a endossé le modèle scientifique au point d'exclure virtuellement le modèle socio-politique, en dépit du fait que l'aliénation sociale, politique, économique et culturelle demeure l'une des principales causes de morbidité et de mortalité. En s'engageant dans cette voie, la profession encourage la mauvaise santé.

Key words: scientific medicine, morbidity, mortality

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GEORGE BERNARD SHAW once declared medicine, the military, and the clergy to be the most conservative forces in society. Increasingly, doctors have come under attack for forming an insular, economically privileged élite divorced from the real health needs of the population they purport to serve. Using a brief survey of the history and health status of one Native community on the north Labrador coast, we would like to suggest that the medical model we as Canada's physicians currently employ ignores precisely those economic and political conditions that are the major determinants of health in any community; and that our use of this model not only fails to address real health needs, but by giving the impression of addressing them, actually serves to obstruct efforts to promote constructive change.

Davis Inlet is a community of 390 people known as the 'Mushuau (or barren-ground) Innu'. Before the arrival of Euro-Canadian society, the Innu lived a life of relative self-sufficiency, healthfulness, and political independence in the interior of Labrador, known to them as 'Nitassinan'. Theirs was a non-monetary, nomadic hunting economy based primarily on the annual migrations of the caribou herd. In keeping with their need for mobility, the basic social unit was the family, and each family had a high degree of functional and political autonomy. Families separated and regrouped freely, depending on the dictates of the hunt. To ensure survival in times of scarcity, it was essential for them to be able to rely on mutual sharing of what food was available. Hence sharing became a central value of their society. The Innu had no chief as we know that office. For purposes of leadership during specific ventures such as hunting trips, one man would become temporary leader or 'utshimau' by taking the initiative. He expressed his authority only when no consensus could be reached. The hunting trip over, he ceased to be utshimau.[1] In summary, before its recent subjugation, Innu society was fundamentally egalitarian. Its princi-

pal values were skill in hunting, sharing, and individual autonomy.

In the matter of health care, the Mushuau-Innu had an extensive system of traditional medicine.[2] As one Innu woman said, "All things on the ground are good for medicine. I could't possibly tell you them all." The efficacy of their medicine was strengthened by its association with a system of animistic religious beliefs based on the caribou hunt, engrained in the practices of day-to-day living and intertwined with all of the values germane to their continued survival. Medical information was dispersed throughout the community; within the community elderly women were considered the most knowledgeable persons in this field.

Though the Innu often summered on the coast, they did not live there permanently. In 1831, the Hudson's Bay Company established a trading post at Davis Inlet, and its influence was gradually able to transform the Innu economy to the barter economy of the fur trade. Thus the Company benefited from a dominant economic relationship with the Innu. This development began the cycle of dependency and domination which continues today. The 20th century found the Innu still on the Company's books and in a state of chronic deprivation and near-starvation. As furs and caribou dwindled and the market deteriorated, the Innu had to rely for survival on the false and sporadic generosity of the Company.

Among the effects of the weakening of the caribou economy was a weakening of the Innu's animistic belief system, which derived much of its strength from its intimate relationship with the caribou hunt. In this setting of weakened economic, social, and religious traditions, it was not difficult for the Roman Catholic Church to encourage spiritual dependence to add to economic dependence. By 1895, the Innu were making long trips to the trading posts along the north shore of the St. Lawrence river in order to receive the sacraments and rites of the Church. Their prolonged absences ran counter to the economic interests of the Hudson's Bay Company in Labrador. Consequently, they lobbied to attain a priest for the coast and provided money to establish a mission in North West River. The Oblates ran this mission until 1895, when they withdrew because of a dispute concerning ecclesiastical jurisdiction in Labrador.[3]

The desire for a mission apparently remained. The trading companies in Labrador continued to pressure the Newfoundland government to obtain a priest for the Innu. When Father O'Brien arrived in 1921, he found a people already severely affected by nearly a century of material and spiritual dependence, and still very much affected by their oppressive relationship with the Hudson's Bay Company. What he perceived was a "lowly and unbefriended people" in a state of chronic deprivation; they were hungry, not only for food and material goods, but for what he called the "bright star of Christ's love."[4]

It was this missionary who first acquainted the Davis Inlet Innu with our notion of 'chief' when he designated one man to assume this title for the purpose of persuading the others to return to the coast in time for his summer trips to Davis Inlet. The Innu gradually became tied to the Mission, and the cycle of dependence and recurrent starvation entrenched itself. The government supplied basic food relief through the Hudson's Bay Company when need was particularly acute. The missionary played an increasingly important role as middleman and patron. In 1934, the government began to issue relief directly. When, in 1942, it became obvious that the fur trade was no longer profitable, the Hudson's Bay Company turned over its Davis Inlet post to the Newfoundland government.[5]

Under the terms of Union in 1949, the natives of Newfoundland and Labrador remained under provincial jurisdiction. Hence the *Indian Act* and other legislation which pertain to the mainland Indians had no relevance to the Innu and Inuit of Labrador. Services and funding for relief, social services, and medical care were supplied on an *ad hoc* basis through a series of federal-provincial transfer-funding agreements. The Labrador coast in general, and the Native groups in particular, remained chronically underfunded. Most of the Davis Inlet Innu lived in tents until 1967, when the provincial government built 15 wooden bungalows on a new town site two miles north of the community.[5]

Since 1946, when the Oblates regained ecclesiastical jurisdiction in Labrador, there has been a permanent priest in Labrador. The government assumed responsibility for education in 1954. The priest acted as primary health caretaker until 1973, when a nursing station was built and staffed by one full-time nurse. A public health nurse was added several years later. All medical care in Labrador is currently provided by one organization, the Grenfell Regional Health Services (GRHS). This organization, founded as a Protestant medical mission by Dr. Wilfrid Grenfell, was for many years the only source of Western-style medical care available to the region.

The medical clinic in Davis Inlet is well stocked. A recent review of pediatric preventive health care found that the standard and completeness of care were good.[6] There is 100% immunization, comprehensive tuberculosis testing and monitoring of growth, development and nutritional standards. A travelling doctor visits approximately one week out of six. There is ready communication with physicians and reliable transport, when necessary, to secondary treatment centres only hours away. The GRHS has achieved what its director has called the "*sine qua non* of any service: good people in the right place doing good work."[7]

And yet, by any definition, the health of Innu living in Davis Inlet is appalling. The problems have been well documented. In 1977, for example, a morbidity survey showed that 86% of the population had head lice; 17% had scabies, a parasitic skin infestation; and 27% had impetigo, a bacterial skin infection; 53% of the adults were considered to have alcohol problems; 29% had been hospitalized within the previous 12 months.[8]

My own review of the clinic charts for those under 15 in 1985 showed an expected pattern of frequent visits to the clinic: six visits per child per year for the whole group and 14 visits for those aged two and under. Altogether 74% of visits were for common infectious problems, and 16% were traumatic in nature, consisting mainly of minor injuries. Scabies and lice remain so common that the nurse treats them without recording the visit in the charts. She says that to do so would be very time consuming.[9] As one would expect, frequent use is made of

antibiotics: almost two seven-day courses per year for all children and 4.5 courses per year for those two and under.

The pattern of morbidity from other than common infections is also startling. Between 1981 and 1984, there were 20 cases of tuberculosis in Davis Inlet in a census population of 240 persons. This figure translates to an incidence of 1,667 per 100,000, that is, more than a thousand times the national or Newfoundland incidence.[10] The Davis Inlet Innu have themselves expressed concern at the rising rates of violence and violent deaths in their community since 1966.[11] There are no statistics of suicide and violent death rates pertinent to the Innu alone. However, the suicide and violent death rates on the North Labrador coast, which include those of the Innu, Inuit and settler communities, are five to six times the national rate and two to three times the national rate for Native groups. In 1982/83, violent deaths accounted for 50% of total mortality.[12] Alcohol remains a very serious problem.

How can we explain this severe pattern of morbidity? In Davis Inlet, infection can be easily traced to its environmental determinants: overcrowding, malnutrition, lack of a reliable water source and of basic sewage disposal facilities. Ten to 20 people live in three- or four-bedroom bungalows,[13] and this in spite of the provincial government's claim that it has spent $150,000 per housing unit over the last four years.[14] In Davis Inlet, in 1984, 28% of pre-school children had hemoglobin levels below 10 gm, well below the value of 12 gm which is widely considered to be the lower limit of normal. The average hemoglobin of those children surveyed was only 10.6 gm. Fifty per cent of them had received iron supplements at some time, mostly for proven anemia.[6] The people of the village do not yet have access to a central uncontaminated water source. Many must get their water from a stream a kilometre west of the village. To meet the needs, a communal bath house was built in 1981, at the Band Council's request. It failed, however, in its first winter, when the pipes burst because they had not been buried deep enough.[15] There is still no really organized system of sewage collection and disposal in the village, although there is in theory a "honey bucket" system of toilet-pail collection. In 1981, an engineer's survey concluded that the town water-catchment area is insufficient to support a functional water sewage system.[16]

This raises questions about the underlying political process and priorities which led the provincial government to relocate the town to its present site in 1967.

The government has attributed many of the problems to the Band Council's failure to assess its priorities properly.[14, 17] In fact, the Council has long had its priorities well organized and enumerated. Housing, water, and sewage facilities are all high on its list.[18]

What, then, of that illness for which we cannot employ a bacteriological model of disease: the severe alcohol abuse, violence and suicides? This syndrome of self-destructive behaviour in the face of social, cultural, and political alienation is well recognized and has been well documented in other Native communities.[19] Erich Fromm has termed it "necrophilic behaviour" and associates it with conditions of scarcity, injustice, and imprisonment. Paulo Freire attributes it to the emotional dependence that develops in a setting of systematic oppression.[20, 21] In North America it has been variously attributed to acculturation, deculturation, social disorganization, anomie, stress, low self-image, boredom, failure, socialization, lack of social acceptance, unemployment, underemployment, arrests and imprisonment, disrupted families, illegitimate pregnancies, dropping out of school, and so on.[22–24] At any rate, it is the result of hopelessness and frustration.

Clearly, this pattern of infection and self-destruction is not unique to Davis Inlet. It is a pattern of morbidity shared by oppressed peoples around the world, groups which have in common economic, political, social, and cultural alienation. On our continent it is most easily recognized among indigenous peoples and ethnic minorities because they are easily identifiable, culturally distinct, and sometimes geographically isolated groups. It is also the pattern of ill-health predominant in the lower socio-economic strata of North American society, among the unemployed and underemployed sectors of the population.[25]

The Innu have tried to focus attention on the socio-political factors that underlie the ill-health of their communities. In 1985, Ben Andrew of the Naskapi-Montagnais Innu Association co-wrote with Dr. Peter Sarsfield a paper titled "Innu Health: The Role of Self-Determination", which articulated the concerns of the Innu people:

> The fact is that for the Innu, health and ill-health are profoundly political issues, inseparable from social and economic considerations. The arrival of an elaborate health care system has coincided with a rapid overall worsening of Innu health. This is not to imply that one has led to the other, but rather to emphasize that the health or ill-health of the Innu has been decided by factors that have very little to do with the health care system. We feel that those who are sincere in wanting to promote Innu health, rather than merely developing a larger self-serving medical system, must be prepared to address problems to which the traditional medical disciplines do not have the answers.[26]

The importance of focusing attention on the socio-political factors underlying ill-health was recognized long before Andrew and Sarsfield wrote these words. In 1848, Rudolf Virchow, who is now widely revered as the father of pathology, the study of disease processes, was asked to investigate a typhoid epidemic associated with famine in Upper Silesia, then an economically depressed province of Prussia inhabited by a large Polish minority. He made his recommendations following an extensive economic, social, anthropological, and epidemiological analysis of the situation. These recommendations were prophetic, and certainly not specific to Upper Silesia.

> We have often referred to "the scientific method". We now find that through applying it, we have moved from medicine into the social field, and in so doing we have had to consider some of the fundamental issues of our times. Thus, for us, it is no longer a question of the medical treatment and care of this or that person taken ill with typhoid but of the well being of one and a half million fellow citizens who find themselves at the lowest level of moral

and physical decline . . . If you want to incercede in Upper Silesia, you must start by inciting the population to united effort. Education, freedom and welfare can never be fully attained from the outside, in the manner of a present, but from the people's realization of their real needs. As far as I can see, it is only by calling for the national reorganization of Upper Silesia that the presently apathetic and exhausted people could bring about their own rebirth . . . the task of any reasonable and democratic government will always be to educate the people and liberate them, not only materially but also spiritually . . . Mass education . . . combined with complete freedom of community life are the first demands which have to be granted to these people. It is no good contriving to patronize and to offer false hopes and solutions.

. . . The principle of equality before the law leads directly to the demand for regional and local self-government. Those who always argue that people have to be educated before the time is sufficiently ripe for a particular measure of freedom have to be told that history has always shown the opposite. Before a revolution the people have always appeared to be immature: immediately afterwards, they have always been mature.[27]

Virchow went on to insist on the importance of full employment, adequate income, housing and nutrition; he also recommended sweeping reforms including unlimited democracy, devolution of decision making, universal education, disestablishment of the church, taxation reform, agricultural improvement, and industrial development. He gave little attention to matters purely medical. Unfortunately the Prussian government completely ignored his report, just as the British government recently ignored the Black Report on Inequalities in Health.[28, 29]

It was Virchow who said "Medicine is a social science, and politics nothing but medicine on a grand scale."[27] Since then, chasing technology's promise to cure the malaise of socio-economic deprivation, medicine has taken on an increasingly technical bent. The Carnegie Foundation's commissioning of the Flexner Report, in 1910, to place medicine on a more scientific footing embodied this spirit.[30] Nonetheless, the subsequent impact of scientific medicine on morbidity and mortality remains highly questionable. With the possible exception of diptheria, mortality rates for the causes of death most common at the turn of the century had begun to decline well before specific therapeutic measures for these illnesses were made possible by medical science.[31] Nevertheless, the scientific paradigm of medicine "rejected the idea of social causality of disease or illness, since the social basis of humanity was placed outside the realm of what was considered scientific."[30]

Consequently, voices addressing the underlying social causes of illnesses have been scarce. When heard at all, they have generally come from without the mainstream of the profession, though much of the profession, particularly in primary care, is faced daily with the myriad consequences of social, political, economic and spiritual deprivation. The worsening crisis of confidence in scientific medicine results, in part, from an increasing public awareness of its unfolding limitations; from its inability to address the socio-economic conflicts which underlie morbidity; and from the profession's unwillingness to raise political

Figure 1
Socio-political Pathogenesis of Disease

Alienation: Economic:	Evolution of economic exploitation
	Destruction of traditional economy
	Absence of practical economic alternatives
	Lack of resource base
	Denial of land claims
	Economic dependency
Political:	Alien political system
	Lack of power
	Lack of meaningful expression
	Lack of self-determination
Sociocultural:	Loss of traditional way of life
	Erosion of belief systems & rituals
	Erosion of traditional values
	Alien educational system
	Alien health model
Environmental Precursors:	Inadequate water
	Inadequate sewage
	Substandard housing
	Overcrowding
	Loss of traditional food base
	Loss of personal control
	Low self-image
	Lack of resource base
	Unemployment
	Poverty
	Boredom
	Anomie
"Medical" Presentation:	Infection
	Anemia
	Malnutrition
	Depression
	Violence
	Suicides
	Alcoholism
	Substance abuse
	Family breakdown
	Teenage pregnancy
	Child neglect
	Obesity
	Lifestyle diseases
	School dropout
	Arrests & imprisonment

questions except when such questions touch upon their personal livelihood.

Self-determination, cultural, economic and political considerations are truly the central issues in health care. That most of the problems which present themselves as "medical" to the nursing station are the result of sociopolitical pathology is clear. Alienation in all its forms leads to a morbid environment which is the substrate for disease. (See Figure 1.) Using any other than an extremely blinkered scientific medical perspective, it is difficult to deny the validity of this causal sequence. Because the medical profession is powerful and is recognized by both the government and the public as an authority on health, its refusal to recognize the link between politics and ill-health does not merely lead to much futile and wasteful activity; it also does much to stifle wider public recognition of the real socio-political problems underlying ill-health. It gives the illusion of providing health care even as it fails to acknowledge the causes of disease.

To be other than an impediment to people healing their own wounds, the individual practitioner must first recognize the limitations of the biotechnical model of disease which he was taught and which underlies current conventional medical practice. He must educate himself about the historical, political and sociological pathogenesis of disease in the community he purports to serve. More important, by establishing a genuine dialogue with the community, he must allow his patients to educate him about their values, perceptions, circumstances and needs.

Across the continent there is a growing wave of spiritual and political rebirth among aboriginal peoples. This is apparent in some areas by the resurgence of traditional beliefs and cultural practices, and in the emergence of a strong, articulate, and vocal leadership demanding increasing autonomy from outside control.[32]

The health of a community cannot be prescribed; it must grow from within. If he is truly interested in promoting Native health, the physician must recognize the limits of prescription, and he must acknowledge the profound importance of autonomy and self-determination. Only through real dialogue and subsequent political solidarity with the community can he hope to be a healer rather than a pathogen.◉

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