Changes in public awareness of, attitudes to, and use of complementary therapy in North East Scotland: surveys in 1993 and 1999

M. J. Emslie, M. K. Campbell, K. A. Walker

Grampian Local Health Council, Aberdeen, Scotland, UK

SUMMARY. Objective: To assess changes in awareness of, use of, attitudes to, and opinions about complementary and alternative medicine (CAM) amongst residents of North East Scotland and to obtain details about CAM use from respondents. Study design: Population survey carried out in 1999, 6 years after the initial study. Postal survey to 800 people to examine eight CAMs; acupuncture, aromatherapy, chiropractic, herbalism, homeopathy, hypnotherapy, osteopathy, and reflexology. Results: A total of 432/800 (54%) responded, of whom 175 (41%) had used at least one type of CAM compared to 29% in 1993. Increases in use were statistically significant for aromatherapy (18% versus 9%), acupuncture (10% versus 6%) and reflexology (9% versus 3%). A greater proportion of 1999 respondents thought CAM should be available on the NHS but a smaller proportion of respondents had concerns about using CAM (25% in 1993 and 20% in 1999). Overall concerns about effectiveness of therapies had increased from 36 to 45%, but fewer individuals were concerned about the cost of therapy in the 1999 survey (52% in 1993 to 22% in 1999).

A total of 175 individuals provided details about one CAM they had used. The self-reported primary reasons for using CAM were relief of pain due to headaches or musculoskeletal problems, and for relaxation and relief of stress. The majority of CAM was therapist administered (103/166) as opposed to a bought product. Effectiveness ratings were self-reported but overall 80/166 found CAM very effective and 62/166 partially effective. A total of 65% had consulted their GP about their health problem before using CAM, 59/157 indicated their GP knew they were using CAM and of these, 14 indicated their GP was administering the therapy.

Conclusions: The study has provided further baseline data on which to assess trends in CAM use and highlighted issues for patients and the NHS about the use of CAM to relieve health problems. Results indicate a greater proportion of the population of North East Scotland are both aware of and using CAM to relieve health problems. More research into the implications for the NHS of concurrent use of CAM with conventional medicine is required.

© 2002 Elsevier Science Ltd. All rights reserved.

Maggie J. Emslie
MSc, Grampian Local Health Council, Westburn House, Foresterhill, Westburn Road, AB25 2XG Aberdeen, Scotland, UK.
Tel.: +44 1224 559444;
Fax: +44 1224 552754

INTRODUCTION

Awareness of, attitudes towards and use of complementary and alternative medicine (CAM) amongst the general public was initially investigated in the North East Scotland in 1993[1] in a population based survey. In response to growing local interest in CAM, its aim was to quantify the level of demand for eight therapies: acupuncture, aromatherapy, osteopathy, chiropractic, reflexology, homeopathy,

doi: 10.1016/S0965-2299(02)00066-3, available online at http://www.idealibrary.com on IDEAL®

hypnotherapy, and herbalism and to establish the factors which might influence this demand. Since then population surveys in the UK, USA, and Australia[2–4] have provided further estimates of demand and clear evidence of increasing use of CAM in populations is emerging. Complementary medicine still remains largely the province of the private sector; however, changes of attitude and a greater acceptance of complementary medicine amongst medical practitioners is also emerging.[5] A further survey of residents of North East Scotland would provide evidence of any changes in use and provide further opportunity to research in more detail the therapies people had used, the involvement of general practitioners and perceived effectiveness/benefits. This report, therefore, describes the results of a follow-up survey of CAM use conducted 6 years after the initial study.

METHODS

A self-completion questionnaire was developed based on questions used and validated in the 1993 survey.[1] Some minor changes were made to the questions to improve clarity but the core questions on awareness of different CAM, whether or not people would consider using the CAM, concerns about using CAM, opinions on NHS availability, the need for a register of approved therapists and opinions about paying towards the cost of NHS therapy remained the same. Respondents to the 1993 survey had been provided with a list of reasons for which they might consider using CAM. In the 1999 study an additional option was included; "lack of a suitable conventional treatment for an illness or medical condition" and a combined option from the 1993 study "lack of confidence in conventional medicines/fear of side effects" was split to provide two separate options.

An additional section exploring opinions on actual use of specific therapies was included. To minimise recall bias, respondents were asked to provide details of one therapy, either a CAM they had used most recently or one they used most often. To ensure that sufficient numbers of respondents provided data on use of therapies, the sample size was inflated relative to the 1993 survey, from 500 to 800 individuals. The increased sample size was designed not only to allow the resulting survey estimates to fall within 5% of the true population proportions with 95% confidence as before, but would allow statistical examination of the subsample who indicated that they had used a CAM. Using the rates of use seen in the 1993 survey, a sample of 800 would allow estimation of proportions within the subset to be estimated within 10% of the true underlying rates with 95% confidence.[5] The study sample was obtained from the Grampian Evaluation Joint Board—a local comprehensive register of persons, resident in Grampian and eligible to vote. Access to the sampling frame used in the 1993 survey—the community health index—was no longer available. A random sample of 800 individuals was selected from the register, stratified by districts of the region. The study period was from 1 November to 15 December 1999. Results are presented as numbers and percentages of those responding. Changes from 1993 to 1999 were assessed using the Chi-squared test.

RESULTS

Four hundred and thirty two (54%) responses were obtained.

Trends from 1993 to 1999

Levels of CAM awareness were generally similar across the two surveys; however, awareness of reflexology, aromatherapy, and chiropractic had significantly increased. A total of 175 (41%) respondents indicated they had used at least one type of CAM, this compared to 29% in the 1993 study. Actual use of CAM had increased for all therapies, with significant increases for aromatherapy, acupuncture, and reflexology (Table 1).

Levels of support for provision of therapies on the NHS were similar for hypnotherapy and osteopathy. For all other therapies, a greater proportion of respondents to the 1999 survey thought that CAMs should be available on the NHS, but only increases in support for chiropractic and reflexology were statistically significant.

Results reveal a reduced proportion of individuals who had concerns about using CAM although the difference was not significant (25% in 1993 and 20% in 1999). Levels of concern about the registration of therapists, the qualification of therapists, and the attitude of health professionals were comparable across the two surveys (Table 2). Overall concerns about the effectiveness of therapies had increased from 36 to 45% but this was not statistically significant. The overall profile of opinions on the need for register of therapists had not changed significantly over the two surveys ($P = 0.07$); however, the proportion of individuals who thought that a register of therapists was essential had increased significantly from 52 to 61% ($P = 0.01$).

Opinions on use of therapies in 1999 study only

A total of 175 (41%) respondents indicated that they had used at least one type of CAM (Table 3). Not all those who used CAM responded to all the questions about use. Respondents who had used CAM were asked to provide details about one CAM therapy only, either one they had used most recently or a therapy they had used most often. A total of 67% of the respondents who provided details of their CAM

Table 1 Trends in opinions of CAM from 1993 to 1999

Therapy	Number (%) aware of therapy			Number (%) who had actually used therapy			Number (%) who thought therapy should be provided on the NHS		
	1993 ($N=341$)	1999 ($N=432$)	P value[a]	1993 ($N=341$)	1999 ($N=432$)	P value[a]	1993 ($N=341$)	1999 ($N=432$)	P value[a]
Any therapy				96 (29)	175 (41)	<0.001			
Acupuncture	320 (94)	420 (97)	n.s.	22 (6)	44 (10)	<0.001	184 (54)	259 (60)	n.s.
Aromatherapy	224 (66)	391 (91)	<0.001	32 (9)	79 (18)	<0.001	82 (24)	128 (30)	n.s.
Chiropractic	189 (56)	302 (70)	<0.001	15 (4)	39 (9)	n.s.	129 (38)	218 (51)	<0.001
Herbalism	215 (63)	309 (70)	n.s.	14 (4)	24 (6)	n.s.	76 (22)	111 (26)	n.s.
Homeopathy	216 (63)	304 (71)	n.s.	23 (7)	45 (10)	n.s.	103 (30)	160 (37)	n.s.
Hypnotherapy	251 (74)	339 (79)	n.s.	12 (4)	20 (5)	n.s.	125 (37)	163 (38)	n.s.
Osteopathy	240 (71)	301 (70)	n.s.	33 (10)	53 (12)	n.s.	172 (50)	230 (53)	n.s.
Reflexology	183 (54)	348 (81)	<0.001	10 (3)	38 (9)	<0.001	98 (29)	181 (42)	<0.001

[a] Chi-squared test, comparing changes from 1993 to 1999; n.s., nonsignificant.

Table 2 Trends in concerns about complementary therapies and opinions on need for a register of approved therapists

	Number (%)		
	1993 ($N = 341$)	1999 ($N = 419$)	P value[a]
Had any concerns about complementary therapy	81 (25)	82 (20)	n.s.
Concerns—number (% of those who had any concerns)			
Cost of therapy	42 (52)	18 (22)	0.001
Registration of therapists	39 (48)	36 (44)	n.s.
Effectiveness of therapists	29 (36)	37 (45)	n.s.
Attitude of other health professionals to complementary therapy	16 (20)	14 (17)	n.s.
Qualifications of practitioners/therapists	55 (68)	53 (65)	n.s.
	$N = 327$	**$N = 424$**	
Opinions on need for a register of approved therapists			
Essential	169 (52)	260 (61)	0.07
Desirable	119 (36)	123 (29)	0.07
Unnecessary	6 (2)	6 (1)	0.07
No opinion	33 (10)	35 (8)	0.07

[a] Chi-squared test, comparing changes from 1993 to 1999; n.s., nonsignificant.

use were females. A total of 11% were aged between 18 and 29, 46% between 30 and 49, 33% between 50 and 69, and 10% were aged over 70 years. For the majority, 133 (70%), therapy had been therapist provided either a complementary therapist or NHS professional as opposed to a bought product. Both types of approach were common, however, for aromatherapy and homeopathy. A total of 53/133 (40%) had enquired into the qualifications of the therapist prior to commencing the course of treatment. Enquiries included; checking or seeing certificates in the clinic and asking the therapist themselves. Two respondents checked with the appropriate registering body (one for chiropractic and one for osteopathy). Most respondents relied on the fact that the therapist was known to them personally or recommended by a friend. One respondent took advice from their general practitioner.

Respondents were asked to volunteer information about the health problem or medical reason for which they had used the therapy. The self-reported primary reasons for use by type of CAM are shown in Table 4. Almost half, 48% found their therapy effective (Table 3); however, 15% found the therapy ineffective.

There was no evidence of differences in effectiveness between therapies delivered by a therapist and specialist products bought from a pharmacist or shop (although numbers were small for this comparison).

A total of 107/165 (65%) had consulted their GP about their health problem before using CAM. Thirty-eight per cent (59/157) indicated that their GP was aware that they were using CAM, of these, 14 because their GP was providing the therapy directly (nine for acupuncture, two for homeopathy, two for hypnotherapy and one for chiropractic). A further 89/157 (57%) indicated that their GP was not aware they were using CAM, with 5% unsure.

DISCUSSION

Little research has been undertaken examining changes in CAM use over time. Whilst one such study is available from the US,[4] this research provides the first empirical evidence of changes in CAM use over time from a UK perspective.

This study does have a number of limitations, however, which may affect the interpretation of the results. Whilst the sampling frames used in the two surveys were similar, in that they were drawn from the same population base, we accept that there may be some differences which may make comparisons less reliable, for example, entry onto the electoral register is voluntary. Due to the differences in sampling frames, we also have no reliable data on which to compare respondents' demographic profiles between the two studies. To improve clarity some minor word changes were made to the questions in the second survey but the core questions remained the same. It is possible that some differences observed may, in part, be a reflection of wording changes.

Although, overall, changes in CAM awareness, use and support for NHS provision had all increased, for most therapies, the changes were too small, based on this study to draw any firm conclusions. However, the changes in awareness for aromatherapy, chiropractic, and reflexology had increased significantly, and, with the exception of chiropractic, these changes were mirrored by similar increases in actual use. This study highlighted that CAM in general appears to be playing an increasing role in the healthcare of the population of North East Scotland, but when examined more closely, this varies with different CAM. The studies have revealed changes in opinions about availability of CAM on the NHS, but again apart from significant increases in support for reflexology and chiropractic, the increases for other CAM were too small to draw any firm conclusions. Increases

Table 3 Opinions on use of CAMs in 1999

	Effectiveness of therapies				Type of therapy		
	Valid *N*	**Very effective *N* (%)**	**Partially effective *N* (%)**	**Not effective *N* (%)**	**Valid *N***	**Therapist administered *N* (%)**	**Bought product *N* (%)**
Overall	166	80 (48)	62 (37)	24 (15)	149	105 (70)	44 (30)
Therapy							
Acupuncture	22	5 (23)	7 (32)	10 (45)	23	22 (96)	1 (4)
Aromatherapy	37	13 (35)	24 (65)	–	31	8 (26)	23 (74)
Chiropractic	23	13 (57)	6 (26)	4 (17)	22	22 (100)	–
Herbalism	8	6 (75)	1 (12.5)	1 (12.5)	8	–	8 (100)
Homeopathy	20	9 (45)	8 (40)	3 (15)	16	5 (31)	11 (69)
Hypnotherapy	7	2 (29)	3 (43)	2 (29)	7	7 (100)	–
Osteopathy	32	20 (61)	10 (30)	2 (6)	31	30 (97)	1 (3)
Reflexology	14	10 (71)	3 (21)	1 (7)	10	10 (100)	–
All therapies							
Therapist administered	103	52 (51)	31 (30)	20 (19)			
Bought product	43	14 (33)	26 (60)	3 (7)			
Aromatherapy only							
Therapist administered	8	6 (75)	2 (25)	–			
Bought product	22	4 (18)	18 (82)	–			
Homeopathy only							
Therapist administered	5	2 (40)	1 (20)	2 (40)			
Bought product	11	4 (36)	7 (64)	–			

Table 4 Self-reported primary reasons for using CAM therapy

Therapy	Primary reasons for use
Acupuncture	Weight problem Stop smoking Muscular problems Back/neck problems
Aromatherapy	Stress relief For relaxation As a “pick me up” Aches and pains Loss of mobility/injury
Chiropractic	Back/neck problems Spinal neck problems Back injury
Herbalism	Chronic sinusitis Rheumatism Menopause Headaches Depression
Homeopathy	Hayfever/allergies Agoraphobia/panic attacks Chronic fatigue syndrome Bruising Sinusitis
Hypnotherapy	Stop smoking Stress (e.g. exams) Phobias (e.g. dental phobia)
Osteopathy	Back pain Muscle spasm/strain Neck/shoulder pain Scoliosis Posture problems
Reflexology	Stress Muscle pain, back pain, headaches General well-being and relaxation To relive side-effects of cancer treatment

in awareness and use of aromatherapy may be explained by the increasing availability of commercial products containing aromatherapy oils. This view is supported by the fact that of the 31 respondents who provided details about aromatherapy, 74% had used a bought product. A bought product was also the most popular form of therapy for users of homeopathy and herbalism. Increased awareness, use and support for NHS provision cannot be similarly explained for reflexology, as it can only be administered by a therapist and is not available on the NHS. Increased exposure in the media may explain at least part of the increased awareness.

Reasons for use reveal that for the most part, respondents were using CAM to relieve stress related problems or for pain relief of muscular/skeletal problems. Although not usually life-threatening, such problems tend to be chronic. The majority indicated they had consulted a doctor about the health problem before using CAM and the majority of CAM users also found their therapy either very, or partially, effective. Although these measures are subjective, the types of health problems for which CAM was used may indicate where conventional medicine is failing patients and where CAM can provide an effective alternative. It was of interest that a number of respondents had received their therapy from their GP.

CAM use is growing in popularity world-wide and it is likely that the increases in CAM use identified in this study will be found in other parts of the UK. Such changes in CAM use may have implications for the NHS. Greater integration of CAM with conventional medicine needs to be considered if inequalities in the current access to CAM are to be addressed.[6–8]

This follow-up study has provided further useful data on awareness, use of, and concerns regarding CAM use and opinion on its availability on the NHS. The additional questions posed have provided further baseline data on which to make future comparisons on actual CAM use. The study has also revealed some of the issues which require to be recognised by the NHS, notably increasing involvement of GPs in CAM provision, patients' involvement of their GPs in their CAM use, and the types of conditions and health problems for which people seek CAM as a remedy.

REFERENCES

1. Emslie M, Campbell M, Walker K. Complementary therapies in a local healthcare setting. Part 1. Is there real public demand? Complement Ther Med 1996; 4: 39–42.
2. Harris P, Rees R. The prevalence of complementary and alternative medicine use among the general population: a systematic review of the literature. Complement Ther Med 2000; 8(2): 88–96.
3. Eisenberg DM, Davis RG, Ettner SL et al. Trends in alternative medicine use in the United States, 1990–1997. J Am Med Assoc 1998; 280: 1569–1575.
4. Thomas KJ, Nicholl JP, Coleman P. Use and expenditure on complementary medicine in England: a population based survey. Complement Ther Med 2001; 9: 2–11.
5. Lemoshow S, Hosmer DW, Klar J, Lwanga SK. Adequacy of sample size in health studies. Chichester: Wiley, 1990.
6. White AR, Resch KL, Ernst E. Complementary medicine: use and attitudes amongst GPs. Fam Pract 1997; 14(4): 302–306.
7. House of Lords Select Committee on Science and Technology. Complement Altern Med. London: HMSO, 2000.
8. Zollman C, Vickers A. Complementary medicine and the doctor 1999. Br Med J; 319: 1558–1561.