
Hepatitis C in Canada's First Nations and Inuit Populations: An Unknown Burden

*Peter Riben, Gillian Bailey, Shauna Hudson,
Karen McCulloch, Tom Dignan, David Martin*

Hepatitis C is recognized as an important cause of liver disease. The burden of disease in Canada, as evident from other reports in this supplement, is being described. The epidemiology and the disease burden of hepatitis C in the First Nations and the Inuit is not known. The assumption that it will mirror the epidemiology in the non-Aboriginal population – as evidenced by the experience with tuberculosis, HIV/AIDS and pneumococcal disease – may be false. The distribution of disease and risk factors may differ from the Canadian population and this may impact on the opportunities for interventions.

Currently the provision of public health services in Aboriginal communities is in the midst of change, as a result of the government's policy on transfer and self-government with the transfer of funds from Medical Services Branch (MSB) to the communities for the provision of those public health services. However, since there is currently no federal legislation governing public health (*more specifically communicable disease control*) on First Nation reserves or in Inuit communities, there is acknowledgment that public health practices in Aboriginal communities must conform to provincial/territorial legislation and regulations.

Though practices vary across the country and are, in part, dependent on transfer status of a community, communicable disease follow-up on reserves is an activity undertaken by First Nations health agencies and/or MSB. The process used for the

reporting of diseases in Aboriginal communities is the same as the reporting process for non-Aboriginals.

METHODS

The seven MSB regions were canvassed to determine how many cases of hepatitis C were identified in First Nations and Inuit in the past year (1999). Information about the age distribution, gender and risk factors were also obtained if available from either the MSB or provincial health reportable disease databases.

RESULTS

Four regions were able to provide varying levels of data on hepatitis C from the reportable diseases databases. A fifth region was able to provide information from an ongoing study of clients attending Alcohol and Drug Treatment Centres.¹

The ability to identify the number of cases of hepatitis C in First Nations varied across the regions. Each province uses its own form to collect data on hepatitis C. Most provinces/territories do not ask for information on ethnicity/Aboriginal status and as a consequence cannot identify First Nations and Inuit in their data and are often unable to identify whether the residence is a First Nations community. Reported cases (incident and prevalent) of hepatitis C in First Nations in 1999 varied by province and ranged from 0.4% of all cases reported in a province to 29.3%. In some regions the cases in First Nations include individuals living both on and off reserve whereas others only include individuals living on reserve.

In two regions the age and sex distribution of cases in 1999 were reported. In one

region, 12 of the 25 cases reported in First Nations on reserve were male. Most cases were reported in the 30 to 39 year age group; the 40 to 59 age group was the second most common. In the other region, 45.6% of the 228 reported cases were male and the average age was 31 with 50% of the cases occurring in individuals ranging from 24 to 38 years of age. Most cases were reported in the 30 to 39 year age group (35.1%) followed by 34.6% in the 20 to 29 age group.

Risk factor information was not consistently available for the cases. In one region, injection drug use and previous blood transfusions were the only two risk factors reported. In the other region that reported risk factor data, the most common risk factor reported was injection drug use (21%), followed by multiple sexual partners (10.5%). Receipt of a blood transfusion or blood product and a history of tattoos were the next most common risk factors reported.

Hepatitis C antibodies were determined in 412 individuals attending alcohol and drug rehabilitation programs in the Pacific Region.¹ Of these, 2 had indeterminate results and 75 or 18% (95% CL 14-22) had a positive result. Forty-nine of the 211 males and 26/200 females were found to be positive.

No information on hepatitis C in the Inuit could be obtained.

DISCUSSION

The current experience with tuberculosis² and HIV/AIDS³ in Canada exemplifies the reason why it is necessary to collect ethnicity data and ensure that an accurate representation of the burden of disease in the Aboriginal community is

Correspondence: Dr. Peter Riben, Director, Community Medicine Residency Program, Department of Health Care and Epidemiology, University of British Columbia, Mather Building, 5804 Fairview Avenue, Vancouver, BC V6T 1Z3, Tel: 604-822-2772, Fax: 604-822-4994, E-mail: priben@interchange.ubc.ca

available. It is clear that the burden of tuberculosis and HIV/AIDS in First Nations and Inuit is considerably greater than the burden in Canadian-born non-Aboriginals, although it is uncertain which of the determinants (or combinations) of health is (are) responsible for this.

At this time, an accurate account of the burden of illness resulting from hepatitis C in the First Nations is not available. The range from less than 1% of cases to approximately 30% of cases within a province may be a reflection of true variation in incidence, the difference in reporting, or an ascertainment bias resulting from special studies and surveillance projects. A recent report generated from the Enhanced Surveillance of Canadian Street Youth found that 6% of self-identified Aboriginals were hepatitis C positive.⁴

The risk factors associated with transmission of hepatitis C identified in the Canadian blood donor study⁵ are probably similar risk factors for First Nations. These include such factors as previous blood transfusions, tattooing, living in a closed institution and having sex with an injection drug user. Percutaneous exposure (injection drug use) to contaminated blood is probably the explanation for the high rate of seropositivity in the clients of the

Alcohol and Drug rehabilitation programs as well as that found in street youth. The role of other risk factors is subject to conjecture. The role poverty plays, particularly in the absence of the other known risk factors, is unknown. Whether there are any other factors which are of importance such as genetic make-up cannot be answered.

To date, the MSB and provincial reportable disease databases have not provided the information required to determine the burden of disease in First Nations. A non-exhaustive list of reasons for this lack of information includes the relatively recent addition of hepatitis C to the list of reportable diseases, a lack of standardized ethnic identifiers on reports which make it difficult to analyze data by Aboriginal status, and a resistance to the exchange of information from one organization to another. Concerns over ownership of data and the confidentiality of patient information are reasons cited for not sharing data between the public health agencies responsible for follow-up and policy.

The lack of information regarding the incidence and prevalence of hepatitis C and associated risk factors in First Nations and the Inuit increases the difficulty of determining, and establishing, appropriate

public health interventions which address the needs of First Nations and Inuit. Given the potential costs in terms of morbidity, quality of life, mortality, as well as the direct and indirect economic costs associated with hepatitis C, it is imperative that the burden of illness be accurately determined. This can be best accomplished through co-operative efforts which include the Aboriginal community and their leadership, First Nations and Inuit health agencies, all levels and branches of government, and academics.

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