

**Physician Perceptions of Health Information from Practitioners of
Complementary and Alternative Medicine (CAM)**

A Survey of British Columbia's Doctors

Summary of Findings

June 2005

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INTRODUCTION AND DEMOGRAPHICS

The use of complementary and alternative medicine (CAM) is reported to be common in BC as it is in Canada in general (1-9)(ref). With the assistance of the BCMA and the College of Physicians and Surgeons of BC (CPSBC), the authors constructed a self-administered questionnaire enquiring about physician's impressions of the effect of patient reliance on alternative or complementary practitioners or practices. The definitions used for CAM were modified from those of the NIH (see Appendix A).

Approval of the survey was granted by the Behavioral Research Ethics Board of the University of British Columbia. The instrument was pre-tested on a group of Family Medicine residents for face validity, and the survey was distributed to a random sample of licensed physicians in the province of British Columbia. From the CPSBC list of licensed physicians two groups were identified: General Practitioners (GPs)(n=5743) and Specialists (n=5071). Random samples of 1043 general practitioners (GPs) and 1008 specialists were generated. After adjusting for physicians with more than one address (thirty extra addresses) and subtracting those no longer in practice (twenty seven), self-administered surveys were sent the remaining 1994 physicians in the fall of 2000. 372 surveys were returned from the first mail-out. A second mail-out was sent to non-responders in the spring of 2001. 180 responses were received, bringing the total to 548, an overall response rate of 27%.

We compared the responses of those responding to the first versus the second mail-out and did not detect any major differences.[†] Hence the responses were pooled for analysis. In order to determine whether the respondents were demographically similar to members of the College of Physicians and Surgeons of British Columbia, a comparison was made with the respondents and the membership.

Table 1 Age & Sex Distribution

	Age Group						Not Stated	Total
	20-29	30-39	40-49	50-59	60-69	70+		
# of Respondents	7	107	168	128	48	30	57	548
% of Respondents	1%	22%	34%	26%	10%	6%		
# of BC Physicians	159	1996	3145	2613	1390	1280		10583
% of BC Physicians	2%	19%	30%	25%	13%	12%		

73% of the survey respondents were men, compared with 74% for the membership of the College as a whole. The age ranges were not different.

Table 2 Physician Practice Location

	Location					Outside BC	Retired	Not Stated	Total
	Vancouver Richmond	Lower Mainland	Vancouver Island	Interior	BC				
# of Respondents	142	107	79	75	22	8	57	548	
% of Respondents	33%	25%	18%	17%	5%				
# of BC Physicians	3204	2611	1964	1998			806	10583	
% of BC Physicians	33%	27%	20%	20%					

The majority of respondents were from the Lower Mainland with a small number

from outside BC (5%).

[†] Data Available Upon Request

The respondents were asked to identify their area of practice. These were coded as family practice including general practice, surgical specialties, medical specialties and other specialties. Just over half of the respondents stated they were family practitioners.

Table 3 Type of Practice

	<i>Family Practice</i>	<i>Surgical</i>	<i>Medical</i>	<i>Not Stated</i>	<i>Total</i>
# of Respondents	243	65	148	35	548
% of Respondents	54%	14%	32%	19%	
# of BC Physicians	5727	1239	3466		
% of BC Physicians	54%	13%	33%		

The majority of respondents obtained their medical degree in Canada.

Table 4 Place of graduation

	<i>Degree</i>			
Sex	Canadian	Other	NS	Total
Known	384	100	57	548
% of Known	79%	21%		
CPSBC	7499	3084		
%	71%	29%		

The comparison of the responders to the physician population in general did not indicate any major differences. Although there is a response bias present, demographically the responders are similar to the population of registered doctors in BC.

RESULTS

The respondents were asked about how often they inquire about alternative medicine use by their patients. Few (5%) never asked, 17% seldom asked, 34% sometimes asked and 44% frequently asked.

Table 5 displays the types of alternative therapies that were incorporated into the practices of some respondents

Table 5 Types of therapies incorporated into practice

<i>Type of therapy</i>	<i>Number of doctors</i>
Lifestyle Change	282
Diets/Nutritional Supplements	194
Massage Therapy	155
Acupuncture	106
Chiropractic	98
Counselling and Prayer	83
Art Therapy/Relaxation Techniques	79
Anti Oxidizing Agents	62
Herbal medicine	61
Yoga/Meditation	58
	n=548

The respondents were then asked how often they felt patients had received a benefit beyond that which could be achieved with conventional therapy. 9% stated never, 33% stated seldom, 42% stated sometimes, 15% stated frequently and 1% stated almost always.

We did not ask whether the perceived benefits were psychological, social or biological.

The numbers of doctors who reported incorporating various alternative therapies into their practices and the numbers of doctors who

reported a perception that a therapy provided benefit beyond what could be achieved with conventional means are presented in Table 6. The modified NIH classification scheme is employed (Appendix A). ‘Changes in lifestyle’ was the most common ‘alternative’ medicine technique used. Diets/nutritional supplements were commonly incorporated into practice and were thought by many to be of benefit to the patient. Massage was the next most cited therapy (N=155 out of 548). Similar rates (roughly 100 out of 548 doctors) were noted for chiropractic and acupuncture. Counseling/prayer therapy, yoga/meditation, herbs, antioxidants, and art therapy/relaxation were all at similar rates. Others were less common or not used at all.

Table 6 Types of alternative therapies used by doctors and those perceived to be beneficial

	<i># of doctors incorporating therapy into practice (n=548)</i>	<i># of doctors who felt the therapy gave benefit beyond conventional medicine (n=548)</i>
Diet/Nutrition/Lifestyle Change		
Macrobiotics	8	10
Megavitamins	22	12
Diets/nutritional supplements	194	115
Changes in lifestyle	282	168
Mind/Body Control		
Art therapy/relaxation techniques	79	73
Guided therapy	10	15
Biofeedback	38	56
Hypnotherapy	31	41
Sound/music therapy	24	25
Yoga/meditation	58	90
Counseling and prayer therapies	83	81
Humor therapy	22	19
Traditional & Ethno-medicine		
Acupuncture	106	164
Ayurveda	1	7
Traditional Chinese Medicine	21	35
Tibetan Medicine	0	3
Homeopathic Medicine	10	29
Herbal Medicine	61	62
Native American	10	11
Past life therapy	0	2
Natural products	34	23
Shamanism	2	2
Structural & Energetic Therapy		
Acupressure	20	40
Rolfing	0	6
Chiropractic	98	149
Alexander technique	4	6
Massage therapy	155	180
Therapeutic touch	17	27
Reflexology	9	13
Aromatherapy	7	12
Craniosacral therapy	8	13
Pharmacological & Biological Treatments		
Anti-oxidizing agents	62	33
Metabolic therapy	3	2
Cell treatment	0	1
Chelation therapy	9	29
Naturopathy	20	37
Oxidizing Agents (ozone)	3	5
Colonic enemas	0	3
Biomagnetic Applications		
Electromagnetic fields	5	11
Electrostimulation/neuromagnetic stimulation devices	9	16
Magneto-resonance spectroscopy	0	0
Blue light treatment/artificial lighting	10	5

The respondents were asked whether they were aware of patients refusing conventional therapy in favor of alternative therapy and hence coming to harm. Thirty-seven percent

of respondents indicated they were aware of this occurring. They were also asked whether they were aware of a delay in seeking proper treatment. Twenty-eight percent felt there had been such an occurrence.

They were also asked whether they were aware of direct harm from the therapy (e.g. toxic effects, electrolyte imbalance, stroke, pneumothorax). Just over half (53%) reported being aware of this occurring.

One third (36%) of respondents believed that their patients had used an alternative medicine diagnostic technique. Most were not considered by any respondent to be accurate, although Chiropractic X-rays, TCM, and massage were thought by a few to have some diagnostic accuracy. This question may have been answered as positive for those areas that used techniques such as history and physical as well as diagnostic tests.

Table 7 Alternative medicine diagnostic techniques

<i>Diagnostic List</i>	<i># of doctors reporting patient use of diagnostic technique</i> <i>n=548</i>	<i># of doctors believing diagnostic technique accurate</i> <i>(NR =No Responses n=548)</i>
Iridology	29	NR
Homeopathy	21	NR
Reflexology	14	NR
mega vitamins	1	NR
TCM	23	4
vega testing	20	NR
blood film analysis	0	NR
Naturopathic MD with liver testing machine	1	NR
naturopathic	42	NR
blood analysis	39	NR
allergy testing	42	NR
Chiropractic (X-ray)	39	7
electromagnetic fields	19	NR
hair analysis	41	NR
Reiki	23	NR
massage	3	3
Yeast tests	5	NR
Qura Analysis (Chakra)	2	NR
Saliva	1	NR
Stool	3	NR

Respondents were asked whether they were aware of a patient incurring large or burdensome costs associated with the use of alternative medicine. 25% answered yes. On the other hand 88% of respondents reported being aware of cases where they felt the use of alternative medicine reduced the overall costs of treating a health problem. Fifty percent of respondents reported being aware of cases where they felt the concurrent use of conventional and unconventional therapies resulted in better treatment of the medical condition. Conversely, 50% also stated they knew of cases where the use of conventional plus unconventional therapies resulted in less than optimal treatment of a medical condition.

These responses indicate a need for more research need to determine what types of benefits (e.g. placebo, social, or biological) are conveyed by the use of CAM and that might lead to different perceptions of health status and different health care resource utilization.

Sixty percent of physicians were aware of their patients receiving information about vaccines from CAM practitioners. Of that sixty percent, Ninety percent of respondents

felt that the quality of information from CAM providers about vaccines was either poor or very poor and 79% felt that the information had made their patients either less likely or much less likely to vaccinate their children.

Doctors were asked how many cases in the last year or five years they had seen where patients had refused immunizations after being advised by an “alternative” practitioner. The one-year responses ranged from zero to twelve with a median of one. The five-year responses ranged from zero to fifty with a median of two.

Table 8 Physician Rating of Health Information from CAM Providers

<i>Alternative therapists provide patients with accurate and reliable information about health</i>						
Completely disagree	Moderately disagree	No opinion	Moderately Agree	Completely Agree	No Response	Total
161	211	45	18	8	105	548
36%	48%	10%	4%	2%		

Most respondents did not agree that alternative medicine therapists provide accurate and reliable information. These data were not broken down by

provider group.

DISCUSSION

The initial question about this survey is whether it is representative of medical practitioners in general. The response rate was 27%, but this is not out of keeping with surveys of physicians. We considered the possibility of offering inducements but chose not to because of concerns that the responder profile might differ from the parent population in ways relevant to the outcomes measured in the survey. We also elected to not vigorously pursue non-respondents with repeated requests for similar reasons.

Our survey was conducted in two phases. Responses from the initial mail-out were collected and then the survey materials were sent again with a reminder letter to non-responders. When surveys obtained from the second mail-out were compared to the first, the responses were very similar. This gives some reassurance that the two responder groups are similar. We then compared the demographic characteristics of responders with the profile for all licensed physicians in BC. Again, an almost perfect match was noted. These two observations indicate that those who replied represent the population of practitioners in BC reasonably well. However, this is still not a guarantee that the views of those who replied to our survey are the same as those of BC physicians in general, and we must be careful not to over-interpret the results.

The questionnaire was set up so that only positive responses were recorded. Thus it is not possible to be sure that a blank is a negative response. Considering that the responder went to the trouble of sending the result back to us, we consider that no responses are more likely to represent negative responses rather than failure to consider the question.

Some responders listed therapies not included in the NIH classification scheme. Handwritten responses such as 'Reiki', and 'spirituality' although very rarely listed, were not captured by our questionnaire.

When we asked physicians about which therapies they incorporated into their practices, we did not define what incorporation meant. A positive response might indicate that the physician referred patients to practitioners of that therapy or that the doctor performed the therapy in the office or some other type of endorsement of the modality.

The only category that captured the majority of respondents was 'changes in lifestyle'. However, 'Diets and nutritional supplements', 'Chiropractic', 'acupuncture' and 'massage' were incorporated (and felt to be in some way helpful) by substantial minorities of respondents. Not all observers would classify all of the above as 'alternative' therapies. For example, a change in lifestyle is a standard recommendation for patients who are obese, who engage in high-risk activities, or who suffer from psychological distress. It is noteworthy that these categories (along with meditation, physiotherapy, prayer, and self-help groups) appear in other surveys of physician and patient use of alternative therapies and the high response rates to this type of question are often interpreted as physician endorsement of CAM in general (10, 11) whereas the large majority of doctors do not accept the majority of CAM therapies listed in the questionnaire.

There was a range of responses to the question of whether doctors perceived that the use of various alternative therapies achieved a benefit beyond that possible with conventional therapy. Over half of respondents stated that this occurred sometimes or more frequently. This question was not modality-specific and does not differentiate between therapies that were thought to be biologically useful versus those that provided psychological benefits. Thirty seven percent of respondents stated they were aware of a delay resulting in harm and 53% were aware of a direct harm from a toxic effect from the use of a CAM modality, indicating that further study of the benefits and harms is needed to determine the modality-specific rates. Half of respondents stated they felt they were aware of times when the combination of conventional and CAM therapies had a better result than conventional alone. Conversely, among respondents, 50% knew of cases where combining modalities resulted in a less favorable outcome. Again, the type of benefit perceived was not ascertained. Many respondents stated they felt they had seen a reduction in health care costs associated with CAM, while 25% indicated they were aware of cases where the CAM therapy's cost was large and or burdensome to the patient.

The patient use of diagnostic techniques associated with CAM was commonly reported but these techniques were in general not considered accurate by doctors. The only modality where the diagnostic accuracy was considered high (3 of 3 respondents) was massage but this was rarely cited as a diagnostic technique.

Very few respondents considered that alternative therapists provided accurate and reliable information for patients some or all the time (6% of respondents). This particular response profile further leads us to question the meaning of physician responses of patient 'benefit' arising from the use of CAM. It seems incongruous that doctors would consider medical information from CAM providers unreliable and yet believe that the therapies had benefits other than psychological.

Perhaps the most striking findings are in the arena of immunizations. BC doctors were strongly of the view that vaccine information from CAM practitioners was of poor quality and that such information was both likely to discourage, and had discouraged, parents from vaccinating their children.

SUMMARY

BC Physicians and their patients are exposed to a wide variety of different alternative medical practices. While the large majority of BC doctors do not feel that the information from alternative medicine therapists is accurate or reliable, some believe that their patients may derive some unspecified benefits from pursuing these modalities. Conversely, physicians also report being aware of physical or financial harm befalling patients who followed the advice of CAM practitioners. In particular, poor quality information about childhood vaccinations was felt to have dissuaded some patients from becoming immunized.

APPENDIX A

LIST OF THERAPIES AND DIAGNOSTIC TECHNIQUES

The following list is a modified version of the classification adopted by the ad hoc advisory panel to the US Office of Alternative Medicine*.

A) DIET/NUTRITION/LIFESTYLE CHANGE

- A-1) macrobiotics
- A-2) megavitamins
- A-3) diets/nutritional supplements
- A-4) changes in lifestyle

B) MIND/BODY CONTROL

- B-1) art therapy/relaxation techniques
- B-2) guided therapy
- B-3) biofeedback
- B-4) hypnotherapy
- B-5) sound/music therapy
- B-6) yoga/meditation
- B-7) Counseling and prayer therapies
- B-8) Humour therapy

C) TRADITIONAL AND ETHNO-MEDICINE

- C-1) Acupuncture
- C-2) Ayurveda
- C-3) Traditional Chinese Medicine
- C-4) Tibetan Medicine
- C-5) Homeopathic medicine
- C-6) Herbal Medicine
- C-7) Native American
- C-8) Past life therapy
- C-9) Natural products
- C-10) Shamanism

D) STRUCTURAL AND ENERGETIC THERAPY

- D-1) Acupressure
- D-2) Rolfing
- D-3) Chiropractic
- D-4) Alexander technique
- D-5) Massage therapy
- D-6) Therapeutic touch
- D-7) Reflexology
- D-8) Aromatherapy
- D-9) Craniosacral therapy

E) PHARMACOLOGICAL AND BIOLOGICAL TREATMENTS

- E-1) Anti-oxidizing agents
- E-2) Metabolic therapy
- E-3) Cell treatment
- E-4) Chelation therapy
- E-5) Naturopathy
- E-6) Oxidizing agents (ozone, hydrogen peroxide)
- E-7) Colonic enemas

F) BIOMAGNETIC APPLICATIONS

* http://www.fhma.com/alternative_med.htm. (Quoting altmed.od.nih.gov/oam/what-is-cam/classify.shtml)
Accessed 26 June 2005.

- F-1) Electromagnetic fields
- F-2) Electrostimulation and neuromagnetic stimulation devices
- F-3) magnetoresonance spectroscopy
- F-4) Blue light treatment and artificial lighting

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