Removing Barriers II

Keeping Canadian Values in Health Care l'élimination des obstacles II

Honorer les valeurs canadiennes dans le système de la santé

Editor/Éditeur Ralph Masi MD, CCFP, FCFP

II.6B Mi'kmaq Traditional Medicine & Cancer: Principles, Applications and Potential for Integrated Healthcare in New Brunswick

WALKER, Marilyn - Sackville, NB

Mi'kmaq traditional medicine and cancer

Plant medicines and herbal remedies are well-established in many cultures and traditions such as China, India and aboriginal communities throughout the world. In the western scientific tradition, we are seeing an increasing interest in plant remedies for many types of disease and illness. Ground-breaking work has been carried out in British Columbia, Alberta and the N.W.T., combining the expertise of academic researchers and traditional healers in documenting and applying traditional plant knowledge. In New Brunswick, Mikmaq have a long history of traditional medicine including a broad range of medicinal plants but little has been documented in any detail.

The project on which I am reporting investigates plants in the Mikmaq pharmacopeia that have been used in, or have potential for use in, the treatment and care of cancer patients. It also examines how traditional plant medicines and treatments may be applied to cancer control strategies and services that will benefit Mikmaqs as well as non-natives in New Brunswick. What plants have the Mikmaq used traditionally in cancer treatment and health promotion? Are there other plants available in the region with potential? How does Mikmaq use of cancer-relevant plants compare with that of other First Nations/Native Americans in the U.S. and Canada, and with scientific information about these plants?

Health care that integrates traditional medicine and mainstream medicine has been shown to be cost- effective and health promoting (Green). Enhanced understanding by mainstream medicine of Mikmaq conceptions of cancer, cancer treatments, the role of traditional healers and the patient/caregiver relationship, and the efficacy of traditional plant medicines can be expected to lead to more effective and culturally sensitive cancer treatment programs. This research is being carried out within the context of how integrative health care may enhance the quality of life for cancer patients and their families in New Brunswick.

The first phase of the project has been underway over the summer. A literature and statistics review is being carried out by Sean Ashley, an Honour's student in Sociology/Anthropology at Mount Allison University. The next steps include producing a listing of plants of interest and cross-referencing these with scientific results on plants tested in other parts of North America and the world. Information will be compiled on the incidence and prevalence of cancer among New Brunswick Mikmaq from national, provincial and community sources in order to make statistical comparisons with non-Natives in New Brunswick; and consideration will be given to options for cancer prevention and control strategies and services that integrate mainstream and traditional practices and practitioners.

Current background knowledge

In his book on phytomedicinals, Tyler (178-181) writes about cancer: "The origin of cancer (carcinogenesis) has been intensively studied, but definitive results have not been obtained. It apparently results from complicated interactions of viruses, carcinogenic substances or conditions, immunologic factors, and diet. Some of the known carcinogens include radiation (the most dangerous), asbestos, aromatic hydrocarbons and benzopyrene, various alkylating agents, and tobacco. A high-fat diet and excessive use of estrogens have also been implicated.

Because of its life-threatening nature, cancer is not a disease that is amenable to self-treatment. However, some plant drugs are currently used professionally in its treatment with good results (bold mine), and others are

recommended by irresponsible herbalists." Tyler then lists under significant anticancer herbs,

- Catharanthus roseus G. Don (family Apocynaceae), "the constituents
 of which are successfully used in the treatment of cancer." This
 species is not found in the region but a member of the same genus
 grows in the region;
- Podophyllum peltatum L/ (family Berberidaceae), commonly known as mayapple, is found in this region;
- Taxus brevifolia Nutt. (Family Taxaceae), common name Pacific Yew, is not found here, but of only two species of the Yew family represented in North America, one species Taxus canadensis Marsh grows in this region.

In addition to what Tyler identifies as anticancer herbs, ethnobotany suggests more research is required in First Nations' pharmacopoeia, especially in eastern Canada. Dr. Nancy Turner's extensive work in British Columbia lists plants used for cancer (e.g. "silver spruce" 1990:101). My own conversations with Sophie Thomas, a Carrier elder in Prince George, identified plants she uses to treat cancer. The ethnobotanical literature, and my own field research, point to the potential of other plants for immune system strengthening, pain management, and related benefits. Echinaceae, for example, may have benefit for treating side effects of radiation therapy but, as of 1991, this remained unproven (Tyler). More current information may surface through the literature review since this plant is being tested extensively. In Sitka, Alaska, Devil's Club [Oplopanax horridus] is a traditional Tlingit remedy for diabetes, cancer and other diseases and afflictions. Amongst other uses, it has been proven to be an effective immune system strengthener. The regional hospital has introduced a program for Native American cancer patients that integrates traditional healers and the use of Devil's Club with physician-based hospital treatments. While the focus of this project is medicinal plants, these are reviewed within the broader context of traditional medicine which looks at the relationship between Mikmag traditional healers and their clients in order to understand conceptualization of cancer within the Mikmag worldview of disease, health, and mind/body/spirit interaction.

The ethnobotanical literature on First Nations (Canadian) and Native American (U.S.) medicinal plants is extensive and rapidly expanding (e.g. Crump, Johnston, Kari, Kroeber, Kuhnlein et al, Lacey, Lamon, Leighton, Moerman, Moore, Ritch-Krc, Webber, Yinka Dene Language Institute, Yukon Archives). Work carried out on Mikmaq ethnobotany includes Lacey (1993) on medicinal plants and Pritchard (1991) on language related to health and healing. While these are useful lay guides, they do not link the ethnographic and the scientific data, go into depth about plant use or preparation, or focus on cancer. They do, however, suggest directions for research; for example, Lacey mentions briefly that "the buttercup was also used to treat cancer" (82). Chandler et al, Speck and Dexter, provide specifics about New Brunswick Mikmaq but not specifically on plants and cancer.

The Centre for Cross-Cultural Study of Health and Healing at the University of Alberta has carried out extensive research on medicinal plants (Young), and on the integration of First Nations community healthcare with mainstream medicine. Their literature review (Young and Smith 1992) provides a substantial base but needs to be updated. Their focus is not cancer, but they provide valuable case studies and models of integrated health care, as well as comparative data on medicinal plants used in China (where extensive testing is underway) and by a diverse range of North American Indian cultures.

Koolage, Kaufert and O'Neil (Kaufert, Kaufert et al., Kaufert and O'Neil, O'Neil) developed a model of cross-cultural health care referral and communication suggested by the work of Indian medical interpreters in urban hospitals that could be usefully adapted in other urban and rural contexts to facilitate improved collaboration between the systems. Culture brokers acting as medical advocates allow the systems to continue functioning on their own terms. They also ensure that, when both health care systems are functioning in the same illness episode, patients' rights to the treatment of choice are respected. Their study provides models for integrating Mikmaq traditional plant knowledge with mainstream cancer control and prevention programs in New Brunswick.

Both ethnobotany and biomedicine traditionally isolate the active ingredient of plants. Documentation of medicinal plants needs to be broad to encompass the activities of gathering, identification, preparation, application and variables such as gender and age of the patient. Barsh points out how little attention has been paid in the ethnobotanical literature to the prescription of traditional remedies; further, traditional healing systems do not simply match drugs with diseases, but acknowledge the individuality of patients' physiologies, and employ complex models for combining remedies into individually-tailored compounds. The effectiveness of remedies used in traditional pharmacopeiae requires careful preparation, including compounding, to ensure strong, selective and nontoxic effects.

Research in these areas needs to address issues about how knowledge is obtained and transmitted. Plant knowledge is specialized and individualized as well as communal. It may be centralized or spread amongst communities, suggesting that intra and inter community links will be beneficial for patients. Current initiatives in traditional medicine also suggest that interventions should be community-based rather than individualized (Elkins et al:51). A traditional knowledge approach looks at how traditional practitioners can be recognized and supported to continue to apply their knowledge. It also considers how the following affect safety, efficacy and active principles: dosage and whether application is topical, injected, consumed orally, applied locally, whether it is taken in powder form, in water or alcohol, if steeped or boiled, if it is held in the mouth for a period of time before swallowing, etc.; season, habitat, altitude, whether used at different stages of life cycle, associations with other plants; the patient/healer relationship; harvesting, processing and storage techniques and equipment, ceremonies involved, restrictions; combinations of plants, or combinations of parts (roots, leaves, flower) of the same plants.

Significance of the project for advancing knowledge on cancer control and prevention in New Brunswick Cancer incidence and mortality rates are not uniform across Canada, tending to be above average in the Maritime provinces (Statistics Canada 1998). Amongst Aboriginal People in Canada, the most recent issue of Health Reports to address Aboriginal health and

cancer, points out findings suggesting that cancers generally occur at a frequency not significantly different from the total population (ibid), with some cancers higher, some lower. It points out, however, that "While cancer incidence in the Inuit has been well-documented, less is known about cancer patterns in Canada's native Indian population" (Statistics Canada 1993). Neither Statistics Canada nor Canadian Cancer Statistics, for example, break down their data to provide information about Aboriginal People and cancer.

Young, Kunstadter and others have pointed out the cost-effectiveness of integrative approaches, but globally there has been little progress in actually utilizing indigenous practitioners in national systems (Green). This project will make preliminary recommendations about how traditional plant medicine and traditional healers may enhance culturally-sensitive care and treatment for Mikmaq cancer patients and their families in New Brunswick. It will also provide information for health care practitioners and program administrators (see related literature by Medicine, Rappaport, Thomas) to understand emic/Mikmaq conceptions of cancer within the context of the body and disease, with the aim of facilitating provincial service delivery of cancer prevention and treatment strategies.

Removing Barriers II: Keeping Canadian Values in Health Care

l'élimination des obstacles II: Honorer les valeurs canadiennes dans le système de la santé

Inclusion: An endeavor to insure that all voices are heard, and no one is excluded in health and health reforms.

Inclusion : L'assurance que toutes les opinions sont entendues et qu'aucun parti n'est laissé pour compte dans le domaine de la santé et au niveau de la réforme de la santé.

Diversity: An acknowledgment that Canadians come from **diverse** backgrounds, lifestyles and characteristics.

Diversité : La reconnaissance que les Canadiens et les Canadiennes proviennent de différents milieux et qu'ils ont des habitudes de vie et des comportements différents.

Social Justice: An effort to reduce inequalities, and address issues of the more vulnerable or marginalized.

Équité sociale : La réduction des inégalités et la réponse aux besoins des personnes vulnérables et marginalisées.

The objective of the Removing Barriers initiative is to bring health issues of vulnerable or marginalized communities to the attention of health care professionals, agencies, organizations and systems across Canada. A national consensus statement, **Declaration on Values in Health Care in Canada**, was developed as a result of the Removing Barriers initiative to reflect policy directions for inclusion, diversity and social justice within health care.

Le projet d'élimination des obstacles vise à attirer l'attention des professionnels, des agences, des organismes et des systèmes de la santé au Canada sur les questions de santé des communautés vulnérables et marginalisées. Un énoncé de consensus national, la Déclaration sur les valeurs dans le système de santé au Canada, a été élaboré à la suite du symposium sur l'élimination des obstacles afin de refléter les directions à prendre en matière de politique sur l'inclusion, la diversité et l'équité sociale au sein du système de santé.