Traditional Native healing

Alternative or adjunct to modern medicine?

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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.

OBJECTIF Vérifier jusqu'à quel point les médecins de famille de la Colombie-Britannique sont d'accord avec les patients des Premières Nations qui utilisent les traitements autochtones traditionnels.

CONCEPTION Enquête transversale randomisée.

CONTEXTE Cliniques de médecine familiale de la Colombie-Britannique.

PARTICIPANTS Échantillon randomisé constitué de 79 médecins volontaires à partir du registre de la Section Colombie-Britannique du Collège des médecins de famille du Canada. Des 125 médecins contactés, 46 n'ont pas répondu.

PRINCIPALES MESURES DES RÉSULTATS Attitudes et variables démographiques des médecins face à l'utilisation par les patients des traitements autochtones traditionnels.

RÉSULTATS De façon générale, les répondants acceptent l'utilisation des traitements autochtones traditionnels pour le maintien de la santé, les soins palliatifs et le traitement des affections bénignes. On a toutefois constaté un désaccord plus marqué concernant leur utilisation dans les maladies graves, que le patient soit hospitalisé ou traité en externe, et surtout au niveau des soins intensifs. De nombreux médecins ont éprouvé des difficultés à définir la médecine autochtone traditionnelle et furent incapables d'exprimer une opinion quant aux avantages et aux risques pour la santé. Il s'est dégagé une corrélation significativement positive entre l'accord sur l'usage des traitements autochtones traditionnels et la pratique médicale actuelle desservant une grande population de Premières Nations, ainsi qu'entre les médecins connaissant plus de cinq patients qui utilisent la médecine traditionnelle.

CONCLUSIONS La collaboration entre les systèmes de soins de santé autochtones traditionnels et modernes nécessite une meilleure sensibilisation aux différentes stratégies thérapeutiques, un appui gouvernemental et une recherche afin de déterminer les perspectives des guérisseurs et des patients autochtones.

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* *First Nations people is defined as being "persons who are sometimes referred to as Native, Indian, or aboriginal." Native is used throughout this article to refer to the indigenous and aboriginal inhabitants of Canada and their descendents. Status Indians is used to refer to Natives registered with the federal government as Indians according to the terms of the Indian Act.*

WHILE THE GENERAL CANADIAN population enjoys a health care system ranked among the best in the world, First Nations* people fall far behind in all measures of health status.

In British Columbia, Status Indians make up 2.4% of the population.[1] The 1989 census showed that the age-standardized mortality rate for Status Indians was 1.7 times that of the British Columbia population, and

their infant mortality rate was 2.7 times that of the province. The potential years of life lost for Status Indians was 127.82 per 1000 population, more than twice the province's average.

Consequently, the British Columbia Royal Commission on Health Care and Costs, in its section on Aboriginal Health, made comprehensive recommendations to address the health, social, and economic concerns of First Nations people.[2,3] It emphasized the need to increase health care providers' knowledge of the Native view of health care and to address the lack of trust in the present system that many Natives feel. The commission proposed increased involvement by Natives themselves in providing health care.[3]

Similar efforts across Canada have been made to deliver health care more effectively to First Nations people. Many Canadian hospitals have instituted Native Liaison programs,[4,5] and community health centres have been organized that take into account aspects of Native culture and healing traditions.[6] Medical schools are introducing courses in cross-cultural health care, including exposure to traditional Native healing.[7,8]

Many traditional Native medicines and healing practices were discouraged with the advent of Western medicine, but there is now a movement to return to traditional ways. This development is compatible with the World Health Organization's stance in its 1978 primary health care strategy, which encouraged the promotion and development of traditional medicines.[9] In Canada, such changes are being supported and recognized by the Yukon government, which proclaimed the following Bill No. 4 of the Health Act on December 18, 1990[10]:

> s. 5.(1) The purpose of this section is to secure aboriginal control over traditional aboriginal nutritional and healing practices and to protect these healing practices as a viable alternative for seekers of health and healing services.
>
> (2) The Minister shall promote mutual understanding, knowledge, and respect between the providers of health and social services offered within the health and social service system and the providers of traditional aboriginal nutrition and healing.[10]

How can we promote this mutual understanding between traditional and modern healers? Could healers from each system actually cooperate in the delivery of health care? Would this cooperation, by promoting health care in a culturally appropriate manner, serve to improve the health of First Nations people?

Project history

This research project was executed as a requirement of the second year of the University of British Columbia Family Practice residency program. These questions were relevant to my practice in the Queen Charlotte Islands, where I did an 8-month block of family practice training. Many of my patients were using traditional medicines for healing and for health maintenance, yet when patients were admitted for acute or extended care, no legislation in place allowed them access to their medicines in the hospital. Essentially, in the existing legal framework, if First Nations people wish for traditional healing methods during their hospital stay, they must be carried out surreptitiously.

This project in its conception was quite different: a survey of the Haida population of Skidegate in the Queen Charlotte Islands, to assess their use of, and belief in, traditional Native medicines. It was also designed to assess their wishes for access to such medicines and healing practices when in the hospital. The questionnaire carefully did not ask about specific ingredients or preparations of the medicines, as that is considered personal property and as such is confidential information.

The survey as described met with resistance by a segment of the Haida population. What were the intentions behind the questionnaire? Would the use of traditional medicines be ridiculed by the health care profession? Would the knowledge and supplies be exploited if their health benefits became more widely recognized? Did physicians want to work with, or take control of, traditional healers? It became clear that a survey to assess the

wishes of First Nations people regarding their use of and access to Native medicines would work only once these questions were answered. Thus the project was redefined in its focus and in its sample population: What are physicians' attitudes toward traditional Native medicine?

Research hypotheses

This study was designed to canvass the attitudes of family physicians in British Columbia toward the use of traditional Native medicines by their First Nations patients, both in and out of hospital.

I hypothesized that family physicians would accept the use of traditional Native medicines in health maintenance, in palliative care, and in the treatment of benign illness. They would not welcome traditional Native medicines in an intensive care setting or for treating serious illness, whether on the medical ward or at home.

METHOD

Design

A cross-sectional design was used, in the form of a 2-page questionnaire sent to a random sample of 125 physicians from the registry of the British Columbia Chapter of the College of Family Physicians of Canada. All 1212 CCFP family physicians registered as practising in British Columbia in January of 1993 were eligible. A reminder letter was sent 1 month after the initial mailing. A total of 79 (63.2%) of the questionnaires was returned.

Outcome measures

A five-point Likert scale was used to assess the physicians' acceptance of the use of traditional Native medicines by their First Nations patients in a variety of clinical settings. A "general agreement" value was derived from these responses, and is the mean of the responses to all seven clinical situations. A general agreement value of 5 would indicate the strongest possible agreement (a response of 5 on all seven questions); a value of 1 would indicate the strongest possible disagreement, and a value of 3 would indicate a

Table 1. **Demographic characteristics of respondents (n = 79):** *Mean age of physicians responding was 40.4, range 26 to 63; mean percentage of First Nations patients in practices was 6.4% (SD 9.3), and median percentage was 5%.*

CHARACTERISTIC	N
SEX (N = 77)	
Male	55 (71.4%)
Female	22 (28.6%)
YEAR OF MEDICAL SCHOOL GRADUATION (N = 77)	
Before 1961	4 (5.2%)
1961-1970	10 (13.0%)
1971-1980	29 (37.7%)
1981-1990	34 (44.2%)
COUNTRY OF MEDICAL SCHOOL TRAINING (N = 76)	
Canada	67 (88.2%)
Other*	9 (11.8%)
PRACTICE SETTING (N = 74)	
Rural	17 (23.0%)
Urban	52 (70.3%)
Mixed	5 (6.8%)
POPULATION IN PRACTICE LOCATION (N = 77)	
<5000	3 (3.9%)
5000-25 000	18 (23.4%)
25 000-50 000	14 (18.2%)
>50 000	42 (54.5%)
CLINIC EXPERIENCE WITH MANY FIRST NATIONS PATIENTS (N = 75)	
Current patients	9 (12.0%)
Only past patients	28 (37.3%)
Never	38 (50.7%)
NUMBER OF PATIENTS USING TRADITIONAL NATIVE MEDICINE (N = 78)	
None	46 (59.0%)
1 to 5	20 (25.6%)
>5	12 (15.4%)
TRADITIONAL MEDICINE AN IMPORTANT ISSUE IN COMMUNITY (N = 75)	
Yes	13 (17.3%)
No	61 (81.3%)
Unsure	1 (1.3%)

**All had received training in the British Isles or New Zealand.*

neutral stance or an overall balance between agreement and disagreement with traditional Native medicines being used in the various medical settings.

The Likert scale was also used to assess physicians' beliefs in the health risks and benefits of such medicines. Open-ended questions were used to determine the physicians' understanding of traditional Native medicine and how they believed it could best be prescribed, delivered, and financed within the current medical system. Basic demographic questions were also included.

The term "traditional Native medicine" was purposely not defined, so that the physician's own understanding of the term could be ascertained.

Table 2. **Definition of traditional Native medicine**

DEFINITION	RESPONSES	CASES (%)*
Herbalism or plant medicine	31	39.2
Culturally based medicine	30	38.0
Rituals used (sweats,	21	26.6
Spiritual or religious healing	14	17.7
Holistic approach	9	11.4
Uses psychology	5	6.3
Non-scientific	4	5.1
Question reworded	2	2.5
No idea	13	16.5
Blank	11	13.9

**Total percentage exceeds 100% due to multiple responses.*

RESULTS

The response rate of 63.2% is within the expected range for responses to mailed surveys of physicians.[11] The demographic composition of the sample is summarized in *Table 1.*

Many respondents indicated that they were unsure what traditional Native medicine entailed and thus had difficulty forming an opinion on whether it would be appropriate in various settings, especially in the hospital. In fact 16% of the physicians indicated this directly, and another 14% left the question blank, when asked for their definition of traditional Native medicine (*Table 2*). Eighty-one percent believed that the use of traditional Native medicine was not an important issue in their community, although 41% knew of at least one patient in their practice using such medicines, and 15% knew of more than five patients using them. Eighty-one percent of respondents indicated that they would be interested in learning more about traditional Native healing.

Respondents generally agreed (*Table 3*) with the use of traditional Native medicines for health maintenance (73.6% agreed, 2.8% disagreed); for the treatment of benign illness, such as colds or sprained ankles (79.2% agreed, 1.4% disagreed); and for palliative care (90.3% agreed, 1.4% disagreed). There was more disagreement with using traditional medicines in the intensive care unit (16.9% agreed, 54.9% disagreed) and for treating serious illness, such as cardiac or respiratory compromise, whether patients were in the hospital (21.2% agreed, 46.5% disagreed) or were outpatients (26.4% agreed, 47.2% disagreed). Nearly half (48.6%) agreed with using traditional medicines for chronic illnesses, such as non–insulin-dependent diabetes or Parkinson's disease; 18.1% disagreed, and 33.3% of the respondents remained neutral.

The general agreement value derived from these responses concerning the clinical setting was correlated with the demographic data obtained. There was no correlation between the general agreement value and the physician's age or sex. There did not appear to be a correlation with the percentage of First Nations people in their practices, either, but this variable was

highly skewed, considering that one practice reported that 65% of patients were of First Nations descent.

There was a significant positive correlation between the level of agreement and whether a physician reported current work in a practice with a large First Nations population, as compared with those with only past or no similar experience (a general agreement value, or mean Likert scale response, of 4.2 compared with 3.2 and 3.3, respectively; $P = .0015$). There was also a significant positive correlation between the level of agreement and the physician's knowing five or more patients using traditional medicines (general agreement value averaging 4.2, compared with 3.5 for those with one to five patients using Native medicines and 3.1 for those with no known patients using them; $P = .0002$). Significantly more physicians who considered the use of traditional Native medicines to be an important issue in their communities agreed with it (general agreement value of 4.4, compared with 3.1 among those who believed the issue to be of little importance; $P = .0001$).

If traditional medicines were to be used in the hospital setting, most physicians thought that they should be prescribed by a traditional healer acting as a consultant (49%), rather than independently (*Table 4*). Only 9% believed that physicians could or should write the prescription themselves. Thirteen percent disagreed with any use of traditional medicines in the hospital, and 16% left this question blank.

Respondents believed that the medicines should be delivered by the traditional healers themselves (61%) rather than by other hospital personnel or the family. A team approach was advocated by 13 (16%) of the respondents in prescribing, delivering, or both. Most suggested that the patients themselves should bear the costs (62%), although 18 respondents (23%) agreed with partial or complete funding by the provincial or federal Native budget (*Table 4*).

Generally, physicians were unwilling to comment on their belief in the health risks and benefits of Native medicines (no answer or a neutral value was given by 61% for health benefits, and by 71% for health

Table 3. **Physician's agreement with traditional Native medicine in different clinical settings:**
Percentages were calculated from the total number of physicians who gave a numerical response. Of those who gave no numerical response, three indicated that they generally agreed with the use of traditional medicine.

CLINICAL SETTING	1 (STRONGLY DISAGREE)	2 (DISAGREE)	3 (NEUTRAL)	4 (AGREE)	5 (STRONGLY AGREE)
Health maintenance (n = 72)	1 (1.4%)	1 (1.4%)	17 (23.6%)	34 (47.2%)	19 (26.4%)
Benign illness (n = 72)	0	1 (1.4%)	14 (19.4%)	36 (50.0%)	21 (29.2%)
Chronic illness (n = 72)	3 (4.2%)	10 (13.9%)	24 (33.3%)	25 (34.7%)	10 (13.9%)
Serious, outpatient (n = 72)	17 (23.6%)	17 (23.6%)	19 (26.4%)	13 (18.1%)	6 (8.3%)
Serious, inpatient (n = 71)	15 (21.1%)	18 (25.4%)	23 (32.4%)	8 (11.3%)	7 (9.9%)
Intensive care unit (n = 71)	24 (33.8%)	15 (21.1%)	20 (28.2%)	4 (5.6%)	8 (11.3%)
Palliative care (n = 72)	0	1 (1.4%)	6 (8.3%)	21 (29.2%)	44 (61.1%)

risks; *Table 5*). Of those who would commit to a Likert scale response, 38.6% thought that traditional Native medicines worked mainly because of the placebo effect. Although there were no specific questions to this effect, 11 (14%) of the respondents mentioned their wish for a scientific study of any medicines to be used, either to prove their benefit (and thus justify their financial support) or else to document their side-effect profile and determine safety.

Table 4. **How traditional medicines should be used in the hospital**

RESPONSIBILITY	RESPONSES	CASES (%)*
FOR PRESCRIBING TRADITIONAL MEDICINE		
Traditional healer as consultant	39	49.4
Team approach	12	15.2
Physician	7	8.9
Traditional healer independently	7	8.9
Patients themselves	1	1.3
Should not be used in hospital	10	12.7
Blank	13	16.5
FOR DELIVERING TRADITIONAL MEDICINE		
Traditional healer	48	60.8
Team approach	5	6.3
Nurse	4	5.1
Patients themselves	2	2.5
Family	1	1.3
Should not be used in hospital	10	12.7
Blank	13	16.5
FOR FINANCING IN WHOLE OR IN PART		
Patients themselves	49	62.0
Native funding (any of, or a combination of, the following three sources)	18	22.8
• Federal government	8	10.1
• Provincial government	2	2.5
• Nonspecific Native budget	10	12.7
Hospital budget	3	3.8
Should not be used in hospital	7	8.9
Blank	9	11.4

**Total percentage exceeds 100% because of multiple responses.*

DISCUSSION

One of the most important observations made by this survey was that physicians lacked knowledge about traditional Native healing methods. This lack of awareness made them reluctant to pass judgment on the therapeutic risks and benefits of traditional healing.

Customary practice in modern medicine is to document scientifically the effects of any treatment that is to be introduced. While healing rituals themselves can be difficult to evaluate, herbal remedies are not. It would seem to be a simple solution to study Native medicines as one would any other pharmaceutical entering the market. Several of the physicians surveyed indicated that they believed such studies were necessary; in fact, in many developing nations similar investigations are under way.[12-15]

In First Nations communities, however, an analytical Western approach is not always welcomed. The medicines themselves are only one aspect of the healing, and are used in a larger spiritual and societal context. Any scientific study of the medicines might be met with resistance and questioning of motives, especially in this age of enthusiasm for Native self-government and Native ownership of traditional practices. At the same time, physicians must determine whether they themselves are comfortable working alongside this alternative form of healing, where there is no scientific proof of its effects.

Physicians expressed the most disagreement with their patients' use of traditional Native medicines in hospitals. One reason could be that they perceive traditional Native medicines

to have more risk when patients are so sick as to require hospitalization. Another legitimate concern is the physicians' legal responsibility for whatever is administered to patients admitted under their care. A solution to this has been found in the United Kingdom, where a Confederation of Healing Organizations has been formed. Spiritual healers work under strict guidelines for practice and conduct, which cover legal obligations and emphasize full cooperation with the medical team.[16] The British Medical Association and various royal colleges were involved in creating the confederation's guidelines, and the healers are allowed to practise in hospitals and take referrals from physicians.

Similar regulation of First Nations healers by a Western-styled governing body could be a controversial issue. Yet within the Canadian medical system, certification and education are important concerns. I understand that the education of First Nations healers includes decades of spiritual and mental preparation, as well as the acquisition of technical skills, and that this education is coordinated within a network of healers that spans North America. Although those within the system could have a clear understanding of its organization, physicians often have difficulty distinguishing legitimate Native healers from charlatans, without the establishment of a formally recognized licensing body. Would First Nations people consider formalizing their long-standing system?

The licensing issue gives rise to an additional concern. If the use of traditional medicine were "legitimized," then would the Canadian government need to absorb the costs? Most physicians surveyed believed that it would be most appropriate to have patients themselves finance any traditional healing given to them in the hospital. My understanding is that this is culturally correct; payment is traditionally made in the form of gifts from the person healed, and it is his or her perception of the value of the healing that determines the value of the gift.[17] The giving is an integral part of the ceremony. Thus a salary or fee from a government agency would go against the nature of the healing; even so, when any change to the health care system is proposed, the potential financial burdens must be considered.

Several potential barriers to cooperation between traditional and modern health care systems have been discussed. Yet there are places in North America with a high density of First Nations people where both systems appear to work well together.[17-19] On the Navajo Indian Reservation, most seriously ill people use both traditional and modern systems of health care, and one of the resident physicians has described several situations in which Navajo healers were as effective as or more effective than medical treatment could have been.[18] In Zuni, New Mexico, the Ak'wa:mossis (healers) are given access to hospitalized patients to perform curing ceremonies.[19] In the

Table 5. **Physicians' perceptions of traditional Native medicine's influence on health:** *Percentages were calculated from the total number of physicians who gave a numerical response.*

INFLUENCE	1 (STRONGLY DISAGREE)	2 (DISAGREE)	3 (NEUTRAL)	4 (AGREE)	5 (STRONGLY AGREE)
Important benefits (n = 67)	3 (4.5%)	6 (9.0%)	36 (53.7%)	15 (22.4%)	7 (10.4%)
Important health risks (n = 67)	5 (7.5%)	13 (19.4%)	44 (65.7%)	3 (4.5%)	2 (3.0%)
Mainly placebo effect (n = 70)	1 (1.4%)	13 (18.6%)	29 (41.4%)	21 (30.0%)	6 (8.6%)

Coast Salish area of British Columbia, medical doctors have referred to shamans those Native patients in whom they recognized "anomic depression," and have had patients go on short leaves from hospital to attend healing rites.[17]

It is interesting that, in the survey, physicians who were currently working in practices with large First Nations populations were most in agreement with their patients' use of Native medicines. This correlation would seem to have positive implications for the possibility of cooperation.

If collaboration between traditional healers and modern health care professionals is to happen in more than a few isolated pockets, it would seem from this survey's results that the most basic prerequisite has yet to be achieved: a simple awareness of what the other person's method of healing entails. Various models have been used or proposed in other nations to encourage mutual understanding, including dialogue groups,[20] joint workshops on primary health care issues,[21] multidisciplinary panel consensus reports,[22] referral systems,[21] and joint clinics.[12] Recommendations for specific strategies are beyond the scope of this paper, but excellent guidelines for their development can be found in articles by Akerele of the World Health Organization,[14] by Neumann and Lauro of the University of California School of Public Health,[15] and by Warren et al,[13] a group who helped coordinate the Ghanaian Primary Health Training for Indigenous Healers Program.

For cooperation to be successful, levels of government would need to give their support, following up recommendations like that of the Yukon government[10] with specific legislation to delineate how the legal responsibility is to be divided when traditional healers and physicians work together.

Obviously the people who need to now express their views are traditional healers and First Nations people themselves. Should any formal licensing body be developed, it would need to be initiated by them. If healers would like greater access to hospitalized patients, and if they are interested in greater collaboration with health care personnel, they must make their wishes known. As a physician embarking on this project, I was told by a traditional Native healer that I must "ask my own people first." This meant that I must survey physicians for their attitudes and opinions before approaching First Nations communities. Now this has been done, and First Nations people and their healers must decide whether the environment is right for change.

CONCLUSION

First Nations people have poorer health than the general Canadian populace, and there have been varied efforts to address this, including the promotion of traditional Native healing techniques. Physicians are sometimes reluctant to collaborate with traditional healers, especially in the hospital, because of legal, ideological, philosophical, and financial barriers. One important barrier is the simple awareness of what traditional Native healing entails.

British Columbia family physicians who were surveyed generally accepted the use of traditional Native medicine for health maintenance, for palliative care, and for treating 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 defining traditional Native medicine and felt 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 whether the physician's current practice served a large First Nations population, as well as with whether the physician knew of more than five patients using traditional medicine.

Methods for encouraging cooperation between traditional Native healers and Western-trained health care professionals have been successful in other nations. Dedication and involvement by government, physicians, traditional healers, and First Nations people themselves would be necessary for this cooperation to proceed. ■

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References

1. British Columbia Division of Vital Statistics, British Columbia Department of Health. *Status Indians in British Columbia: a vital statistical overview (1989).* Victoria: British Columbia Department of Health, 1991.
2. British Columbia Medical Association. BCMA response to the report of the Royal Commission on Health Care and Costs. *BC Med J* 1992;34(11):719-28.
3. British Columbia Royal Commission on Health Care and Costs. *Closer to home. Summary of the B.C. Royal Commission on Health Care and Costs.* Vol 1. Victoria: British Columbia Crown Publication, 1991:23.
4. Shah CP. The health of Indians in Canadian cities: a challenge to the health care system. *Can Med Assoc J* 1985;133:859-63.
5. Baker FW, Findlay S, Isbister L, Peekeekoot B. Native health care: an alternative approach. *Can Med Assoc J* 1987;136:695-6.
6. Lowry F. New native healing centre in Toronto opens eyes of non-native MDs who work there. *Can Med Assoc J* 1993;148:270-2.
7. Hennen BK, Blackman N. Teaching about culture and health in Ontario medical schools. *Can Fam Physician* 1992;38:1123-9.
8. Deagle GL. Should medical anthropology be required for family physicians? *Can Fam Physician* 1992;38:1177-82.
9. World Health Organization and United Nations Children's Fund. *Primary health care. Report of the International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 September 1978.* Reprinted. Geneva: World Health Organization, 1979.
10. *Republished statutes of the Yukon 1986-1990.* Vol 6. Whitehorse: Queen's Printer for the Yukon, 1993: chap 36, 1-7.
11. Sobal J, DeForge BR, Ferentz K, Muncie HL Jr, Valente CM, Levine DM. Physician responses to multiple questionnaire mailings. *Evaluation Rev* 1990;14(6):711-22.
12. Pearce TO. Integrating Western Orthodox and Indigenous medicine. *Soc Sci Med* 1982; 16:1611-7.
13. Warren DM, Bova GS, Tregoning MA, Kliewer M. Ghanaian national policy toward indigenous healers: the case of the primary health training for indigenous healers (PRHETIH) program. *Soc Sci Med* 1982; 16:1873-81.
14. Akerele O. The best of both worlds: bringing traditional medicine up to date. *Soc Sci Med* 1987;24:177-81.
15. Neumann AK, Lauro P. Ethnomedicine and biomedicine linking. *Soc Sci Med* 1982; 16:1817-24.
16. Aldridge D. Spirituality, healing and medicine. *Br J Gen Pract* 1991;41:425-7.
17. Jilek W. *Indian healing: shamanic ceremonialism in the Pacific Northwest today.* Surrey, BC: Hancock House, 1982:83,130.
18. Coulehan JL. Navajo Indian medicine: implications for healing. *J Fam Pract* 1980; 10(1):55-61.
19. Camazine SM. Traditional and Western health care among the Zuni Indians of New Mexico. *Soc Sci Med* 1980;14B:73-80.
20. Christie VM. A dialogue between practitioners of alternative (traditional) medicine and modern (Western) medicine in Norway. *Soc Sci Med* 1991;32:549-52.
21. Hoff W, Maseko DN. Nurses and traditional healers join hands. *World Health Forum* 1986; 7:412-6.
22. Murray RH, Rubel AJ. Physicians and healers – unwitting partners in health care. *N Engl J Med* 1992;326(1):61-4.

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