Traditional Medicine for Aboriginal Health & Wellness

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This bibliography is a selected list of books, DVDs, and articles on traditional medicines used by First Nations people or Native Americans. Please contact the Neil John Maclean Health Sciences Library if you are looking for information on cross-cultural care, traditional healing ceremonies, and patient education materials on medicines such as sage, cedar, tobacco and sweetgrass.

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**See the following list online at http://tinyurl.com/TM-DVDs**

*Aboriginal women healing themselves, their families and their communities: The case of the Minwaashin Lodge* (2008). Ottawa, ON: Canadian Research Institute for the Advancement of Women
Location: NJM Health Sciences Library Aboriginal Health Collection
Call Number: WA 309 DC2 A154a 2008

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Call Number: E 99 D1 C37L2 2003

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Call Number: WB 50 O96o 2008
NJM Health Sciences Library Aboriginal Health Collection
Call Number: BL 624 P214n 2007

NJM Health Sciences Library Aboriginal Health Collection
Call Number: WA 309 N263n 2004


**DVDs**

Call Number: WM 75 A514a 2005 AV

Aboriginal Health Collection
Call Number: WB 50 DC2 M489m 1995 AV
*Note: There is also a copy at the Elizabeth Dafoe Library E 98 M4 M43 1995 DVD*

Aboriginal Health Collection
Call Number: WB 50 I55i 2001 DVD

Aboriginal Health Collection
Call Number: WB 50 I55i 2001 DVD

Aboriginal Health Collection
Call Number: WB 50 DC2 S974s 1999 AV

NJM Health Sciences Library Aboriginal Health Collection
Call Number: E 99 C92 N278n 2007 AV

*Note: The following book can be used with the DVD, Native Spirit: The Sun Dance Way*

NJM Health Sciences Library Aboriginal Health Collection
Call Number: E 99 C92 Y43h 2007
Journal Articles

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Through advances in interpretive inquiry, diverse ways of knowing and experiencing reality are increasingly made explicit in nursing literature. Nevertheless, the privileges of empiricism continue alongside a lack of language to consider other realms of reality. In this column, Aboriginal ways of constituting health and reality are explored. Morley's four categorizations of health belief systems provide a useful tool for understanding diverse worldviews. In contrast, Atleo drew on Nuu-chah-nulth origin stories to address the complexities and ambiguities of Aboriginal health beliefs. Approaches for bridging cultural differences are explored with a view toward inclusive healthcare and nursing practice.


The more than one hundred different Native American Indian cultures of the United States and Canada developed a rich pharmacopoeia before contact with Europeans began in the fifteenth century. Together these Native American groups contributed 220 indigenous drugs to "The Pharmacopoeia of the United States of America." Some of these remedies are used today in North America, Europe and elsewhere. © 2003 Prous Science. All rights reserved.


There is a growing interest in medicinal botanicals as part of complementary medicine in the United States. In particular, both physicians and consumers are becoming aware of the use of herbs by Native American societies; many botanicals sold today as dietary supplements in the United States were used by Native Americans for similar purposes. Yet, these supplements represent only a small number of the >2500 different plant species from vascular taxa, and >2800 species from all taxa, known to have been prized for their medicinal properties by the indigenous inhabitants of the North American continent. We review some of the studies of the immunomodulatory activities of botanicals used by native peoples of North America, the bioactive constituents responsible for those activities, and the mechanisms by which these constituents might modulate the immune system. We focus particularly on 3 species of purple coneflower (ECHINACEA:) because of the widespread use of purple coneflower in the United States to boost immunity and prevent upper respiratory infections. Seven of the 10 most common botanicals sold in the United States were used extensively by Native Americans. However, there are very few data to support such use and even less information about drug toxicity or interactions.


Herbal medicine has a long history in Canadian therapeutics. It is integrated with the ethnocultural medical traditions of aboriginals, settlers and immigrants. Phytotherapy constituted the dominant source of medications until they were largely replaced by synthetic allopathic products in the mid-twentieth century. There has been pressure to revise the Food and Drug Act to accommodate the resurgence of demand for complementary medicines. Following extensive public hearings a National Health Products Directorate was established within Health Canada. A new framework is being developed for regulation of natural health products including herbal agents. Access, quality, safety and efficacy are major considerations in this process. © 2001 by The Haworth Press, Inc. All rights reserved.

Illicit and prescription drug use disorders are two to four times more prevalent among Aboriginal peoples in North America than the general population. Research suggests Aboriginal cultural participation may be protective against substance use problems in rural and remote Aboriginal communities. As Aboriginal peoples continue to urbanize rapidly around the globe, the role traditional Aboriginal beliefs and practices may play in reducing or even preventing substance use problems in cities is becoming increasingly relevant, and is the focus of the present study.

Mainstream acculturation was also examined. Data were collected via in-person surveys with a community-based sample of Aboriginal adults living in a mid-sized city in western Canada (N=381) in 2010. Associations were analyzed using two sets of bootstrapped linear regression models adjusted for confounders with continuous illicit and prescription drug problem scores as outcomes. Psychological mechanisms that may explain why traditional culture is protective for Aboriginal peoples were examined using the cross-products of coefficients mediation method. The extent to which culture served as a resilience factor was examined via interaction testing. Results indicate Aboriginal enculturation was a protective factor associated with reduced 12-month illicit drug problems and 12-month prescription drug problems among Aboriginal adults in an urban setting. Increased self-esteem partially explained why cultural participation was protective.

Cultural participation also promoted resilience by reducing the effects of high school incompletion on drug problems. In contrast, mainstream acculturation was not associated with illicit drug problems and served as a risk factor for prescription drug problems in this urban sample. Findings encourage the growth of programs and services that support Aboriginal peoples who strive to maintain their cultural traditions within cities, and further studies that examine how Aboriginal cultural practices and beliefs may promote and protect Aboriginal health in an urban environment. © 2013 Elsevier Ltd.


Background: Neisseria gonorrhoeae (Ng) has developed resistance to most antimicrobial agents and the antibiotics recommended for therapy are restricted, for the most part, to third generation cephalosporins. In order to investigate new potential sources of antimicrobial agents, the antibacterial properties of 14 Canadian plants used in traditional First Nations' medicine were tested against Ng isolates having differing antimicrobial susceptibility profiles. Methods: Ethanol extracts of 14 Canadian botanicals, analyzed by high-performance liquid chromatography, were tested for their antimicrobial activity (disc diffusion and/or agar dilution assays) against susceptible Ng reference strains and a panel of 28 Ng isolates with various antimicrobial resistance profiles. Results: Extracts of Arctostaphylos uva ursi (kinnikinnick or bearberry), Hydrastis canadensis (goldenseal), Prunus serotina (black cherry), and Rhodiola rosea (root) inhibited the growth of all Ng isolates with minimum inhibitory concentrations of 32 µg/mL, 4 to 32 µg/mL, 16 to >32 µg/mL, and 32 to 64 µg/mL, respectively. Extracts of Acorus americanus (sweet flag), Berberis vulgaris (barberry), Cimicifuga racemosa (black cohosh), Equisetum arvense (field horsetail), Gaultheria procumbens (wintergreen), Ledum groenlandicum (Labrador tea), Ledum palustre (marsh Labrador tea), Oenothera biennis (common evening primrose), Sambucus nigra (elderberry), and Zanthoxylum americanum (prickly ash) had weak or no antimicrobial activity against the Ng isolates with minimum inhibitory concentrations ≥256 µg/mL. The phytochemical berberine from H. canadensis inhibited the growth of all Ng isolates. The phytochemicals, salidroside and rosavin, present in R. rosea, also showed inhibitory activity against Ng strains. Conclusion: Canadian botanicals represent a potential source of novel compounds which inhibit Ng, including isolates resistant to antibiotics. © 2011 American Sexually Transmitted Diseases Association All rights reserved.


Accidents, violence, and certain chronic diseases kill American Indians greatly out of proportion to other racial groups. Complex interactions between previously adaptive survival mechanisms, historical and cultural factors, and U.S. policy must be understood to respond effectively to these health issues. The traditional medicine wheel provides a conceptual framework that is culturally grounded and also supported by solid scientific research. Research related to complex

This qualitative study informs the literature by bringing two perspectives together: the trauma of residential school abuse and the transpersonal viewpoint of healing. A phenomenological hermeneutic approach explored lived experiences of residential school survivors and their families. Transpersonal psychology was introduced as the focus for a new healing paradigm. The research questions ask, "What has been the lived experience of the trauma of residential school abuse" and "How are traditional and non-traditional healing practices mutually applied in the recovery process by individuals who are impacted by the residential school experience"? Five First Nations co-researchers were interviewed, the data was analyzed, coded, and a thematic analysis was undertaken from which six themes emerged. The results of this study may go on to employ this new healing paradigm to help First Nations people gain spiritual wholeness. Finally, a description and summary of research findings, limitations and implications for counselling were discussed. © 2013 Springer Science+Business Media New York.
Garro, L. C. (1990). Continuity and change: The interpretation of illness in an anishinaabe (ojibway) community. *Culture, Medicine and Psychiatry, 14*(4), 417-454. Rich descriptions of Anishinaabe medical knowledge and the cultural meanings associated with illness are available in the anthropological literature, especially in the writings of A.I. Hallowell. Most of this work is based on fieldwork carried out prior to 1940 and was often motivated by a desire to reconstruct the pre-contact situation. Since that time, there have been numerous changes affecting health status and health care. This paper examines lay medical knowledge in a
contemporary Canadian Anishinaabeg community, with particular attention to change and continuity in the way people explain and respond to the occurrence of illness.


Gone, J. P. (2011). The red road to wellness: Cultural reclamation in a native first nations community treatment center. *American Journal of Community Psychology, 47*(1), 187-202. This article explores how Native American cultural practices were incorporated into the therapeutic activities of a community-controlled substance abuse treatment center on a "First Nations" reserve in the Canadian north. Analysis of open-ended interviews with nineteen staff and clients-as contextualized by participant observation, program records, and existing ethnographic resources-yielded insights concerning local therapeutic practice with outpatients and other community members. Specifically, program staff adopted and promoted a diverse array of both western and Aboriginal approaches that were formally integrated with reference to the Aboriginal symbol of the medicine wheel. Although incorporations of indigenous culture marked Lodge programs as distinctively Aboriginal in character, the subtle but profound influence of western "therapy culture" was centrally evident in healing activities as well. Nuanced explication of these activities illustrated four contributions of cultural analysis for community psychology. © 2010 Society for Community Research and Action.

Gone, J. P. (2013). Redressing first nations historical trauma: Theorizing mechanisms for indigenous culture as mental health treatment. *Transcultural Psychiatry, 50*(5), 683-706. Indigenous "First Nations" communities have consistently associated their disproportionate rates of psychiatric distress with historical experiences of European colonization. This emphasis on the socio-psychological legacy of colonization within tribal communities has occasioned increasingly widespread consideration of what has been termed historical trauma within First Nations contexts. In contrast to personal experiences of a traumatic nature, the concept of historical trauma calls attention to the complex, collective, cumulative, and intergenerational psychosocial impacts that resulted from the depredations of past colonial subjugation. One oft-cited exemplar of this subjugation - particularly in Canada - is the Indian residential school. Such schools were overtly designed to "kill the Indian and save the man." This was institutionally achieved by sequestering First Nations children from family and community while forbidding participation in Native cultural practices in order to assimilate them into the lower strata of mainstream society. The case of a residential school "survivor" from an indigenous community treatment program on a Manitoba First Nations reserve is presented to illustrate the significance of participation in traditional cultural practices for therapeutic recovery from historical trauma. An indigenous rationale for the postulated efficacy of "culture as treatment" is explored with attention to plausible therapeutic mechanisms that might account for such recovery. To the degree that a return to indigenous tradition might benefit distressed First Nations clients, redressing the socio-psychological ravages of colonization in this manner seems a promising approach worthy of further research investigation. © The Author(s) 2013.

Green, B. L. (2010). Culture is treatment: Considering pedagogy in the care of aboriginal people. *Journal of Psychosocial Nursing and Mental Health Services, 48*(7), 27-34. This article presents an overview of culture is treatment, by recognizing the impact that culture has on treatment along with the specific rituals, customs, and meanings related to healing. Attention must be given to the Aboriginal heritage, including various concepts of metaphysics, spirituality, medicines, government, oral history, and language. A pedagogical underpinning of illness and healing is better cared for through cultural messaging and learning that is related to the complex historical legacy of Aboriginal societies, and therefore, culture provides important diverse contributions to current treatment and wellness programs. © SLACK Incorporated.

Canadian Aboriginals, like others globally, suffer from disproportionately high rates of diabetes. A comprehensive evidence-based approach was therefore developed to study potential antidiabetic medicinal plants stemming from Canadian Aboriginal Traditional Medicine to provide culturally adapted complementary and alternative treatment options. Key elements of pathophysiology of diabetes and of related contemporary drug therapy are presented to highlight relevant cellular and molecular targets for medicinal plants. Potential antidiabetic plants were identified using a novel ethnobotanical method based on a set of diabetes symptoms. The most promising species were screened for primary (glucose-lowering) and secondary (toxicity, drug interactions, complications) antidiabetic activity by using a comprehensive platform of in vitro cell-based and cell-free bioassays. The most active species were studied further for their mechanism of action and their active principles identified though bioassay-guided fractionation. Biological activity of key species was confirmed in animal models of diabetes. These in vitro and in vivo findings are the basis for evidence-based prioritization of antidiabetic plants. In parallel, plants were also prioritized by Cree Elders and healers according to their Traditional Medicine paradigm. This case study highlights the convergence of modern science and Traditional Medicine while providing a model that can be adapted to other Aboriginal realities worldwide. Copyright © 2012 Pierre S. Haddad et al.


The health of Aboriginal peoples in Canada has been compared to that of people in third world countries. Shkagamik-Kwe Health Centre, an Aboriginal-based primary health centre, was recently established to address the unique needs of the Aboriginal population in one area of an urban community in Canada. The purpose of this paper is to describe the Shkagamik-Kwe Health Centre in terms of the history of its development within the Aboriginal Healing and Wellness Strategy and its current programs, with particular emphasis placed on how traditional Aboriginal healing and health practices are being utilized within a multi-disciplinary team approach.


Studies have shown that anthocyanins present in berry fruits have some beneficial health effects such as reducing age-associated oxidative stress and possessing anti-inflammatory properties. Therefore, six Manitoba berries (wild blueberry, Saskatoon berry, raspberry, chokecherry, strawberry, and seabuckthorn) were studied for their anthocyanin compositions (mg/100 g) on dry weight basis. Saskatoon berry and wild blueberry showed a high content of total anthocyanins (562.4 and 558.3 mg/100 g, respectively) that were not significantly (P > 0.05) different from each other. The corresponding values for other berries: raspberry (365.2 mg/100 g), chokecherry (177.39 mg/100 g), and strawberry (97.5 mg/100 g) were significantly different from each other (P < 0.05), and the total anthocyanin content of seabuckthorn was negligible (0.84 mg/100 g). Fifteen major anthocyanins were isolated from Manitoba berries. Saskatoon berry and wild blueberry contained higher amounts of delphinidin 3-glucoside (Dp-3-glc), malvidin 3-glucoside (Mv-3-glc), and malvidin 3-galactoside (Mv-3-gal). Dp-3-glc was 263.8 (mg/100 g) in Saskatoon berry and 84.4 (mg/100 g) in wild blueberry, whereas the corresponding values for Mv-3-glc in these berries were 47.4 and 139.6 (mg/100 g), respectively. Raspberry, strawberry, and chokecherry contained higher amounts of cyanidin 3-glucoside (Cy-3-glc), cyanidin 3-rutinoside (Cy-3-rut), and pelargonidin 3-glucoside (Pg-3-glc). The total anthocyanin content of Manitoba fruits followed the order: Saskatoon berry and blueberry (high anthocyanin berries), raspberry and chokecherry (medium anthocyanin berries), strawberry (low anthocyanin berries), and seabuckthorn (negligible anthocyanin berries). This study demonstrated that Saskatoon berries and wild blueberries have high potential value for fruit growers as well as the food and nutraceutical manufacturers because of their high anthocyanin contents. © 2007 American Chemical Society.

The paper presents a historically unique partnership between an American Southwestern, Catholic faith-based, urban hospital and a program it sponsored on the spirituality of American Indian Traditional Indian Medicine (TIM) by a Comanche medicine man. A discussion is offered on the cultural partnerships, experiences and benefits achieved through the cultural accommodations of these spiritual beliefs and practices within this healthcare system. The theory of Culture Care Diversity and Universality (Culture Care Theory), including the Sunrise Enabler, is applied in discussion of these past experiences to explore the relationships among and between the participating cultures. The intent of the partnerships within this program was not to 'learn Indian healing ceremonies' but to share the philosophy of TIM with all people (clients and professionals) as a means to enhance their own way of living. Examples of actual nursing decisions and actions are provided including outcomes from the program within the healthcare system and globally.


With a phenomenal expected growth in the Canadian Aboriginal population and the fact that less than 1% of Canadian health professionals are of Aboriginal ancestry, there is an increased need for culturally competent health professionals. This article explains diverse healing traditions and links those traditions to holistic nursing practice. Respect for culturally sensitive care is necessary for understanding Aboriginal peoples in different contexts. We suggest that nursing practice, which takes into consideration the understanding of Aboriginal healing traditions, strengthens the intention of nurses to be holistic. Holism in nursing allows the profession to be on the forefront of understanding Aboriginal healing traditions; the linking of holistic nursing practice with Aboriginal healing traditions offers a foundation on which to build culturally competent care.


This ethnographic study explored the question, How do urban-based First Nations peoples use healing traditions to address their health issues? The objectives were to examine how Aboriginal traditions addressed health issues and explore the link between such traditions and holism in nursing practice. Data collection consisted of individual interviews, participant observations, and field notes. Three major categories that emerged from the data analysis were: following a cultural path, gaining balance, and sharing in the circle of life. The global theme of healing holistically included following a cultural path by regaining culture through the use of healing traditions; gaining balance in the four realms of spiritual, emotional, mental, and physical health; and sharing in the circle of life by cultural interactions between Aboriginal peoples and non-Aboriginal health professionals. Implications for practice include incorporating the concepts of balance, holism, and cultural healing into the health care services for diverse Aboriginal peoples. © 2006 Sage Publications.


Black cohosh (Actaea racemosa/Cimicifuga racemosa) is a North American perennial plant that has been used for traditional medicinal purposes by the native Indian population. Its modern day application is the treatment of menopausal symptoms. Unlike conventional non-herbal medications, herbal preparations have not been systematically evaluated for their safety. However, the evidence from in vitro, animal and clinical studies all suggest that black cohosh is a safe herbal therapy for menopausal women if taken for a limited period. More research is needed to evaluate the safety of this herb over longer periods of time, and also to further investigate its mechanism of action. © 2004 Ashley Publications Ltd.


OBJECTIVE: To explore perspectives on the meaning of health to Aboriginal adults and youth living in a northern Manitoba First Nations community. METHODS: Six focus groups with 29 youth and individual interviews with 10 adults were audio-recorded, transcribed verbatim and
thematically analyzed. RESULTS: Adults and older youth used aspects of health depicted in the Medicine Wheel to describe being healthy, but younger youth were not as specific. Both generations spoke about the importance of positive adult role models (emotional health), incorporation of traditional First Nations practices into everyday life (spiritual health), changes in diet and activity (physical health) and the significance of making good choices (mental health). CONCLUSIONS: Participants incorporated aspects of current and traditional lifestyles into their discussion of health. Use of the Medicine Wheel to conceptualize health holistically on the part of both adults and older youth suggest that it may be an effective way to frame health promotion strategies for younger youth. Because it is in harmony with cultural values, such an approach may influence other members of this community to adopt healthful lifestyle practices.

OBJECTIVE: To understand the development of culturally based and community-based alcohol and substance abuse treatment programs for aboriginal patients in an international context.
SOURCES OF INFORMATION: MEDLINE, HealthSTAR, and PsycINFO databases and government documents were searched from 1975 to 2007. MeSH headings included the following: Indians, North American, Pacific ancestry group, aboriginal, substance-related disorders, alcoholism, addictive behaviour, community health service, and indigenous health. The search produced 150 articles, 34 of which were relevant; most of the literature comprised opinion pieces and program descriptions (level III evidence). MAIN MESSAGE: Substance abuse in some aboriginal communities is a complex problem requiring culturally appropriate, multidimensional approaches. One promising perspective supports community-based programs or community mobile treatment. These programs ideally cover prevention, harm reduction, treatment, and aftercare. They often eliminate the need for people to leave their remote communities. They become focuses of community development, as the communities become the treatment facilities. Success requires solutions developed within communities, strong community interest and engagement, leadership, and sustainable funding. CONCLUSION: Community-based addictions programs are appropriate alternatives to treatment at distant residential addictions facilities. The key components of success appear to be strong leadership in this area; strong community-member engagement; funding for programming and organizing; and the ability to develop infrastructure for long-term program sustainability. Programs require increased documentation of their inroads in this developing field.

BACKGROUND: The use of plants for healing by any cultural group is integrally related to local concepts of the nature of disease, the nature of plants, and the world view of the culture. The physical and chemical properties of the plants themselves also bear on their selection by people for medicines, as does the array of plants available for people to choose from. I examine use of medicinal plants from a "biobehavioral" perspective to illuminate cultural selection of plants used for medicine by the Gitksan of northwestern British Columbia, Canada. METHODS: Consultant consensus, "intercultural consensus", independent use of the same plants by other cultural groups, and phytochemistry and bioassay results from the literature, were employed in analysis of probable empirical efficacy of plant uses. RESULTS: 70% of 37 Gitksan medicinal plants were used similarly by other cultures where direct diffusion is not known to have occurred; eleven plants, including the eight most frequently mentioned medicinal plants, also show active phytochemicals or bioassays indicating probable physiologically based therapeutic effects. CONCLUSION: Analysis of intercultural consensus revealed that the majority of cultures in the British Columbia region within the plant ranges use the same plants, or closely related species, in similar ways. The rigor of this analysis is effected by the lack of consistent data on all taxa of interest for all cultures within the region.

Native American traditional medicine is alive and vibrant in many North American societies, although not all. These traditions coexist with other forms of healing, and the particular patterns of existence, interaction, and meaning vary among groups. The literature examining these issues is likewise diverse. This article explores, through a selective review of the recent literature, how
social and behavioral scientists, among others, are focusing their investigations of traditional and alternative medicine in Native American communities of the United States and Canada today. Issues include how native practices have persisted and changed, how they are being used (e.g., in framing cultural identity), and how they interact with other systems, especially biomedicine and faith healing.


From literature describing medicinal usage of plants by First Nations Peoples in eastern Canada, 18 eastern Canadian plants were selected and tested for their antifungal activities. Eight randomly selected tropical plants were also tested for comparative purposes. Four groups of plants were obtained: popular antimicrobial-remedy (n = 6), popular non-antimicrobial-remedy (n = 6), random temperate (n = 6) and random tropical (n = 8). Extracts from these plants were tested in disk assays as growth inhibitors of six fungi known to be opportunistic human pathogens (Saccharomyces cerevisiae, Cryptococcus neoformans, Candida albicans, Aspergillus fumigatus, Microsporum gypseum and Trichophyton mentagrophytes). Of the four plant groups tested, extracts from the popular antimicrobial-remedy group were significantly more effective at inhibiting fungal growth based on both overall antifungal activity and number of fungal species inhibited. (C) 2000 Elsevier Science Ireland Ltd.


Objective: To identify issues and concepts to guide the development of culturally appropriate mental health promotion strategies with Aboriginal populations and communities in Canada.

Methods: We review recent literature examining the links between the history of colonialism and government interventions (including the residential school system, out-adoption, and centralised bureaucratic control) and the mental health of Canadian Aboriginal peoples.

Results: There are high rates of social problems, demoralisation, depression, substance abuse, suicide and other mental health problems in many, though not all, Aboriginal communities. Although direct causal links are difficult to demonstrate with quantitative methods, there is clear and compelling evidence that the long history of cultural oppression and marginalisation has contributed to the high levels of mental health problems found in many communities. There is evidence that strengthening ethnocultural identity, community integration and political empowerment can contribute to improving mental health in this population.

Conclusions: The social origins of mental health problems in Aboriginal communities demand social and political solutions. Research on variations in the prevalence of mental health disorders across communities may provide important information about community-level variables to supplement literature that focuses primarily on individual-level factors. Mental health promotion that emphasises youth and community empowerment is likely to have broad effects on mental health and wellbeing in Aboriginal communities.


The notions of resilience that have emerged in developmental psychology and psychiatry in recent years require systematic rethinking to address the distinctive cultures, geographic and social settings, and histories of adversity of indigenous peoples. In Canada, the overriding social realities of indigenous peoples include their historical rootedness to a specific place (with traditional lands, communities, and transactions with the environment) and the profound displacements caused by colonization and subsequent loss of autonomy, political oppression, and bureaucratic control. We report observations from an ongoing collaborative project on resilience in Inuit, Métis, Mi’kmaq, and Mohawk communities that suggests the value of incorporating indigenous constructs in resilience research. These constructs are expressed through specific stories and metaphors grounded in local culture and language; however, they can be framed more generally in terms of processes that include: regulating emotion and supporting adaptation through relational, ecocentric, and cosmo-centric concepts of self and personhood; revisioning collective history in ways that valorize collective identity; revitalizing language and culture as resources for narrative self-fashioning, social positioning, and healing; and renewing individual and collective agency through political activism, empowerment, and reconciliation. Each of these sources of resilience can be understood in dynamic terms as emerging from interactions between
individuals, their communities, and the larger regional, national, and global systems that locate and sustain indigenous agency and identity. This social-ecological view of resilience has important implications for mental health promotion, policy, and clinical practice.

Kolb, V. M. (2002). Herbal medicine of Wisconsin Indians. *Progress in Drug Research, 58*, 51-97. In this chapter we will familiarize the reader with selected aspects of the herbal medicine of Wisconsin Indians. We will concentrate on the Menominee, Potawatomi, Ojibwe and Meskwaki tribes. We will address the following topics: (1) selected methods for research in the existing literature to reveal both the identity and the chemical composition of plants which Indians used for medicinal purposes; (2) some aspects of Indian medicine, such as the mode of delivery of herbal drugs, extensive use of plant mixtures, and other practices; (3) selected literature resources on comparison of uses of medicinal plants among different North American Indian tribes and contemporary white men.

Korn, L., Logsdon, R. G., Polissar, N. L., Gomez-Beloz, A., Waters, T., & Ryser, R. (2009). A randomized trial of a CAM therapy for stress reduction in American Indian and Alaskan Native family caregivers. *The Gerontologist, 49*(3), 368-377. doi:10.1093/geront/gnp032 PURPOSE: Although it is widely recognized that caregivers of individuals with dementia experience elevated stress that places them at increased risk for health problems, little is known about how caregiving stress may be alleviated among underserved ethnic minority populations. The purpose of this study was to compare a complementary and alternative medicine therapy, polarity therapy (PT), to an enhanced respite control condition (ERC) to reduce stress and depression and improve quality of life for American Indian (AI) and Alaskan Native family caregivers. DESIGN AND METHODS: Forty-two AI family caregivers of individuals with dementia, living on and off reservations in the Pacific Northwest, were randomized to an 8-session trial of PT or ERC. PT is a touch therapy that uses gentle pressure on energy points and biofields to help the client achieve physiological relaxation. ERC included respite care for the person with dementia and a choice of activities for the caregiver. Average age of caregivers was 50 years (range 27-69 years); 90% were women; 52% daughters, 10% wives, 7% sons, and 31% other relatives. Outcome assessments administered at baseline and posttreatment included caregiver perceived stress, depression, quality of life, sleep quality, worry, and physical health. RESULTS: PT participants improved significantly more than ERC participants on stress (p = .01), depression (p = .045), bodily pain (p = .02), vitality (p = .03), and general health (p = .01). IMPLICATIONS: These results indicate that the delivery of PT to AI dementia family caregivers is feasible and culturally acceptable and may be an important approach to reducing stress, depression, and pain.

Maar, M. A., Erskine, B., McGregor, L., Larose, T. L., Sutherland, M. E., Graham, D., ... Gordon, T. (2009). Innovations on a shoestring: A study of a collaborative community-based Aboriginal mental health service model in rural Canada. *International Journal of Mental Health Systems, 3* Background: Collaborative, culturally safe services that integrate clinical approaches with traditional Aboriginal healing have been hailed as promising approaches to ameliorate the high rates of mental health problems in Aboriginal communities in Canada. Overcoming significant financial and human resources barriers, a mental health team in northern Ontario is beginning to realize this ideal. We studied the strategies, strengths and challenges related to collaborative Aboriginal mental health care. Methods: A participatory action research approach was employed to evaluate the Know Chi Ge Win services and their place in the broader mental health system. Qualitative methods were used as the primary source of data collection and included document review, ethnographic interviews with 15 providers and 23 clients; and 3 focus groups with community workers and managers. Results: The Know Chi Ge Win model is an innovative, community-based Aboriginal mental health care model that has led to various improvements in care in a challenging rural, high needs environment. Formal opportunities to share information, shared protocols and ongoing education support this model of collaborative care. Positive outcomes associated with this model include improved quality of care, cultural safety, and integration of traditional Aboriginal healing with clinical approaches. Ongoing challenges include chronic lack of resources, health information and the still cursory understanding of Aboriginal healing and outcomes. Conclusions: This model can serve to inform collaborative care in other rural and Indigenous mental health systems. Further research into traditional Aboriginal approaches to mental health is needed to continue advances in collaborative practice in a clinical setting. © 2009 Maar et al; licensee BioMed Central Ltd.
Mainguy, B., Valenti Pickren, M., & Mehl-Madrona, L. (2013). Relationships between level of spiritual transformation and medical outcome. *Advances in Mind-Body Medicine, 27*(1), 4-11. Culturally defined healers operate in most of the world, and to various degrees, blend traditional healing practices with those of the dominant religion in the region. They practice more or less openly and more or less in conjunction with science-based health professionals. Nonindigenous peoples are seeking out these healers more often, especially for conditions that carry dire prognoses, such as cancer, and usually after science-based medicine has failed. Little is known about the medical outcomes of people who seek Native North American healing, which is thought by its practitioners to work largely through spiritual means. This study explored the narratives produced through interviews and writings of people working with traditional Aboriginal healers in Canada to assess the degree of spiritual transformation and to determine whether a relationship might exist between that transformation and subsequent changes in medical outcome. Before and after participation in traditional healing practices, participants were interviewed within a narrative inquiry framework and also wrote stories about their lives, their experiences of working with traditional healers, and the changes that the interactions produced. The current study used a variety of traditional healers who lived in Alberta, Saskatchewan, and Manitoba. Urban and Rural Reserves of the Canadian Prairie Provinces. One hundred fifty non-Native individuals requested help from Dr Mehl-Madrona in finding traditional Aboriginal healing and spiritual practitioners and agreed to participate in this study of the effects of their work with the healers. The healers used methods derived from their specific cultural traditions, though all commonly used storytelling. These methods included traditional Aboriginal ceremonies and sweat lodge ceremonies, as well as other diagnosing ceremonies, such as the shaking tent among the Ojibway or the yuwipi ceremony of the Dakota, Nakota, and Lakota, and sacred-pipe-related practices. The research team used a combination of grounded theory modified from a critical constructivist point of view and narrative analysis to rate the degree of spiritual transformation experienced. Medical outcome was measured by a 5-point Likert scale and was confirmed with medical practitioners and other family members. A 5-year follow-up revealed that 44 of the reports were assessed as showing profound levels of persistent spiritual transformation, defined as a sudden and powerful improvement in the spiritual dimension of their lives. The level of spiritual transformation achieved through interaction with healers was associated in a doseresponse relationship with subsequent improvement in medical illness in 134 of 155 people (P < .0001). The degree and intensity of spiritual transformation appeared related to the degree of physical and psychological change among people interacting with traditional North American Indigenous healers. Further research is warranted.

McCabe, G. (2008). Mind, body, emotions and spirit: Reaching to the ancestors for healing. *Counselling Psychology Quarterly, 21*(2), 143-152. This paper is a discussion of the meaning of the personal integrated inner body, mind, emotions and spirit dialogue from an Aboriginal perspective and the importance of placing this in a collective positioning of mental health and psychological treatment. The Aboriginal/Native American concept of the Medicine Wheel and the presence of balance and free will that are associated with it, burning tobacco, the power of story and the sweat lodge are used to ground and situate this discussion and demonstrate how traditional healing and the inner dialogue are linked. A discussion is offered as to the integration of traditional healing practices in counselling and psychotherapy and also how traditional healing is a culture and community based form of traditional counselling and psychotherapy. How the engagement of the inner dialogue of the body, mind, emotions and spirit helps to heal individuals, families and communities is discussed. © 2008 Taylor & Francis.

McCabe, G. H. (2007). The healing path: A culture and community-derived indigenous therapy model. *Psychotherapy, 44*(2), 148-160. In recent times, psychosocial intervention activities by Native/Aboriginal traditional healers have received much attention. There is a belief among many Native Americans and Aboriginal Canadians that their current problems are connected to past and contemporary traumas and that psychology as a profession has failed them and is even perceived as an agent of social control and hegemony. As a result, more and more Aboriginal people are turning to traditional ways for psychological healing. In this study, Aboriginal healers and healer clients participated in individual interviews and discussions related to their experiences and views as to what conditions they believe are helpful in effecting positive changes in behavior, cognitions, and emotions. Through

Over the past decade, intergenerational trauma as an explanation for the array of social conditions that exist within Aboriginal communities has been put forward by a number of researchers. This study explored the family histories of 21 Aboriginal men at a homeless shelter, seeking links between personal homelessness and intergenerational trauma. The indicators of intergenerational trauma within four domains are synthesized in the Intergenerational Trauma Model. Recognizing that the healing of intergenerational trauma at the individual level must include family, community and nation, traditional Aboriginal healing practices including healing circles, sweat-lodge, fasting, vision quest and other ceremonies can augment mainstream interventions and motivate the individual to further explore their deep rooted pain. Healing within the intergenerational trauma framework is a slow complicated process and is a difficult journey both for the therapist and the client.


Thirty-five plant species were selected from the published literature as traditionally used by the Indigenous Peoples of the boreal forest in Canada for three or more symptoms of diabetes or its complications. Antioxidant activities in methanolic extracts support the contribution of these traditional medicines in a lifestyle historically low in the incidence of diabetes. In a DPPH assay of free radical scavenging activity 89% of the methanol extracts had activity significantly greater than common modern dietary components, 14% were statistically equal to ascorbic acid and 23% had activities similar to green tea and a Trolox® positive control. Superoxides produced with an NBT/xanthine oxidase assay found scavenging was significantly higher in 29% of the species as compared with the modern dietary components and Trolox®. The methanol extracts of Rhus hirta, Quercus alba and Cornus stolonifera performed similarly to green tea’s in this assay. Assessment of peroxyl radical scavenging using a DCF/AAPH assay showed 60% of the plant extracts statistically similar to Trolox® while R. hirta and Solidago canadensis extracts were greater than green tea, ascorbic acid and Trolox®. The majority of the species (63 and 97%, respectively) had scavenging activities similar to ascorbic acid in the superoxide and peroxyl radical scavenging assays. © 2002 Elsevier Science Ireland Ltd. All rights reserved.


Background: The commonalities are described of 47 people who sought traditional aboriginal healers for help with their cancer. All had 10% or less chance of survival at 5 years given the site and stage of their cancer from actuarial table calculations. Subjects and design: The subjects were compared to a similar group of people who were also working with aboriginal healers and who did not survive past 5 years. Narratives were obtained from the people before and after their work with the healer. These stories were enriched through interviews with family members, friends, health care providers, and the healers themselves, whenever possible. Panels of naïve medical students, graduate students, patients, and health care providers were used to evaluate the stories and to pick themes that consistently emerged (dimension analysis). Once stable dimensions emerged, scenarios were developed to rate patients along these dimensions from "1" to "5." New panels did the ratings, with at least 3 panels of 3 people per narrative. Comparisons were made between these 2 groups of people, and differences emerged on the dimensions of Present-centeredness; Forgiveness of others; Release of blame, bitterness, and chronic anger; Orientation to process versus outcome; Sense of Humor; Refusal to accept death as immediate prognosis; Plausible (to the patient, his or her family, and the healers) explanation for why he or she got well, including a story reflecting a belief about how he or she can stay well; Supportive community who believes in the person’s cure and protects the person from outsiders who think the person will die; People experience a quantum change, in which major improvements in self-esteem and quality of relationships occurs; and Spiritual transformation. Conclusions: The 2 groups of people reported equal increases on the dimensions of Sense of Meaning and Purpose and Faith and Hope, which may be intrinsic to the style of healing of aboriginal elders. © 2008 Mary Ann Liebert, Inc.
This paper describes an analysis of the plants of North America which have been used medicinally by Native North Americans. A method using regression residuals is developed for analyzing large quantities of data, divided into subgroups of varying sorts and sizes. The analysis shows that the medicinal species utilized by Native North Americans are distributed in a highly non-random fashion across subclasses and families as well as across groups defined in terms of growth habit and life pattern. This distribution makes sense in terms of both the defensive chemistry and the "complexity" of plants.

This paper compares the medicinal and food floras of the native peoples of North America. There is a surprising overlap of these floras by both family and taxon. Yet there are also substantial differences—food and medicine tend to involve different plant parts, plant habit, and plant character. The similarities and differences are considered in an evolutionary context and a theoretical perspective is suggested to account for these facts.

In this article, Cree Indian methods of treating disease are compared with the treatment process and procedures used in the Western health Care system. Ethnographic data permitted the identification of the five components of Cree healing: the ritual, contract, treatment, didactic, and closure components. These components are compared with equivalent phases in the physician-patient and nurse-patient relationship. In particular, the process of comparison permits the identification of incongruities that the Cree may encounter when using the Western system. These include the inability to identify one's own state of health and abnormalities; a passive, rather than a participatory role in healing; the incomprehensible notion of "silent" diseases and preventative treatment; the specialization of the caring, curing, and counselling roles of practitioners and the limited perspective of "holism" in health care.

Through ethnobotanical surveys, the CIHR Team in Aboriginal Antidiabetic Medicines identified 17 boreal forest plants stemming from the pharmacopeia of the Cree First Nations of Eeyou Istchee (James Bay region of Northern Quebec) that were used traditionally against diabetes symptoms. The leaves of Sarracenia purpurea (pitcher plant), one of the identified Cree plants, exhibited marked antidiabetic activity in vitro by stimulating glucose uptake in C2C12 mouse muscle cells and by reducing glucose production in H4IIE rat liver cells. Fractionation guided by glucose uptake in C2C12 cells resulted in the isolation of 11 compounds from this plant extract, including a new phenolic glycoside, flavonoid glycosides, and iridoids. Compounds 6 (isorhamnetin-3-O-glucoside), 8 [kaempferol-3-O-(6'-caffeoylglucoside], and 11 (quercetin-3-O-galactoside) potentiated glucose uptake in vitro, which suggests they represent active principles of S. purpurea (EC50 values of 18.5, 13.8, and 60.5 µM, respectively). This is the first report of potentiation of glucose uptake by compounds 6 and 8, while compound 11 (isolated from Vaccinium vitis) was previously shown to enhance glucose uptake. Treatment of H4IIE liver cells with the new compound 1, 6'-O-cafeoylgoodyeroside, decreased hepatic glucose production by reducing glucose-6-phosphatase enzymatic activity (IC50 = 13.6 µM), which would contribute to lowering glycemia and to the antidiabetic potential of S. purpurea. © 2012 The American Chemical Society and American Society of Pharmacognosy.


We determined the capacity of putative antidiabetic plants used by the Eastern James Bay Cree (Canada) to modulate key enzymes of gluconeogenesis and glycogen synthesis and key regulating kinases. Glucose-6-phosphatase (G6Pase) and glycogen synthase (GS) activities were assessed in cultured hepatocytes treated with crude extracts of seventeen plant species. Phosphorylation of AMP-dependent protein kinase (AMPK), Akt, and Glycogen synthase kinase-3 (GSK-3) were probed by Western blot. Seven of the seventeen plant extracts significantly decreased G6Pase activity, Abies balsamea and Picea glauca, exerting an effect similar to insulin. This action involved both Akt and AMPK phosphorylation. On the other hand, several plant extracts activated GS, Larix laricina and A. balsamea, far exceeding the action of insulin. We also found a significant correlation between GS stimulation and GSK-3 phosphorylation induced by plant extract treatments. In summary, three Cree plants stand out for marked effects on hepatic glucose homeostasis. P. glauca affects glucose production whereas L. laricina rather acts on glucose storage. However, A. balsamea has the most promising profile, simultaneously and powerfully reducing G6Pase and stimulating GS. Our studies thus confirm that the reduction of hepatic glucose production likely contributes to the therapeutic potential of several antidiabetic Cree traditional medicines. © 2013 Abir Nachar et al.


Native American medicine provides an approach to the treatment of cardiovascular disease that is unique and that can complement modern medicine treatments. Although specific practices among the various Native American tribes (Nations) can vary, there is a strong emphasis on the power of shamanism that can be supplemented by the use of herbal remedies, sweat lodges, and special ceremonies. Most of the practices are passed down by oral tradition, and there is specific training regarding the Native American healer. Native American medicine has strong testimonial experiences to suggest benefit in cardiac patients; however, critical scientific scrutiny is necessary to confirm the validity of the benefits shown to date.


Background: Type II diabetes and obesity are major health problems worldwide and aboriginal peoples are particularly at risk. To address this problem in Canadian native populations who find modern pharmaceuticals culturally inappropriate, our team is testing the traditional pharmacopeia of the James Bay Cree for anti-diabetic and anti-obesity activities. More specifically, the aim of the present study was to define the effects of traditional plants on intestinal glucose absorption, an under-appreciated anti-hyperglycaemic and anti-obesity activity. Methods: Crude ethanol extracts of 17 Boreal forest medicinal plants were tested in vitro using the Caco-2 human enterocytic cell line and in vivo using an oral glucose tolerance test. Results: Thirteen of seventeen extracts were observed to significantly inhibit uptake when administered simultaneously with 3H-deoxyglucose. Inhibition was dose-dependent and, in a few cases, even surpassed that induced by a combination of the positive controls. To validate these effects in vivo, four plant extracts were administered by intragastric gavage at 250mg/kg to normal rats simultaneously with a 3g/kg bolus of glucose. This resulted in a decrease in peak glycaemia by approximately 40% for two of them. Similarly, only 2 extracts reduced glucose transport after long term incubation and this could be related to reductions in the expression of SGLT-1 or GLUT-2 proteins. Conclusions: These findings indicate that competitive inhibition of intestinal glucose uptake can be achieved by crude extracts of medicinal plants. Such extracts could be taken with meals to control postprandial glycaemia and reduce caloric intake in high risk populations that are positively inclined towards traditional medicine. © 2010 Elsevier Ireland Ltd.


Traditionally, First Nations maternity care was provided by community-based midwives trained through apprenticeship. Obstetrical practices and beliefs were integrated to provide holistic care. The Sioux Lookout Meno Ya Win Health Centre has a mandate to be a centre of excellence for Aboriginal health care. We undertook a literature review and performed a qualitative research...
study to understand some of the traditional practices in maternity care. We conducted qualitative semi-structured interviews in English and Oji-Cree with 12 elders who had knowledge and experience of historical birthing practices in their home communities. Research team members included nursing and medical personnel and Anishinabe First Nation members. Interviews were analyzed and themes developed and verified by member checking and triangulation. The hands-on training for a community-based midwife often began in her teenage years with observation of childbirth practices. Practices were handed down by oral tradition and included prescriptions for healthy diet and moderate exercise during pregnancy; intrapartum care with preparation of clean cloths, moss, and scissors; the involvement of certain supportive family and community members; careful attention to the sacred handling of the placenta and umbilical cord; and careful wrapping of the newborn in fur. Complications, sometimes fatal, included retained placentas and stillbirths. The provision of modern maternity care to Aboriginal patients should include acknowledgement of, and respect for, traditional birthing practices. Facilities providing care for these patients should consult with the relevant Aboriginal communities to understand their needs and initiate appropriate programming.

Omar, S., Lemonnier, B., Jones, N., Ficker, C., Smith, M. L., Neema, C., . . . Arnason, J. T. (2000). Antimicrobial activity of extracts of eastern north american hardwood trees and relation to traditional medicine. *Journal of Ethnopharmacology, 73*(1-2), 161-170. Wood and bark extracts of 14 eastern North American hardwood tree species which were used traditionally as medicine by First Nation's people were screened for antimicrobial activities with eight strains of bacteria and six strains of fungi. Eighty-six percent of the bark extracts were active against methicillin sensitive Staphylococcus aureus; 71% against Bacillus subtilis and 79% against Mycobacterium phlei. The bark extract of Juglans cinerea was active against Pseudomonas aeruginosa 187, Salmonella typhiumurium, and Klebsiella pneumoniae. The wood extracts were less active: 72% were active against S. aureus (methicillin-sensitive), 36% against B. subtilus and 43% against M. phlei. Results from antifungal tests indicated that 36% of the extracts were active against at least one fungal strain and that bark extracts were more active than wood extracts. The bark extract from Juglans cinerea had the broadest spectrum of activities against Candida albicans, Saccharomyces cerevisiae, Cryptococcus neoformans, Trichophyton mentagrophytes, Microsporum gypseum, and Aspergillus fumigatus. In general, the extracts were more active against gram positive bacteria than gram negative bacteria and against filamentous fungi than yeast-like fungi. The study also demonstrated a correlation between frequency of traditional medicinal use by the First Nations people and antimicrobial activity of extracts indicating that the traditional knowledge encompasses an understanding of aspects of chemical ecology. (C) 2000 Elsevier Science Ireland Ltd.


Ritch-Krc, E. M., Turner, N. J., & Towers, G. H. (1996). Carrier herbal medicine: An evaluation of the antimicrobial and anticancer activity in some frequently used remedies. *Journal of Ethnopharmacology, 52*(3), 151-156. doi:0378874196014079 [pii] The antimicrobial properties of some traditional Carrier herbal preparations were evaluated using an agar dilution method. Pitch preparations were screened against known human pathogens: Escherichia coli, Staphylococcus aureus, Pseudomonas aeruginosa, Candida albicans and Aspergillus fumigatus. The results indicated definite antimicrobial activity in the pitch preparations of Picea glauca and Pinus contorta and provide a starting point for pharmacognostic evaluation of these species. In addition, cytotoxicity assays, to test the anticancer activity of methanolic extracts of Alnus incana and Shepherdia canadensis against mouse mastocytoma cells, were shown to be positive.

Cultural factors significantly influence the Native American's perspectives of traditional professional health care practices. To most effectively deal with Native American clients, health care providers must understand, respect, and demonstrate sensitivity to the values and implications of the Native American culture. A basic understanding of a group's cultural beliefs, values, and practices will enable the holistic nurse to appreciate the importance of appropriate interactions and techniques and, therefore, make health care more readily accepted. This article reviews the health and illness beliefs, the traditional remedies, the critical need for holistic health care, and the Five Great Values that guide Native American behavior. Familiarization with these cultural components will facilitate the provision of quality, holistic health care through improved interactions with Native American clients.


The importance of traditional healing practices for First Nations people1 has created interest in traditional ceremonies, including sweat lodges, which are increasingly incorporated into programs serving Aboriginal people. Despite the fact that traditional healing practices have always been valued by Aboriginal people, there is virtually no research on their efficacy. The results of a pilot study that measured the impact of the sweat lodge ceremony on the physical, mental, emotional, and spiritual domains of individual participants indicated that an increase in spiritual and emotional well-being of participants was directly attributable to the ceremony.


Ethnopharmacological relevance: Diabetes is a growing epidemic worldwide, especially among indigenous populations. Larix laricina was identified through an ethnobotanical survey as a traditional medicine used by Healers and Elders of the Cree of Eeyou Istchee of northern Quebec to treat symptoms of diabetes and subsequent in vitro screening confirmed its potential.

Materials and methods: We used a bioassay-guided fractionation approach to isolate the active principles responsible for the adipogenic activity of the organic extract (80% EtOH) of the bark of Larix laricina. Post-confluent 3T3-L1 cells were differentiated in the presence or absence of the crude extract, fractions or isolates of Larix laricina for 7 days, then triglycerides content was measured using AdipoRed reagent. Results: We identified a new cycloartane triterpene (compound 1), which strongly enhanced adipogenesis in 3T3-L1 cells with an EC 50 of 7.7 µM. It is responsible for two thirds of the activity of the active fraction of Larix laricina. The structure of compound 1 was established on the basis of spectroscopic methods (IR, HREIMS, 1D and 2D NMR) as 23-oxo-3a-hydroxycycloart-24-en-26-oic acid. We also identified several known compounds, including three labdane-type diterpenes (compounds 2-4), two tetrahydrofuran-type lignans (compounds 5-6), three stilbenes (compounds 7-9), and taxifolin (compound 10). Compound 2 (13-epitorulosol) also potentiated adipogenesis (EC 50 8.2 µM) and this is the first report of putative antidiabetic principles isolated from Larix laricina, therefore increasing the interest in medicinal plants from the Cree pharmacopeia. © 2012 Elsevier Ireland Ltd. All rights reserved.


Traditional ways of healing illnesses originating in ancient societies are called complementary medicine today. Many of the traditional medical systems are based on sound fundamental principles and centuries of practices by healers. This article reviews some of the most commonly practiced traditional medical systems. A common factor noted in several traditional systems is a holistic approach to the well-being of a person's body, mind, and spirit.

In recent decades, Indigenous peoples across the globe have become increasingly urbanized. Growing urbanization has been associated with high rates of geographic mobility between rural areas and cities, as well as within cities. In Canada, over 54 percent of Aboriginal peoples are urban and change their place of residence at a higher rate than the non-Aboriginal population. High rates of mobility may affect the delivery and use of health services. The purpose of this paper is to examine the association between urban Aboriginal peoples’ mobility and conventional (physician/nurse) as well as traditional (traditional healer) health service use in two distinct Canadian cities: Toronto and Winnipeg. Using data from Statistics Canada's 2006 Aboriginal Peoples Survey, this analysis demonstrates that mobility is a significant predisposing correlate of health service use and that the impact of mobility on health care use varies by urban setting. In Toronto, urban newcomers were more likely to use a physician or nurse compared to long-term residents. This was in direct contrast to the effect of residency on physician and nurse use in Winnipeg. In Toronto, urban newcomers were less likely to use a traditional healer than long-term residents, indicating that traditional healing may represent an unmet health care need. The results demonstrate that distinct urban settings differentially influence patterns of health service utilization for mobile Aboriginal peoples. This has important implications for how health services are planned and delivered to urban Aboriginal movers on a local, and potentially global, scale. © 2012 Elsevier Ltd.


Type II diabetes is a major health problem worldwide. Some populations, such as aboriginal peoples, are particularly at risk for this disease. In the Cree Nation of Quebec, Canada, prevalence in adults is approaching 20%, and the consequences are compounded by low compliance with modern medicine. In 2003, we conducted an ethnobotanical study of Cree medicinal plants used for the treatment of symptoms of diabetes. This served as the basis for a project designed to identify efficacious complementary treatment options more readily accepted by this population. The present study assesses the in vitro anti-diabetic potential of extracts from the 8 most promising plants to emerge from the ethnobotanical study. Cell-based bioassays were employed to screen for (i) potentiation of glucose uptake by skeletal muscle cells (C2C12) and adipocytes (3T3-L1); (ii) potentiation of glucose-stimulated insulin secretion (GSIS) and insulin production by pancreatic beta cells (INS 832/13); (iii) potentiation of triglyceride accumulation in differentiating 3T3-L1 cells; (iv) protection against glucose toxicity and glucose deprivation in pre-sympathetic neurons (PC12-AC). Additionally, anti-oxidant activity was measured biochemically by the diphenylpicrylhydrazyl (DPPH) reduction assay. All plant extracts potentiated basal or insulin-stimulated glucose uptake to some degree in muscle cells or adipocytes. Adipocyte differentiation was accelerated by 4 extracts. Five extracts conferred protection in PC12 cells. Three extracts displayed free radical scavenging activity similar to known anti-oxidants. None of the plant extracts enhanced GSIS or insulin content in INS 132/13 beta cells. It is concluded that the Cree pharmacopoeia contains several plants with significant anti-diabetic potential. © 2006 NRC Canada.


In a phenomenological research study with a purposeful sample, 6 Ojibwa and Cree indigenous women healers from Canada and the United States shared their experience of being a traditional healer. Using stories obtained during open-ended, unstructured interviews, in this article I depict the lives, backgrounds, and traditional healing practices of women who, in the past, have not been afforded an opportunity to dialogue about their healing art and abilities. The methods of these women healers, their arts and their gifts, are different from those of Western conventional medicine because of dissimilar world views related to health and illness. An increased awareness of health care providers related to the ancient art of traditional healing currently practiced in communities by gifted women who provide culturally specific holistic healing and health care is essential.

Indigenous traditional healing is an ancient, deeply rooted, complex holistic health care system practiced by indigenous people worldwide. However, scant information exists to explain the phenomenon of indigenous medicine and indigenous health. Even less is known about how indigenous healing takes place. The purpose of this study is to describe the meaning and essence of the lived experience of 4 indigenous people who have been diagnosed with cancer and have used indigenous traditional healing during their healing journey. The researcher used a qualitative phenomenological methodology to collect and analyze interview data. Interviews were conducted with 4 self-identified indigenous people, ages 49 to 61, from diverse tribes. Time since cancer diagnosis varied from 2 to 20 years; types of cancer included lung, prostate, sarcoma of the leg, and breast. Four themes and 2 subthemes emerged (1) receiving the cancer diagnosis (with subthemes of knowing something was wrong and hearing something was wrong), (2) seeking healing, (3) connecting to indigenous culture, and (4) contemplating life's future. This study demonstrates that 4 individuals with cancer integrated Western medicine and traditional healing to treat their cancer. This knowledge provides necessary data about the phenomena of being healed by indigenous healers. Such data may serve as an initial guide for health care professionals while interacting with indigenous people diagnosed with cancer. Accordingly, traditional healing may be used to decrease health disparities.


Culture determines how one views illness and thus, their choice of healing to seek treatment for disease processes. Traditional indigenous healing is an ancient holistic approach used today by some Native Americans to resolve health care problems. This article presents four stories of three indigenous people who sought traditional healing for imbalance and disease. The accounts were derived from a qualitative phenomenological study. The lived experience of indigenous people healed by indigenous traditional healers. The healing stories provide examples of contemporary specific healing rituals used during indigenous healing encounters. Healing methods described include the Sun Dance, Yuwipi, Ojibwe Healing Ceremony, Shaking Tent and Shaker Healing Ritual. The stories reveal that old knowledge is still paramount in a contemporary society. The accounts point to the necessity for health care professionals and nurses to understand and encourage Native people to incorporate indigenous healing practices into their lives for attainment of the highest level of well-being, which includes potential for decreasing health disparities in this population. © 2004 Elsevier Ltd. All rights reserved.


Traditional indigenous healing is widely used today, as it has been since time immemorial. This article describes the following areas in regards to traditional healing: (a) an explanation of indigenous peoples, (b) a definition of traditional indigenous healing, (c) a portrayal of traditional healers, (d) health within indigenous culture, (e) traditional healing techniques, (f) utilization of traditional healing, (g) how to find a traditional healer, and (h) comparing traditional healing principles with mainstream ways. It is important to have knowledge about this method of holistic healing so health care providers and nurses can integrate it into the health care for individuals and/or families that choose traditional indigenous healing. © 2004 Elsevier Ltd. All rights reserved.


PURPOSE: The purpose was to understand the experience of being an Anishinabe man healer. Of particular relevance, healers explained how they provide Indigenous health care in a world dominated by Western biomedicine. DESIGN: A phenomenological approach was utilized to interview four Anishinabe men healers who reside in the United States and Canada. METHOD: In-person interviews were conducted using an interview guide. The interviews were audiotaped when permitted; otherwise notes were taken. Data analysis was conducted using techniques from Colaizzi and van Manen. FINDINGS: Seven themes were identified: (1) The Healer's Path, (2) Health as Wholeness, (3) Healing Ways, (4) Healing Stories, (5) Culture Interwoven with Healing, (6) Healing Exchange, and (7) Connection with Western Medicine. CONCLUSIONS: The themes identified inform nursing practice by pointing out the importance of culture within traditional
Indigenous healing, as well as the need for a holistic approach when caring for Indigenous people. Additionally, the Indigenous men healers acknowledged their connection with Western medicine as part of the process of healing for their clients. This emphasizes the need for nurses and other health care providers to become knowledgeable regarding traditional Indigenous healing that their clients may be receiving, in order to foster open communication.


A sacred relationship exists between tobacco and American Indian ceremonial activities and beliefs. This ancient connection continues to play an important role in American Indian communities including the Anishinabe (Ojibwe). Six Ojibwe traditional healers and spiritual leaders described the sacred use of tobacco during interviews. The research provides information on key-informant smoking behaviors, influence of tobacco-industry media, and 3 essential themes: the origin of sacred traditional tobacco; contemporary use and abuse of tobacco; and cultural strengths and meaning of tobacco in Anishinabe (Ojibwe) communities. Health professionals must recognize, be amenable to learn, and understand that sacred tobacco use and smoking commercial cigarette tobacco have separate purposes and functions. The challenge for health professionals, including nurses, is to retain the cultural use and value of tobacco while addressing the abuse and chronic effects of cigarette smoking when providing health care to American Indian clients.


Seventeen Cree antidiabetic medicinal plants were studied to determine their potential to inhibit cytochrome P450 3A4 (CYP3A4) through mechanism-based inactivation (MBI). The ethanolic extracts of the medicinal plants were studied for their inhibition of CYP3A4 using the substrates testosterone and dibenzylfluorescein (DBF) in high pressure liquid chromatography (HPLC) and microtiter fluorometric assays, respectively. Using testosterone as a substrate, extracts of Alnus incana, Sarracenia purpurea, and Lycopodium clavatum were identified as potent CYP3A4 MBIs, while those from Abies balsamea, Picea mariana, Pinus banksiana, Rhododendron tomentosum, Kalmia angustifolia, and Picea glauca were identified as less potent inactivators. Not unexpectedly, the other substrate, DBF, showed a different profile of inhibition. Only A. balsamea was identified as a CYP3A4 MBI using DBF. Abies balsamea displayed both NADPH- and time-dependence of CYP3A4 inhibition using both substrates. Overall, several of the medicinal plants may markedly deplete CYP3A4 through MBI and, consequently, decrease the metabolism of CYP3A4 substrates including numerous medications used by diabetics.


The purpose of this grounded theory study was to provide a framework for understanding the contemporary experience of First Nations grandparents. Fifteen respondents (N = 15) were selected from two demographically different Canadian cities. Seven of the grandparents lived with their child and a grandchild or grandchildren at the time of the interview; an additional four had lived with their grandchildren at some point prior to this investigation. Results revealed that First Nations grandparents had leveraged their own experiences of cultural disruption to reinvest in the cultural health and well-being of their grandchildren. One grandfather described this role as "walking the red road" which entailed a responsibility "to provide wisdom and ... protection." Identified benefits of rejuvenating traditions and grandparent involvement included cultural healing and joy. © 2013, Baywood Publishing Co., Inc.


Background: The boreal forest of Canada is home to several hundred thousands Aboriginal people who have been using medicinal plants in traditional health care systems for thousands of years. This knowledge, transmitted by oral tradition from generation to generation, has been eroding in recent decades due to rapid cultural change. Until now, published reviews about traditional uses of medicinal plants in boreal Canada have focused either on particular Aboriginal groups or on
restricted regions. Here, we present a review of traditional uses of medicinal plants by the Aboriginal people of the entire Canadian boreal forest in order to provide comprehensive documentation, identify research gaps, and suggest perspectives for future research.

Methods: A review of the literature published in scientific journals, books, theses and reports.

Results: A total of 546 medicinal plant taxa used by the Aboriginal people of the Canadian boreal forest were reported in the reviewed literature. These plants were used to treat 28 disease and disorder categories, with the highest number of species being used for gastrointestinal disorders, followed by musculoskeletal disorders. Herbs were the primary source of medicinal plants, followed by shrubs. The medicinal knowledge of Aboriginal peoples of the western Canadian boreal forest has been given considerably less attention by researchers. Canada is lacking comprehensive policy on harvesting, conservation and use of medicinal plants. This could be explained by the illusion of an infinite boreal forest, or by the fact that many boreal medicinal plant species are widely distributed.

Conclusion: To our knowledge, this review is the most comprehensive to date to reveal the rich traditional medicinal knowledge of Aboriginal peoples of the Canadian boreal forest. Future ethnobotanical research endeavours should focus on documenting the knowledge held by Aboriginal groups that have so far received less attention, particularly those of the western boreal forest. In addition, several critical issues need to be addressed regarding the legal, ethical and cultural aspects of the conservation of medicinal plant species and the protection of the associated traditional knowledge. © 2012 Uprety et al; licensee BioMed Central Ltd.


This paper examines the question of access to traditional Indian medical systems in the western Canadian city of Saskatoon. The data demonstrate that many Natives desire such access, and do not see difficulties in having Indian healers available in Western-style biomedical clinics. A variety of language variables proved to be the best predictors of access questions, indicating that those with the greatest cultural adherence were most likely to want a more formal access. It is argued that a lack of access to traditional Indian medical services represents a legitimate health need. Considerations for the implementation of such a formal access to traditional Indian medicine are discussed.


The persistence of the traditional medical systems among Canadian Native peoples has been fairly well documented, and some commentators have suggested that a resurgence in these systems is currently underway (Gregory, 1988). Although there have been very few studies of the utilization of these medical systems by contemporary Native peoples, there has been some suggestion that dual utilization is indeed practiced. Virtually nothing is known about the specific patterns of utilization, and the relationship, if any, between the utilization of traditional and western medical services. Similarly, few aspects of health care utilization by Native peoples in urban areas have been researched. The purpose of this paper is to explore this relationship through the examination of data obtained in a recent study of Native and non-Native medical service utilization patterns in the city of Saskatoon, Saskatchewan.


Studies of the efficacy of 'traditional' Indigenous healing often fail to consider the epistemologies that underlay specific healing traditions, especially intrinsic notions of efficacy. In this article, I critically engage the concept of efficacy by identifying two somewhat different approaches to the issue of outcome. In 'transformative' healing processes, healing is conceptualized as a journey in which the outcome goal is a transformed individual. Efficacy, then, is about incremental changes toward this goal. In 'restorative' healing processes, the goal is termination of the sickness and the restoration of health; efficacy is conceptualized as a return to a presickness state. These healing processes are illustrated with examples from the Q'eqchi Maya of Belize and Aboriginal peoples of Canada. © 2013 Copyright Taylor and Francis Group, LLC.
Walters, K. L., & Simoni, J. M. (2002). Reconceptualizing native women's health: An "indigenist" stress-coping model. *American Journal of Public Health, 92*(4), 520-524. This commentary presents an "indigenist" model of Native women's health, a stress-coping paradigm that situates Native women's health within the larger context of their status as a colonized people. The model is grounded in empirical evidence that traumas such as the "soul wound" of historical and contemporary discrimination among Native women influence health and mental health outcomes. The preliminary model also incorporates cultural resilience, including as moderators identity, enculturation, spiritual coping, and traditional healing practices. Current epidemiological data on Native women's general health and mental health are reconsidered within the framework of this model.


Zubek, E. M. (1994). Traditional native healing. alternative or adjunct to modern medicine? *Canadian Family Physician Medecin De Famille Canadien, 40*, 1923-1931. OBJECTIVE: To ascertain the extent to which family physicians in British Columbia agree with First Nations patients' using traditional Native medicines. DESIGN: Randomized cross-sectional survey. SETTING: Family medicine practices in British Columbia. PARTICIPANTS: A randomized volunteer sample of 79 physicians from the registry of the BC Chapter of the College of Family Physicians of Canada. Of 125 physicians contacted, 46 did not reply. MAIN OUTCOME MEASURES: Physicians' demographic variables and attitudes toward patients' use of traditional Native medicines. RESULTS: Respondents generally accepted the use of traditional Native medicines for health maintenance, palliative care, and the treatment of benign illness. More disagreement was found with its use for serious illnesses, both for outpatients and in hospital, and especially in intensive care. Many physicians had difficulty forming a definition of traditional Native medicine, and were unable to give an opinion on its health risks or benefits. A significant positive correlation appeared between agreement with the use of traditional Native medicines and physicians' current practice serving a large First Nations population, as well as with physicians' knowing more than five patients using traditional medicine. CONCLUSIONS: Cooperation between traditional Native and modern health care systems requires greater awareness of different healing strategies, governmental support, and research to determine views of Native patients and healers.