



## Perceptions of New Zealand adults about complementary and alternative therapies for cancer treatment

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### Abstract

**Aim** To study perceptions regarding complementary and alternative medicine (CAM) treatments for cancer among adult New Zealanders.

**Methods** An anonymous telephone questionnaire that included questions to explore perceptions about CAM and cancer treatment was administered to a randomly selected sample of New Zealanders, 20 years and older.

**Results** A total of 438 New Zealand adults participated in the survey, out of 689 eligible contacts (68% participation). Less than one-third (28%) agreed with the statement *alternative therapy for cancer has an equal or better chance of curing cancer as medical treatment*, 34% disagreed, and 38% said they did not know. Most (63%) felt that complementary therapies could be beneficial to people who were also receiving conventional cancer treatment, although only 36% could name one or more such therapies. One-third (32%) said that alternative therapies could be used instead of conventional cancer treatments, but only 16% of the sample could name any alternative therapies. The CAM therapies named most often were nutrition (vitamin and mineral supplements, herbs, and diets) and psychosocial therapies (including positive thinking, spiritual therapies, and relaxation).

**Conclusions** There seems to be little consensus about the efficacy of CAM therapies for cancer. New Zealanders may lack information about CAM, or may be withholding judgment because of contradictory messages.

Many different terms are used to describe the area of healthcare that is largely external to conventional biomedicine, but complementary and alternative medicine (CAM) is the collective term recommended for New Zealand use.<sup>1</sup> Therapies are sometimes specifically described as *complementary* if they are used to supplement conventional biomedical treatments for cancer, *to control symptoms and improve wellbeing* (p20),<sup>2</sup> or as *alternative*, if used instead of conventional treatment. This use of the term *alternative* is often viewed as undesirable, since it defines such therapies in terms of what they are not, rather than what they are, and also defines them in contrast to an *orthodox* system.<sup>1</sup> Nevertheless, the term *alternative* remains in some popular usage and may convey the more radical perception that there is an effective choice other than conventional biomedical treatment.

Methods of categorising CAM therapies vary considerably. For example, some studies include spiritual practices in their definitions of CAM<sup>3-6</sup> whereas others consider spiritual practices to be a part of an outlook on life rather than a therapy.<sup>7</sup> In New Zealand, an adaptation of the five group categorisation used by the US National Center for Complementary and Alternative Medicine (NCCAM) has been recommended to represent the full spectrum of modalities that exist here.<sup>1</sup>

Although some complementary therapies have demonstrated effectiveness in improving quality of life, there is no convincing evidence that any alternative therapies can cure cancer.<sup>2</sup> Although the effectiveness of CAM therapies is still in question, a survey of Australian oncologists found that meditation / relaxation / visualisation techniques were the CAM therapies considered most helpful, followed by hypnotherapy and acupuncture.<sup>6</sup> CAM therapies are widely used by cancer patients, with 49% of a New Zealand sample<sup>8</sup> and 66.7% of a Canadian sample<sup>5</sup> reporting use of one or more CAM therapies.

Recent studies in use among the general population have reported that 23.4% of New Zealanders<sup>9</sup> and 23.3% of Australians<sup>10</sup> visited a CAM practitioner in the past year, while the percentages of people who used at least one type of CAM therapy in the previous year were 52.1% in Australia<sup>10</sup> and 35.1% in America.<sup>11</sup> Although the public profile of CAM therapies has increased dramatically over recent decades,<sup>12</sup> this increase may have levelled off: an American study<sup>11</sup> has indicated that the prevalence of CAM use did not increase markedly between 1997 to 2002.

CAM therapies are also widely regarded as being safe,<sup>8</sup> despite the potential for dangerous effects, including negative interactions between CAM therapies and conventional medications. One New Zealand study found that 89% of cancer patients considered CAM to be safe, but that fewer than half of these patients discussed their usage of CAM with their doctors.<sup>8</sup> Because of increasing public awareness, reported high use of CAM therapies, and the lack of objective information, it has been argued that there is an urgent need to make available clear and accurate information about CAM therapies, so that people can make informed decisions regarding their use.<sup>1,13</sup>

The New Zealand Cancer Control Strategy identified the need (Goal 4, Objective 4) to *ensure that those with cancer and their family and whanau have access to high-quality information on treatment and care, including complementary and alternative medicine.*<sup>14</sup> One of the proposed “broad areas of action” is to make sure that *comprehensive, reliable and objective information, including that from the Ministry of Health database on CAM research, is easily accessible and understandable to patients, their families and whanau.* The subsequent Action Plan, 2005-2010, identifies one outcome as ensuring that *information for consumers will be comprehensive, evidence-based and reflect an integrated approach, combining self-help, CAM, and biomedical information.*<sup>15</sup>

Currently, cancer patients tend to learn about CAM therapies from friends (41%) and family (39%), rather than the Internet (3%).<sup>16</sup> Nevertheless, the provision of trustworthy information on the Internet would be of benefit as the use of that source seems likely to increase. The exploration of current public awareness about CAM would assist in the targeting of such a service. Despite its potential importance for informing and helping in the evaluation of health promotion and cancer control programmes, the assessment of public perceptions about cancer has received little attention in New Zealand.<sup>17</sup> The present study was designed to meet this need and contribute to current discussion about CAM in New Zealand<sup>18,19</sup> by reporting the perceptions of a random sample of adult New Zealanders regarding CAM therapies for cancer treatment.

## Methods

Sample selection and research procedures were fully described in an earlier paper.<sup>17</sup> In summary, a national telephone survey was conducted in August and September 2001 among a random sample, 20 years and older, identified from telephone directory listings, supplemented with self-identified Maori from electoral rolls.

The questionnaire was designed to explore perceptions of the causes, prevention and treatment of cancer as well as provide demographic information. For questions with fixed responses (such as agree/disagree/don't know), the interviewer read out all allowable answers and electronically recorded responses as a numerical code.

For open-ended questions, interviewers used numerical codes for the most commonly anticipated answers. All other answers were recorded verbatim and subsequently coded by one researcher, with the coding later checked by another member of the research team. After each response, participants were asked "Anything else?" until they could provide no further answers.

The CAM section of the questionnaire was introduced with the statement:

"Now I am going to ask you a few questions about other therapies which people sometimes use when they have cancer. These are therapies that are *not* part of the usual medical treatments of radiology, chemotherapy and surgery."

Then two questions were asked which were worded to indicate a distinction between complementary and alternative therapies, as follows:

"Do you believe that there are any therapies that can be *beneficial* to people who are *also* receiving conventional medical treatment for their cancer? Sometimes these are called *complementary* therapies." (If the respondent answered in the affirmative, they were then asked "Could you name any such therapies?")

"Do you believe that there are any therapies that can be used *instead* of mainstream medical treatment to *cure* cancer? Sometimes these are called *alternative* therapies." "Could you name any such therapies?"

## Results

A total of 1565 attempts were made to perform interviews, resulting in 1130 contacts, of which 689 were deemed eligible, according to population quotas. Of these, 251 refused to participate, producing 438 completed interviews (231 females and 207 males) and 64% participation. The age, sex, and ethnicity distributions of the respondents were closely similar to those for the New Zealand population in the 1996 Census, but respondents were better educated, contained a larger proportion in full-time employment, but a smaller proportion of those permanently unable to work.<sup>17</sup>

There was almost universal agreement (96%) about the benefit of early detection of cancer (S1), and most people (79%) were optimistic regarding the possibility of curing cancer (S2), although the level of fear regarding cancer treatment seemed quite high (S3)—see Table 1.

There was also considerable uncertainty regarding the effectiveness of alternative therapies when compared to conventional medical treatment (S4). Although many people (63%) felt that complementary therapies could be beneficial (Q5), only about half as many (32%) considered that alternative therapies could cure cancer (Q6).

**Table 1. Perceptions about cancer and cancer treatment; percentages reporting agreement or disagreement with statements (n=438)\***

<b>Statements</b>	Agree	Not sure	Disagree
S1: Overall, survival time is much better when cancer is identified and treated early, than when it is not identified and treated until later	96	3	1
S2: Even with early detection, there is not much chance of curing cancer	12	9	79
S3: Most cancer treatment is so terrible, it is worse than death	22	22	57
S4: Alternative therapy for cancer has an equal or better chance of curing cancer as medical treatment	28	38	34
<b>Questions</b>	Yes	Don't know	No
Q5: Do you believe that there are any therapies that can be beneficial to people who are also receiving conventional medical treatment for their cancer? Sometimes these are called complementary therapies	63	24	14
Q6: Do you believe that there are any therapies that can be used instead of mainstream medical treatment to cure cancer? Sometimes these are called alternative therapies.	32	20	48

\* Percentages may not add to 100, due to rounding

When asked if they could name any complementary therapies, 64% could not name any, and 21% could name only one therapy. Others mentioned two (9%), three (5%), four (1%), and even six (1%) different therapies. The therapies mentioned were coded into the five groups recommended by the Ministerial Advisory Committee on Complementary and Alternative Health (MACCAH).<sup>19</sup>

As shown in Table 2, nearly 20% of the sample (more than half of those who named any complementary therapies) mentioned one or more therapy from Group 3 (Biological-based theories, including diet and dietary supplements, herbalism, and aromatherapy), as a complementary therapy. Around 15% of the sample gave one or more therapy from Group 2 (mind/body/spirit interventions, including meditation, positive thinking, relaxation and spiritual healing); nearly 10% of the sample cited one or more therapy from Group 1 (alternative medical systems, such as acupuncture, homeopathy, naturopathy, and yoga); and fewer than 5% listed any therapies from Group 5 (energy therapies: colour therapy, chi kung) or Group 4 (manipulative and body-based therapies: exercise and massage). Several of the 12 (3%) unclassifiable responses mentioned the use of clinics in America or Mexico, or specific cases reported in the media.

When asked if they could name any alternative therapies, 84% of respondents did not suggest any, and others mentioned one (11%), two (2%), or three (2%) therapies each. One person listed four therapies, and another six. As with the complementary therapies, the most commonly mentioned alternative therapies were from Group 3, followed by Group 2 and Group 1, with few people mentioning therapies from Group 4 or Group 5 (see Table 2).

Logistic regression was used to test whether attitudes and knowledge of CAM were related to the demographic variables of age (20–39, 40–59, 60+ years, with n = 183, 144 and 111 respectively), gender (207 male, 231 female), ethnicity (391 non-Maori, 47 self-identified Maori), formal educational qualifications (226 with no tertiary qualification, 200 with a tertiary qualification) and employment status (191 not employed full-time, 246 employed full-time).

The logistic regression compared people aged 20–39 and 40–59 with those aged 60 and over, as chi-squared comparisons indicated that (where differences due to age seemed to exist) the younger groups were more positive or knowledgeable about CAM than the oldest group. Odds ratios are presented in Table 3 for positive answers (*yes / agree / named any therapies*) rather than negative answers (*no / disagree / did not name any therapies*): answers of *don't know* were excluded. Analysis for S1 is not reported, as few people disagreed with the statement.

Males, Maori, persons lacking a post-secondary qualification, and those not employed full-time were more pessimistic about the chance of curing cancer (S2). Being Maori was also associated with thinking cancer treatment was “worse than death” (S3) and agreeing that alternative therapy had an equal or better chance of curing cancer as medical treatment (S4). People who thought that complementary therapies could be beneficial in addition to conventional medical treatment (Q5) were more likely to be female, with a post-secondary qualification, and to be aged 40–59 rather than 60 or over.

**Table 2. Numbers and percentages of participants naming complementary and alternative therapies**

MACCAH Group	Complementary			Alternative		
	n	% (total)	% (named any com)	n	% (total)	% (named any alt)
Could not name any therapies	279	64	-	369	84	-
1: Alternative medical systems	41	9	26	20	5	29
2: Mind/body/spirit interventions	69	16	43	23	5	33
3: Biological-based therapies	86	20	54	33	8	48
4: Manipulative and body-based therapies	13	3	8	1	0	1
5: Energy therapies	15	3	9	3	1	4
Not classifiable	12	3	8	12	3	17

**Table 3. Unadjusted odds ratios (confidence intervals) for all demographic predictors of CAM perceptions, and *adjusted\* odds ratios (confidence intervals)* where these were significant**

Question		Younger†	Female	Maori	Qualified	Full-time
S2	unadj	0.58 (0.28-1.20) 0.72 (0.35-1.50)	0.66 (0.37-1.19)	2.48 (1.16-5.27)	0.42 (0.22-0.80)	0.61 (0.34-1.08)
	<i>adj</i>		0.39 (0.19-0.77)	2.85 (1.25-6.50)	0.40 (0.20-0.78)	0.38 (0.20-0.94)
S3	unadj	0.70 (0.38-1.27) 0.71 (0.38-1.32)	0.84 (0.52-1.34)	2.71 (1.39-5.32)	0.74 (0.46-1.20)	0.73 (0.45-1.17)
	<i>adj</i>			2.83 (1.39-5.79)		
S4	unadj	1.56 (0.86-2.83) 0.89 (0.46-1.70)	1.38 (0.85-2.22)	2.99 (1.31-6.84)	0.74 (0.46-1.20)	0.83 (0.51-1.34)
	<i>adj</i>			2.58 (1.11-6.02)		
S5	unadj	2.39 (1.23-4.65) 3.29 (1.56-6.92)	1.62 (0.92-2.84)	1.65 (0.56-4.87)	2.39 (1.32-4.34)	1.25 (0.72-2.20)
	<i>adj</i>	3.49 (1.45-8.42)§	2.01 (1.04-3.87)		2.50 (1.31-4.77)	
NCom	unadj	1.53 (0.92-2.54) 1.62 (0.95-2.75)	1.69 (1.14-2.52)	1.63 (0.89-3.00)	1.82 (1.23-2.72)	0.70 (0.47-1.03)
	<i>adj</i>	2.16 (1.16-4.01)§	1.64 (1.05-2.54)		2.09 (1.36-3.20)	0.55 (0.36-0.90)
S6	unadj	2.35 (1.32-4.20) 2.06 (1.11-3.82)	0.79 (0.52-1.22)	2.28 (1.15-4.52)	1.31 (0.85-2.02)	1.33 (0.86-2.05)
	<i>adj</i>	1.98 (1.01-3.88)‡				
NAlt	unadj	1.78 (0.85-3.72) 2.19 (1.04-4.63)	0.74 (0.44-1.24)	2.01 (0.98-4.10)	2.44 (1.43-4.18)	1.09 (0.65-1.83)
	<i>adj</i>	2.41 (1.04-5.61)§		2.49 (1.16-5.32)	2.60 (1.48-4.55)	

\* Adjusted for age, gender, ethnicity, qualification and full-time employment

† First comparison is Age 20-39 vs Age 60+; second comparison is Age 40-59 vs Age 60+

‡ Greater probability for Age 20-39 than Age 60+

§ Greater probability for Age 40-59 than Age 60+

The people who were more likely to name one or more complementary therapy rather than none were female, more qualified, not employed full-time, and aged 40–59 rather than 60 or over.

The belief that there were alternative therapies which could be used instead of mainstream medical treatment was more prevalent among people aged 20–39 than those aged 60 or over. People who could name one or more such alternative therapy were more likely to be Maori, more qualified, and aged 40–59 rather than 60 and over.

## Discussion

This study seems to be the first to report on the awareness of (and attitudes towards) complementary and alternative therapies for cancer among a random sample of the adult New Zealand population. The response rate of 64% was comparable to rates of 57%<sup>8</sup> and 76%<sup>5</sup> obtained in previous postal surveys, and telephone surveys have also been shown to yield results similar to those of postal surveys.<sup>20</sup>

Opinions were divided about whether or not alternative therapies for cancer were equally or more effective than conventional medical treatment, and many respondents said they did not know, indicating a need for reliable information to be made more available. New Zealanders in our study were more likely (38%) to be “not sure” (whether alternative therapies were as good at curing cancer as mainstream medical treatments) than people in an Australian sample,<sup>21</sup> of whom only 5% were not sure (and a further 6% neither agreed nor disagreed). The quite large proportion of “not sure” responses in the current study may indicate a lack of knowledge about alternative methods of treatment, or there may be a reluctance to make a judgement either for or against alternative therapies, in the face of contradictory sources of evidence. In either case, this result reinforces previous urgent calls for reliable, objective information about CAM to be made more available.<sup>8,15</sup> The Ministry of Health website (<http://www.cam.org.nz>) should, increasingly, help to meet this need.

It is of concern that so many people (63%) express a belief that complementary therapies can be beneficial when used alongside conventional medicine, especially given evidence that fewer than half of cancer patients who use CAM therapies discuss these therapies with their health professionals.<sup>8</sup> The authors of that report discuss the potential risks involved, including adverse reactions to CAM therapies, and dangerous interactions between CAM and conventional treatments. The Cancer Society of New Zealand has also stressed the importance of cancer patients discussing CAM therapies with their physicians.

Another source of concern is the degree of pessimism regarding cancer reported by the Maori participants who were less likely than non-Maori to believe that cancer was curable, and more likely to believe that cancer treatment was worse than death. Although based on very small numbers, and therefore to be treated with caution, this greater pessimism may, in part, reflect the actual experience of cancer among the Maori population, given the increasing inequalities in outcomes now known to exist.<sup>22</sup> In addition to making appropriate changes in health services, associated health promotion efforts may be needed to address perceptions.

Younger people were more likely than those over 60 years to believe that complementary and alternative therapies are efficacious. Women were more likely

than men to believe that complementary therapies could be beneficial, which is consistent with the findings of the 2002/3 New Zealand Health Survey, a recent survey which indicated that women were more likely than men to have visited a CAM practitioner in the previous year (28% of women, compared to 18% of men surveyed.)<sup>9</sup>

In the NZ Health Survey, overall, 23% of the respondents had visited a CAM practitioner in the previous 12 months, and the three CAM practitioners visited were most often massage therapists, chiropractors, and osteopaths (visited in the previous year by 9%, 6%, and 5% of the sample, respectively).<sup>9</sup> All three of these therapists fall into MACCAH Group 4 (Manipulative and body-based therapies), in contrast to the findings of the current study where, in the specific context of cancer treatment, Group 4 therapies were suggested least.

The plausible explanation for this may be that such therapies are, and are perceived as, less appropriate for cancer treatment. In addition, participants in the NZ Health Survey were shown a card with a number of different CAM practitioners on it (with massage therapists listed first), whereas the current study did not use any prompts, and participants may not have perceived massage as a complementary therapy.

Overall, as found in several studies from other countries<sup>3,5,7,23</sup> the most frequently reported CAM therapies for cancer seem to be psychosocial (including spiritual therapies, psychotherapy, relaxation, and visualisation) and nutrition (vitamin and mineral supplements, herbs, and diets).

In light of the high levels of uncertainty about the efficacy of CAM therapies found in the present study and the small proportions able to name any therapies, perhaps one of the most useful current initiatives in New Zealand is the attempt to help improve knowledge by making accessible to the public authoritative information on the *Complementary and Alternative Medicine* website ([www.cam.org.nz](http://www.cam.org.nz)) supported by the Ministry of Health.

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## References:

1. Terminology in complementary and alternative health. A paper prepared for the Ministerial Advisory Committee on Complementary and Alternative Health. Wellington: Ministry of

- Health; 2002. Available online. URL: <http://www.newhealth.govt.nz/maccab/terminology.htm>  
Accessed November 2005.
2. Metz JM. "Alternative medicine" and the cancer patient: an overview. *Medical & Pediatric Oncology*. 2000;34:20–6.
  3. Richardson MA, Sanders T, Palmer JL, et al. Complementary/alternative medicine use in a comprehensive cancer center and the implications for oncology. *Journal of Clinical Oncology*. 2000;18:2505–14.
  4. Sollner W, Zingg-Schir M, Rumpold G, Fritsch P. Attitude toward alternative therapy, compliance with standard treatment, and need for emotional support in patients with melanoma. *Archives of Dermatology*. 1997;133:316–21.
  5. Boon H, Stewart M, Kennard MA, et al. Use of complementary/alternative medicine by breast cancer survivors in Ontario: prevalence and perceptions. *Journal of Clinical Oncology*. 2000;18:2515–21.
  6. Newell S, Sanson-Fisher RW. Australian oncologists' self-reported knowledge and attitudes about non-traditional therapies used by cancer patients. *Medical Journal of Australia*. 2000;172:110–3.
  7. Fernandez CV, Stutzer CA, MacWilliam L, Fryer C. Alternative and complementary therapy use in pediatric oncology patients in British Columbia: prevalence and reasons for use and nonuse. *Journal of Clinical Oncology*. 1998;16:1279–86.
  8. Chrystal K, Allan S, Forgeson G, Isaacs R. The use of complementary/alternative medicine by cancer patients in a New Zealand regional cancer treatment centre. *N Z Med J*. 2003;116(1168). URL: <http://www.nzma.org.nz/journal/116-1168/296>
  9. Ministry of Health. A portrait of health: Key results of the 2002/03 New Zealand Health Survey. Wellington: MOH; 2004. Available online. URL: <http://www.moh.govt.nz/moh.nsf/0/3d15e13bfe803073cc256eeb0073cfe6?OpenDocument>  
Accessed December 2005.
  10. MacLennan A, Wilson D, Taylor A. The escalating cost and prevalence of alternative medicine. *Preventive Medicine*. 2002;35:166–73.
  11. Tindle HA, Davis RB, Phillips RS, Eisenberg DM. Trends in use of complementary and alternative medicine by US adults: 1997-2002. *Alternative Therapies in Health and Medicine* 2005;11:42–9.
  12. Goldbeck-Wood S, Dorozynski A, Lie L, Yamauchi M.. Complementary medicine is booming worldwide. *BMJ*. 1996;313 (7050):131.
  13. Ministry of Health. Towards a Cancer Control Strategy for New Zealand. Marihi Tauporo. A discussion document. Wellington: Ministry of Health, 2002.
  14. Minister of Health. The New Zealand Cancer Control Strategy. Wellington: Ministry of Health, 2003. Available online. URL: <http://www.moh.govt.nz/moh.nsf/0/11242dd9919eb9dccc256c7e0078281e?OpenDocument>  
Accessed December 2005.
  15. Cancer Control Taskforce. The New Zealand Cancer Control Strategy: Action Plan 2005-2010. Wellington: Ministry of Health, 2005. Available online. URL: <http://www.moh.govt.nz/moh.nsf/238fd5fb4fd051844c256669006aed57/abed0ba681a637e1cc256fbc006f22d7?OpenDocument> Accessed December 2005.
  16. Eysenbach G. The impact of the Internet on cancer outcomes. *Ca: A Cancer Journal for Clinicians*. 2003;53:356–71.
  17. Reeder AI, Trevena JA. Adults' perceptions of the causes and primary prevention of common fatal cancers in New Zealand. *N Z Med J*. 2003;116(1182) URL: <http://www.nzma.org.nz/journal/116-1182/600> .

18. Ministerial Advisory Committee on Complementary and Alternative Health. Summary of submissions in response to the Discussion Document – Complementary and alternative medicine: current policies and policy issues in New Zealand and selected countries. Wellington: Ministerial Advisory Committee on Complementary and Alternative Health; 2004.
19. Ministerial Advisory Committee on Complementary and Alternative Health. Complementary and alternative health care in New Zealand. Wellington: Ministerial Advisory Committee on Complementary and Alternative Health; 2004.
20. Brøgger J, Bakke P, Eide G, Gulsvik A. Comparison of telephone and postal survey modes on respiratory symptoms and risk factors. *American Journal of Epidemiology*. 2002;155:572–6.
21. Olver I, Wakefield M, Roberts L. Community beliefs about cancer treatment and care in South Australia. *Cancer Forum*. 2000;24:18–19.
22. Blakely T, Ajwani S, Robson B, et al. Decades of disparity: widening ethnic mortality gaps from 1980 to 1999. *N Z Med J*. 2004;117(1199). URL: <http://www.nzma.org.nz/journal/117-1199/995>
23. Morris KT, Johnson N, Homer L, Walts D. A comparison of complementary therapy use between breast cancer patients and patients with other primary tumor sites. *American Journal of Surgery*. 2000;179:407–11.