

Complementary medicine use in children: extent and reasons. A population-based study

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SUMMARY

This study used a cross-sectional population survey to determine the prevalence of complementary medicine use in children. Some form of complementary medicine had been used by 17.9% of children at least once, and 6.9% had visited a complementary medicine practitioner. Homoeopathy, aromatherapy, and herbal medicine were most frequently used, most commonly for ear, nose, and throat; dermatology; musculoskeletal; infant; respiratory; and emotional/behavioural health problems. Complementary medicine was used mainly because of word-of-mouth recommendation, dissatisfaction with conventional medicine, and fear of side-effects of conventional treatments. Complementary medicine use is widespread in children; professionals should be aware of this, be alert for possible side-effects/interactions, and encourage adherence to effective conventional treatments where important.

Keywords: complementary medicine; child health; prevalence.

Introduction

OVER 20% of primary health care teams in the UK currently provide some form of complementary therapy as part of their practice.¹ The extent of complementary medicine use in children is unclear. A systematic review of studies investigating complementary medicine use in children identified only one population survey, from rural Canada.²

It is important to be aware of the extent of complementary medicine use in children, for a number of reasons. These include raising the awareness of health professionals, encouraging questions about complementary medicine use and adherence to effective conventional treatments where important, to be alert for potential side-effects/interactions, and to help direct future research.

This study aimed to determine the population prevalence of the use of complementary medicine in children, the types most frequently used, and the conditions it is used for.

Method

A cross-sectional survey was undertaken in the Bath clinical area, south west England. A questionnaire was developed and piloted, which defined complementary medicine inclusively thus: '... complementary medicine (sometimes called alternative medicine) includes various therapies for which you see a therapist, such as a homeopath, and various self-treatments, such as herbs, which you buy yourself. These treatments are not normally available on the NHS ... Sometimes it will not be clear. If in doubt, please write down what you used'.

A random sample of 1230 children under 16 years of age was generated from the child health database. Questionnaires were sent in August 1998, with up to two reminders to non-responders. Sample size was calculated, based on detecting an estimated prevalence of complementary medicine use in children of 15% (95% confidence intervals [CIs] of +/- 2%) and a 70% response rate.

Responses were not validated, other than by comparison with 10 questionnaires that were inadvertently re-mailed which showed identical responses. Data were entered onto Microsoft Access and analysed using the statistical package SPSS. Ethics approval was obtained.

Results

The eligible sample was 1134 (92.2% of random sample). Ninety-six children were excluded for the following reasons: being from the same family, living with foster carer, confidential address, private school address, armed forces, incorrectly recorded date of birth, and no longer at recorded address.

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HOW THIS FITS IN*What do we know?*

The extent of complementary medicine use in children in the UK is unclear. This is the first population survey looking at complementary medicine use in children and confirms its widespread use.

What does this paper add?

Health professionals need to be aware of this, and encourage adherence to effective conventional treatments where appropriate.



Nine hundred and four replied (79.7% response rate). Four false-positive results were excluded. There was no indication of response bias when responders and non-responders were compared by age, group or sex. One hundred and sixty-two responders (17.9%, 95% CI = 15.7–20.1%) had used complementary medicine for their child at least once, 62 (6.9%) of whom had visited a complementary medicine practitioner. Seventy-eight (8.6%) had used complementary medicine more than once. Sensitivity analysis shows that if none of the non-responders had used complementary medicine then the prevalence would have fallen to 14.3%. A further 55 (6.1%) had thought about using complementary medicine for their child.

Four hundred and twenty responders (46.5%) said that one or both parents had used complementary medicine, and this was associated with complementary medicine use in children (relative risk = 2.3, 95% CI = 2.0–2.5, $\chi^2 = 130.6$, $df = 1$, $P = 0.001$). Complementary medicine use was not associated with age group (χ^2 test for trend = 0.06, $df = 1$, $P = 0.81$), sex of child (χ^2 test = 1.6, $df = 1$, $P = 0.20$) or household income (χ^2 test for trend = 0.07, $df = 1$, $P = 0.79$).

Table 1 shows the types of complementary medicine most frequently used. The main reasons given for using complementary medicine (154 gave a reason, some more than one) included: word of mouth recommendation (92 [59.7%]), dissatisfaction with conventional medicine (57 [37.0%]), fear of side-effects of conventional medicines (49 [31.8%]), more personalised attention (21 [13.2%]), and having a child with a chronic condition (13 [8.4%]).

Table 1. Types of complementary medicine used.

Complementary medicine	Number	Percentage ^a
Homoeopathy	94	61.0
Aromatherapy	56	36.4
Herbal medicines	37	24.0
Osteopathy (including cranial osteopathy)	19	12.3
Reflexology	10	6.5
Chiropractic	5	3.3
Acupuncture (including acupressure)	4	2.6
Hypnosis	3	2.0
Other	11	7.1
Total	154 ^b	

^aThe percentages add up to more than 100% because some children used more than one complementary medicine. ^b154 (95.1%) of the 162 responders who had used complementary medicine gave further information. 'Other' includes shiatsu (2), spiritual healing (2), massage with oils (2), kinesiology (1), programming exercise therapy (1), and unspecified creams, ointments, and salts.

Further details were requested about each episode of complementary medicine use (231 in all). Eighty-two (35.5%) had visited a complementary medicine practitioner; entailing one visit (23), between two and five visits (36) or five or more visits (21). Costs varied; 47 paid less than £20 per visit, 27 paid between £20 and £30 per visit and three £30 or more per visit. For the remaining 149 (64.5%), the complementary medicine was obtained from shops (74), chemists (32), general practitioners (GPs) (7), and 'other' sources — mainly friends/family (27).

Complementary medicine was reported to have helped the child's condition in 197 (85%) episodes. One hundred and twenty-six (55%) had tried conventional medicine first and 75 (33%) had told their child's doctor.

Discussion

This study shows that 17.9% (95% CI = 15.7–20.1%) of children under 16 years of age have used complementary medicine at least once.

Care should be taken in generalising the results of this study. The Bath clinical area has a population of 410 000 (child population of 75 000), which includes the city of Bath and towns in rural areas. The socioeconomic mix overall is on the affluent side of the national mean with an approximate Jarman score of -7.7.

Contrary to previous studies, the results show no association between complementary medicine use and household income.³⁻⁵ However, a number of the general comments made by parents suggest that cost was a factor in complementary medicine use.

Adult studies show that over three-quarters of patients presenting to complementary medicine practitioners have musculoskeletal problems as their main complaint.^{4,6} However, this study shows a different range of morbidity treated with complementary medicine in children (Table 2). Adults also tend to turn to complementary medicine for difficult persisting problems that have not responded to conventional treatment.^{4,5} However, this does not appear to be the case for children. When the main health categories — with the exception of dermatology — are coded as acute or chronic presentations, they show that acute conditions are predominantly represented (Table 2). Thus, complementary medicine is commonly used for short self-limiting conditions, such as upper respiratory tract infections and bruising, as

Table 2. Health conditions treated with complementary medicine.

Health condition	Practitioner visit (% of health conditions)	Total number (%)	Acute conditions (%)	Chronic conditions (%)
ENT	12 (32)	38 (17)	28 (74)	10 (26)
Dermatology	11 (30)	37 (17)	7 (19)	30 (81)
Musculoskeletal	7 (26)	27 (12)	18 (67)	9 (33)
Infant	10 (37)	27 (12)	–	–
Respiratory	13 (50)	26 (12)	15 (58)	11 (42)
Emotional/behavioural	17 (68)	25 (11)	–	–
Gastrointestinal	2 (29)	7 (3)	–	–
Allergies	1 (17)	6 (3)	–	–
Other	9 (29)	31 (14)	–	–
Total	82 (37)	224 ^a (100)	–	–

^aThis number is larger than the number of subjects because some people described complementary medicine use in more than one health condition. 'Other' includes unspecified fever and other infections, such as urinary tract infections and fungal infections (9) and constitutional conditions, including tiredness and weakness (10).

well as chronic conditions.

This is the first population survey of complementary medicine use in children in the United Kingdom and it confirms widespread use. Health professionals should be aware of this, be able to ask about complementary medicine use, be alert for possible interactions/side-effects and, where important, encourage adherence to effective conventional treatments. Given the important market for complementary medicine in children, there should be more high quality information available to health professionals and to parents, and further research looking at effectiveness, safety and cost-effectiveness.

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