

Use of complementary or alternative medicine in a general population in Great Britain. Results from the National Omnibus survey

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Abstract

Background A representative sample of the adults in England, Scotland and Wales was interviewed to estimate levels of use of complementary or alternative medicines (CAMs) and their socio-economic correlates.

Methods The Omnibus survey is a multi-purpose survey carried out in the United Kingdom by the Office for National Statistics on behalf of non-profit making organizations. The survey is carried out in 2 out of 3 months each quarter using a stratified random, probability sample of households. An eight-question module was added to the interview schedule of the survey in March 2001. Topics included practitioner-based use of 23 named CAM therapies in the past 12 months. The resulting data were analysed in conjunction with socio-economic and demographic variables.

Results A response rate of 65 per cent (1794/2761) was achieved. An estimated 10.0 per cent of the population [95 per cent confidence interval (CI) 8.7–11.5 per cent] had received any CAM therapy from a practitioner in the past year. No individual therapy was used by more than 2 per cent of the sample. An estimated 6.5 per cent (95 per cent CI 5.4–7.6) had used one of the five main therapies: acupuncture, homeopathy, chiropractic, osteopathy or herbal medicine. Estimates of CAM use were similar in England, Scotland and Wales. There was a significant positive association between CAM use and non-manual social class ($p = 0.002$), age left full-time education ($p < 0.001$), and gross income over £15 600 ($p < 0.001$). More than half (52 per cent) of the respondents that had used CAM in the past year had not told their general practitioner.

Conclusions Strong correlations between the use of CAM and gross socio-economic indicators are demonstrated in the survey. Repeated national surveys of this type could provide a useful vehicle for collecting information about changing patterns of CAM use on a routine basis.

Keywords: survey, complementary and alternative medicine, adult population, Great Britain

Background

Previous population-based studies in Europe, Australia and the United States show that the use of therapies and treatments referred to collectively as complementary or alternative medicines

(CAMs) is widespread.¹ In England, with the publication of new national estimates of patient access to CAMs via National Health Service (NHS) primary care, there is evidence to show increasing availability of CAMs in an NHS setting.² However, the term 'CAM' covers a wide-range of therapies and over the counter remedies purchased for lifestyle, as well as for health reasons, and despite the reported changes in patient access via primary care, most CAM-based activity (an estimated 90 per cent in 1998) takes place outside the NHS.³

In considering the public health issues that this may raise, in 1999, a Scientific Committee of the House of Lords recommended that CAM provision in NHS be increased.⁴ Whilst not intending to be restrictive, in its report, the Committee grouped therapies according to the level of statutory or voluntary professional regulation, and the availability of studies of effectiveness in an emerging evidence base. Accordingly, five therapies, acupuncture, homeopathy, chiropractic, osteopathy and herbal medicine, were classified as belonging to 'Group 1', and as being appropriate for NHS funding. This raises policy-related questions about providing CAM in an NHS setting and elsewhere, and an associated need to have a mechanism in place to monitor changes in patterns of CAM use in the population and NHS provision.

Aims

To use a routine national survey to obtain estimates use of CAM in an adult general population. To describe socio-demographic characteristics, socio-economic correlates, reasons for use, communication with general practitioner (GP) regarding use and reasons for choosing the practitioner.

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Methods

Omnibus survey

The Omnibus survey is a multi-purpose survey carried out on a regular basis by the UK Office for National Statistics (ONS) on behalf of a range of government departments and other public and non-profit-making organizations.⁵ Interviews are conducted in respondents' homes by trained interviewers. Advance letters are sent to all addresses giving a brief account of the survey. Interviewers must make at least three calls at an address at different times of the day and week. A quality check on fieldwork is carried out through recall interviews with a proportion of respondents. The average response rate is 66 per cent.

Sample

The Omnibus survey is designed to produce nationally representative estimates about individuals and households. It uses a Post Code Address File as its sampling frame, and all private household addresses in Great Britain are included. Each month a sample of 100 postal sectors is selected, stratified by region, the proportion of households renting from local authorities, and the proportion of households in which the head of household is in socio-economic group 1–5 or 13 (i.e. professional, employer or manager). Within each postal sector, 30 addresses are selected randomly. In households with more than one adult member, one person aged 16 and over is randomly selected for interview. No proxy interviews are undertaken. In March 2001, the Omnibus sample consisted of 2761 eligible addresses (excluding business addresses, new and empty properties).

Questionnaire development

The Omnibus survey contains a set of classificatory questions, including socio-economic status and ethnicity, and these can be supplemented to provide information on a range of health and health-related topics. In March 2001, an eight-question module was added to the interview schedule of the survey.⁶ The additional questions asked about CAM use within the last 12 months relating to 23 types of CAM treatment received from any practitioner within that period. For each reported use, we asked about reasons for seeking each treatment, whether the patient had informed their GP or other health care professional that they were consulting a CAM practitioner, and reasons for selecting the chosen CAM practitioner.

Analysis and weighting

The survey figures are weighted to correct for the greater probability of being interviewed if living in a household with few rather than many adults. The weight was calculated by ONS by dividing the number of adults in the sampled household by the average number of adults per household. The authors conducted the analyses presented in this paper on the weighted data, using SPSS PC version 11.5. Confidence intervals (CIs) for proportions were calculated using CIA.⁷ It is recognized that

CIs surrounding percentages calculated on the basis of 30 or less will be very large, and that caution is necessary when interpreting such results.

Results

Response rate

A response rate of 65 per cent was achieved (1794/2761). There were 703 (26 per cent) refusals and 264 (10 per cent) non-contacts. Analysis was conducted on all respondents.

Demographic characteristics

The sample comprised 47 per cent males. All age groups were represented: 50 per cent were aged 16–44, and 20 per cent were aged 65 or over. Twenty-one per cent had continued in full-time education after the age of 18, 44 per cent were from manual social classes, 69 per cent reported a gross annual income of <£15 600, and 5 per cent were from minority ethnic groups.

CAM use

An estimated 10 per cent (95 per cent CI 8.7–11.5 per cent) of adults had used a practitioner to receive CAM treatment in the past 12 months. No individual therapy was used by more than 2 per cent of the sample. Only seven therapies were used by more than 1 per cent of the sample (Table 1). An estimated 6.5 per cent (95 per cent CI 5.4–7.6) of adults had used one of the five therapies classified by the House of Lords Committee as Group 1⁴ in the past 12 months. Most users reported more than one therapy. Of the users, 16 per cent had used four or more therapies, 51 per cent had used two or three therapies, and 33 per cent had used a single therapy in the past year.

Geographic variation

Analysis of regional variations in levels of CAM use indicates similar levels of use in England, Scotland and Wales. The CIs around the estimates for Scotland and Wales are wide and are due to the small sample size. In this sample, reported use was significantly lower in the north of England compared with all England (Table 2).

Age and sex

Demographic characteristics of CAM users are shown in Table 3. Men and women used CAM therapies in equal proportions. Use was lower in the youngest and oldest age groups. The difference in proportions using CAM between age groups was statistically significant for men only.

Socio-economic indicators

The relationship between CAM use and socio-economic characteristics was explored with respect to gross personal income (including benefits), social class and age left full-time education. All these variables were strongly related to CAM use. Receipt of

CAM from a practitioner is positively associated with higher gross income levels, non-manual social class and full-time education after the age of 18. However, adults in all income and social class groups reported some use of complementary therapies (Table 4).

Table 1 Estimated proportion (per cent, 95per cent CI) of adult population visiting named CAM practitioner in 12 months

Therapy	Use in the past 12 months (<i>n</i> = 1794)		
	Frequency	%	95% CI*
Osteopathy	33	1.9	1.3–2.6
Chiropractic	29	1.6	1.1–2.3
Homoeopathy	33	1.9	1.3–2.6
Acupuncture	29	1.6	1.1–2.3
Herbalism	15	0.8	0.5–1.4
Visited at least one of the above five	115	6.4	5.4–7.6
Massage therapy	37	2.1	1.5–2.8
Aromatherapy	30	1.7	1.2–2.4
Reflexology	28	1.6	1.1–2.2
Spiritual healing	13	0.7	0.4–1.2
Nutritional therapy	9	0.5	0.3–1.0
Shiatsu	8	0.4	0.2–0.9
Reiki	8	0.4	0.2–0.9
Traditional Chinese medicine	7	0.4	0.2–0.8
Dowsing	3	0.2	0.1–0.5
Transcendental meditation	3	0.2	0.1–0.5
Hypnotherapy	2	0.1	0.0–0.4
Naturopathy	2	0.1	0.0–0.4
Ayurvedic medicine	1	0.1	0.0–0.3
Alexander technique	1	0.1	0.0–0.3
Crystal therapy	1	0.1	0.0–0.3
Iridology	0		
Kinesiology	0		
'Other' practitioner*	10	0.6	0.3–1.0
All therapies	179	10.0	8.7–11.5

*'Other' included: counselling; gentle pressure points; Indian head massage; magnetic therapy; relaxation therapy; vitamin supplements on advice of herbalist; zero balancing.

Ethnic groups

In this sample, similar percentages of CAM use were found for the ethnic category 'white' and all others grouped together (Table 5). The CI around the percentage for all groups other than 'white' combined is wide due to the relatively small base. The survey sample size and structure did not generate sufficient numbers for analysis of the individual ethnic groups.

Disclosure to GP

Over half (52 per cent) of those reporting the use of CAMs had not told their GP or a health care provider about any of the visits they had made in the past 12 months to a CAM practitioner. More than one-third (37 per cent) said they had always done so. No significant relationship was found between reported disclosure to a GP or other NHS professional and socio-demographic characteristics including age group, gender, social class, education, gross income or broadly defined ethnic group. No differences were observed in disclosure behaviour relating to the individual therapy used with respect to the main five therapies. However, with less than 200 CAM users in the data set, the cells for analysis are too small to interpret with confidence.

Table 2 Use of CAM from a practitioner (all therapies) in the past 12 months by geographical region

Region	Received CAM			
	Frequency	%	95% CI	<i>n</i> = 100%
England	152	10.0	8.6–11.7	1513
Wales	10	10.0	5.5–17.4	100
Scotland	17	9.8	2.3–15.1	174
North	20	4.3	2.8–6.5	469
Midlands and East Anglia	67	14.4	11.5–17.9	464
London	12	7.4	4.3–12.5	162
South East	32	12.5	9.0–17.1	256
South West	21	13.0	8.6–19.0	162

Table 3 Estimated use of CAM from a practitioner in the past 12 months by age and sex

Used any named CAM via a practitioner	Male*			Female†			Both sexes‡			
	<i>n</i>	Frequency	%	<i>n</i>	Frequency	%	<i>n</i>	Frequency	%	95% CI
16–24 years	122	5	4.1	117	8	6.8	238	13	5.5	3.2–9.1
25–44 years	326	39	12.1	340	36	10.6	661	75	11.3	9.1–14.0
45–54 years	113	20	17.7	174	20	11.6	285	40	14.0	10.5–18.5
55–64 years	115	5	4.4	136	14	10.4	251	19	7.6	4.9–11.5
65–74 years	92	7	7.7	102	14	13.7	194	21	10.8	7.2–16.0
75+ years	68	5	7.4	91	6	6.7	159	11	6.9	3.9–12.0
All use of any named CAM therapies	830	81	9.8	956	98	10.3	1786	179	10.0	8.7–11.5

* $p = 0.002$ for difference in proportions between age groups for males.

† $p = 0.49$ for difference in proportions between age groups for females.

‡ $p = 0.012$ for difference in proportions between age groups; $p = 0.40$ for difference in proportions between sexes.

Table 4 Use of CAM from a practitioner in the past 12 months by socio-economic indicators

Indicator	Description	Frequency	%	95% CI	n (100%)
Gross income*	<£5200	37	7.3	5.3–9.8	510
	£5200–<10400	29	8.1	5.7–11.4	359
	£10400–<15600	25	8.6	5.9–12.4	291
	£15600–<26000	42	13.7	10.3–18.0	307
	≥£26000	32	15.4	11.1–20.9	208
	Gross income <£15600	91	7.8	6.4–9.5	1160
	Gross income ≥£15600	74	14.4	11.6–17.7	515
Social class†	I Professional	15	14.3	8.9–22.2	105
	II Intermediate	77	16.8	13.7–20.6	457
	III NM Skilled non-manual	41	10.7	8.0–14.2	384
	III M Skilled manual	20	6.7	4.4–10.1	299
	IV Partly skilled	8	2.7	1.4–5.3	291
	V Unskilled	6	6.2	2.9–12.8	97
	Non-manual	133	14.1	12.0–16.4	946
	Manual	34	4.9	3.6–6.8	687
Age left education‡	≥14 years	6	3.1	1.4–6.5	196
	15–18 years	97	8.5	6.9–10.1	1137
	19–25 years	55	18.6	14.6–23.4	296
	>25 years	16	24.6	15.8–36.3	65
	Still in education	3			86
	No education	3			7
	Left full time education ≥19 years	71	19.7	15.9–24.1	360
	Left full-time education <19 years	103	7.7	6.4–9.3	1333

* $p = 0.002$ for difference in proportions between broad gross income groups.

† $p < 0.001$ for difference in proportions between non-manual and manual social classes.

‡ $p < 0.001$ for difference in proportions between age 19 and above, and <19 years.

Table 5 Use of CAM from a practitioner in the past 12 months by ethnic group

Ethnic group	Received CAM in past 12 months			
	Frequency	%	95% CI	n = 100%
White	169	9.9	8.6–11.4	1701
All others	11	12.8	7.3–21.5	86
Black Caribbean	0			9
Black African	1			11
Other black groups	1			2
Indian	5			23
Pakistani	1			7
Bangladeshi	0			6
Chinese	2			5
None of these	1			23

Reasons for receiving therapy

Sixty-two per cent of respondents reported using CAM on at least one occasion to treat an illness for which conventional medical advice had been sought previously, 17 per cent to treat an illness/condition for which no conventional medical treatment had been sought, 34 per cent to improve their general health or prevent ill health, 6.5 per cent for recreational/beauty purposes, and 9 per cent mentioned another reason (most of

which related to the pre-specified categories). Reflexology, aromatherapy and massage were used more than other treatments to improve health, and less often to treat illness, with or without prior conventional treatment. No differences were found between the reasons given for using CAM treatments and the socio-demographic characteristics examined, including gender.

Reasons for choosing practitioner

Personal recommendation from a friend or relative was the most common reason, given by 59 per cent, for choosing the CAM practitioner. Recommendation by a GP or other NHS professional was cited by 18 per cent of those using CAM. GP recommendations were more likely to be cited by women (20 per cent) than men (15 per cent), and much more frequent amongst those reporting the use of acupuncture (48 per cent).

Discussion

Limitations of the study

Sampling bias. The Omnibus survey has a valid structure and process designed to produce nationally representative data, and provides a useful means for conducting 'one off' investigations as specific questions can be added to the core survey on a range of health and health-related issues. Previous health-related

studies using the survey have reported results about weight control practices,⁸ sunburn,⁹ oral health in older people,¹⁰ beliefs about healthy lifestyles,¹¹ and the use of smoke alarms.¹² In 2001, we added an eight-question module about the use of CAM. This yielded 179 respondents (10 per cent of the achieved sample) who had used CAM at least once in the previous 12 months. The number of users identified in the survey was relatively small, and this limited the scope for sub-group analysis.

Response bias. The response rate of 65 per cent was typical for the Omnibus survey. It has been demonstrated that interview survey response rates tend to be positively correlated with socio-economic status and negatively correlated with age.¹³ No information is available regarding the characteristics of the non-responders in this sample. However, an Omnibus sample has been shown to compare well with Census data for Britain with respect to socio-demographic characteristics.¹⁴ As a method for collecting data on CAM use, the Omnibus survey has distinct advantages. Given the general scope of the Omnibus survey, CAM-user response bias due to the saliency of the topic is unlikely, and there is no danger that the questionnaire is passed to the household member with the most 'experience' of CAM use. This can happen with a postal survey, even if the survey questionnaire is sent to a named person within the household.³

Measurement and recall bias. This survey used an extensive list of therapies that respondents were shown during the interview. Given the cultural unfamiliarity of some of these therapies, it is possible that some respondents did not have a full understanding of the meaning of each term. Underestimation of the use of individual therapies may have occurred if a respondent had received an adjunctive therapy from a practitioner and not recognized the descriptive term offered. Conversely, overestimation may have occurred if respondents misidentified a therapy from the list. Previous research has found that some people mistake 'chiropractic' for 'chiropractic'.³ A 12-month recall period is quite long, but making a visit to a practitioner is a significant behaviour and likely to be remembered. Results from a previous survey of CAM use suggest that a 12-month recall period is not associated with inflated reports of use.³

Principal findings

In this survey we found that 10 per cent of adults in Britain had consulted at least one CAM practitioner in the past 12 months, and 6.4 per cent had used one of the therapies named in 'Group 1' of the House of Lords Report: acupuncture, homeopathy, chiropractic, osteopathy or herbal medicine. Reported use was the same for both sexes. Adults in each income and social group used CAM in the previous 12 months, but the data showed a clear positive association between CAM use and higher gross income levels, as well as non-manual social class and more years in education. Approximately half of the sample had informed their GP or other health professional that they had consulted a CAM practitioner, and personal recommendation from a friend

or relative was the reason given most frequently for choosing a particular practitioner.

It is difficult to draw comparisons between the findings from this study and those reported in other surveys of CAM use in the United Kingdom, as each is based on a different methodology, asks slightly different questions, and may relate to different populations.¹⁵ The Omnibus survey covers Great Britain (England, Scotland and Wales). The population estimates for those consulting a practitioner for one of the five established therapies in the last 12 months (6.4 per cent, 95 per cent CI 5.4–7.6) is lower than has been reported previously for England alone (10.6 per cent, 95 per cent CI 9.4–11.7).³ Use of CAM by women in this survey is also lower than has been reported elsewhere.^{1,3,16} These differences may be due to differences in sampling and the methods used to collect the data, but the variation is not sufficient to question the overall reliability of the results from the Omnibus survey.

We found that 62 per cent of the CAM use reported in the past 12 months was for an illness or condition for which conventional medical advice had been sought previously. This supports other studies that suggest that most CAM use is supplementary or additional to conventional care, rather than an alternative.¹⁷ The finding that the majority of the reported use was to improve general health or prevent ill health, with only 6.5 per cent stated to be for recreational/beauty purposes, indicates that health, rather than lifestyle or beauty, is still the prime motivator for persons to consult CAM practitioners.

Data from this survey suggest that minority ethnic groups in Great Britain are using CAMs. However, our ability to investigate this use is hindered by the small base numbers in each ethnic group other than 'white'.

Implications for future research

This study has demonstrated that it is possible to collect information about CAM use in routine surveys, such as the Omnibus survey. However, the limitations of the process are that the numbers in the sample using CAM were often too small to allow sub-group analysis to be carried out. A population sample of 8000 (four times the size of this sample) would allow most socio-demographic and behavioural sub-groups in the population to be examined. This could be achieved by repeating the CAM questions in four consecutive ONS Omnibus surveys. However, the numbers in each individual ethnic group would still be too small to yield reliable estimates with respect to the use of CAM.

This survey yielded reliable population estimates for adults in Great Britain who had consulted at least one practitioner offering one of 23 named CAM therapies in the previous 12 months. Future surveys will need to consider the range of therapies that are named in the questions. The therapies included should reflect both temporal and cultural influences. New therapies emerge, and others increase in popularity over time. Socio-political circumstances make the availability of various therapies more or less likely in different countries. However, there is clearly a need for a 'core' set of therapies to be identified and

included as standard, in order to facilitate comparisons over time and between countries. We suggest that those therapies with current use levels in excess of 1 per cent provide a useful starting point for defining such a 'core'.

Restricting the definition of CAM use to that involving a practitioner will help to reduce measurement bias. If a wider definition is used, one that incorporates 'over-the-counter' purchases and self-care, a distinction should be made between the different types of use. Standardizing the measurement to the use of CAMs in the past 12 months will also facilitate comparisons between future surveys.

Conclusions

Strong correlations between the use of CAM and gross socio-economic indicators are demonstrated in this survey. The population estimates of use are within the range reported elsewhere, but the number of CAM users in this relatively small population sample restricted exploration of relevant sub-group behaviours. Repeated national surveys of this type could provide a useful vehicle for collecting information about changing patterns of CAM use on a routine basis.

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