# Complementary medicine: are patients' expectations being met by their general practitioners?

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SUMMARY. Complementary, or alternative, medicine has increased in popularity among patients during the past 20 years. The purpose of this study was to determine whether general practitioners met their patients' expectations with regard to complementary medicine. In a postal survey all 71 accredited general practitioners in the district of Kassel, Germany, received a structured questionnaire about their experience with complementary medicine. Forty (56%) replied. In 10 of these practices 310 patients were interviewed about their attitudes towards and expectations of such treatment. Of the responding doctors 95% used, at least occasionally, some form of complementary medicine (most commonly herbal medicine, neural therapy or homoeopathy). All but three patients accepted the value of complementary medicine, 58% of them (especially younger, more highly educated patients and those from rural practices) preferred it to orthodox medicine and 40% of the patients had received some form of complementary therapy. Nearly 70% of the patients requested that complementary medicine be practised by their general practitioner more frequently than at present. There was no significant link between patient satisfaction with the doctor and patients' view of, or demand for, complementary medicine. Although both patients and practitioners were interested in complementary therapy, there was a gap between the willingness, or the ability, of general practitioners to use complementary medicine and the patients' demand for these alternative forms of treatment.

Keywords: complementary medicine; patients' expectations; doctors' attitudes.

# Introduction

COMPLEMENTARY medicine has steadily increased in popularity among patients during the past 20 years. Various reasons for this development have been suggested, including complementary medicine being favoured by patients because they are dissatisfied with mainstream medicine or because they are worried about the side effects of 'chemical substances'. <sup>2-4</sup> In response to this challenge family practitioners in many industrialized countries seem to be interested in complementary medicine, and some are practising these methods. <sup>5-10</sup>

To our knowledge, all studies in this field so far have concen-

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trated only on patients' or only on doctors' attitudes to alternative treatment, or on the use of these treatments. No attempt has been made to study the perceptions of both patients and doctors and to see how well they correspond. The aim of this study was to explore the current use of alternative methods of treatment by general practitioners, and patients' expectations of such treatments. Some of these treatments are fully or partially acknowledged by mainstream medicine, for example chiropractic treatment, acupuncture and homoeopathy. Yet, with the exception of chiropractic treatment, 11 confusion about the efficacy of complementary medicine remains. 12-16

# Method

A letter of invitation and a structured questionnaire<sup>17</sup> were sent to all 71 accredited general practitioners listed in the business telephone directory of Kassel, a city of 195 000 inhabitants in the centre of Germany. Non-respondents were telephoned four weeks later and once again invited to take part in the study. The respondents were asked whether and why they used complementary medicine (reasons were chosen from a list), how they rated these treatments compared with orthodox methods, and how often patients had asked for such treatments. As possible moderator variables the doctor's age and the practice setting were examined. To avoid confusion the 15 questions were limited to six well known methods in complementary medicine: homoeopathy, herbal medicine, dietary treatment (for example macrobiotic diet), chiropractic treatment, acupuncture and neural therapy. An additional non-specific category of 'other alternative methods' was also included. Neural therapy, originally described at the beginning of this century in Germany and Russia, aims to normalize functionally disturbed regulation of body systems by injecting local anaesthetics into muscles, nerve ganglions or nerve roots.<sup>18</sup> It is frequently used in arthralgias, chronic sinusitis, recurrent respiratory infections and tension headaches.

Permission was sought from doctors to interview their patients on one day in their surgeries. The interviews with patients were performed using a structured questionnaire containing 20 closed questions and lasted approximately 12 minutes. After having finished one interview the next available patient aged over 14 years was asked to participate. The questions centred on patients' experiences of, and attitudes to, complementary medicine. Patients were asked if they had already been treated with complementary medicine, if they had ever asked their doctor for this treatment and how well they were informed about the complementary therapies available from their doctor. As possible moderator variables the age, sex and education of patients were examined, as well as the subjective extent of their complaints. In order to assess patients' satisfaction with their family doctors statements were shown to them about the doctor-patient relationship (Appendix 1). Possible responses were agree, disagree, or do not know. If patients agreed to six or seven statements, they were rated as 'satisfied'. This index was considered to reflect the central characteristics of the doctor-patient relationship (professional care, depth of relationship, perceived time, and general satisfaction), as shown by Baker. 19

# Analysis

Absolute and relative frequencies of responses to the questionnaire were tabulated. Pearson's chi square test (or Fisher's exact test when necessary) were used to investigate associations between variables and to test the goodness of fit of proportions.

## **Results**

## **Doctors**

Demographic characteristics. Of the 71 general practitioners (all in single handed practices) 40 replied (56.3%). The majority of the doctors (25) practised in the city, two worked in a small town nearby, and the remaining 13 worked in rural areas. One doctor had a recognized qualification in chiropractic therapy. The ages of the general practitioners in the study and the ages of general practitioners in West Germany<sup>20</sup> are shown in Table 1. The P value of 0.86 (chi square test) indicates a good fit with the age distribution of all general practitioners in West Germany.

Table 1. Ages of the 40 general practitioners in the study and of general practitioners in West Germany.<sup>20</sup>

Age (years)	% of GPs in age group		
	Study group (n = 40)	West Germany (n = 15 093)	
31–40	30.0	25.7	
41-50	37.5	<i>33.1</i>	
51-60	12.5	13.5	
>60	20.0	27.7	

n = total number of GPs in group.

Use of complementary therapies. Thirty four of the responding doctors (85.0%) used alternative treatments supplementary to mainstream medicine, 10.0% administered them if orthodox medicine failed; only two doctors did not use any complementary treatments. Herbal medicine was used most often, 31 doctors (77.5%) reported using this treatment. Twenty six doctors used neural therapy, 18 doctors used homoeopathy, nine doctors used dietary treatment, eight doctors used chiropractic therapy and six doctors used acupuncture. Six doctors listed other methods of complementary therapy.

Reasons for use of complementary medicine. Most doctors (28) used complementary therapies for patients with chronic disease, 19 doctors used complementary treatments for those with psychosomatic disorders, 17 for those with minor illnesses (such as occasional headache) and 14 doctors used complementary therapies to relieve patients with terminal illnesses. For 84.2% of doctors who used complementary medicine in their practice prior therapautic success was a reason for the use of these treatments. Sixteen viewed failure of orthodox medicine and positive experiences with complementary medicine as a reason, 50.0% used such treatments because of the scarcity of adverse reactions and 34.2% because of patients' requests.

Perceived value of complementary therapies. Eight doctors were more satisfied with the benefits of complementary medicine than of mainstream medicine; 17 judged the benefits to be equal. Five judged the success of mainstream medicine to be higher and eight did not make a judgement. All but five doctors agreed that complementary medicine should be integrated (after scientific evaluation) into mainstream medicine. The five doctors who disagreed about integration were all younger than 51 years and

practised in urban settings. The differences between doctors agreeing and disagreeing with integration were not statistically significant.

Doctor-patient relationship. About half of the doctors (21/38) thought they were responsible for actively recommending complementary medicine for their patients (10/12 in rural areas versus 11/26 in urban practices;  $\chi^2 = 5.6$ , P < 0.01). Seventy five per cent of the doctors in rural areas reported that patients asked them several times a week for alternative treatment, whereas this was reported by only 34.6% of the doctors in urban surgeries ( $\chi^2 = 5.4$ , P < 0.05). However, patients did not always follow their doctors' recommendations: 69.2% of the responding doctors in urban practices (18/26) and 50.0% in rural surgeries (six) reported that they had patients who had refused a recommendation for complementary medicine. Fifteen doctors ranked herbal medicine as the most popular treatment among patients while 10 doctors and eight doctors, respectively, considered homoeopathy and chiropractic therapy to be the most popular.

#### **Patients**

Demographic characteristics. Ten of the 40 participating doctors allowed one of the authors (M S) to interview patients on one day in the surgeries. The other doctors had no separate room to conduct patient interviews or did not want their patients to be interviewed. All 310 patients who were asked in the 10 participating practices agreed to take part in an interview, between 29 and 34 patients in each practice. As expected, there were more women patients (65.5%) in the study group. All age groups were well represented.

Treatment with complementary medicine. A total of 122 of the responding patients (39.4%) had been treated with complementary medicine, mostly with herbal medicine (83 patients). Twenty two patients had had chiropractic treatment, 16 patients had had neural therapy, 15 had had homoeopathy, nine had had acupuncture and three had had dietary treatment. Eleven patients reported having had other complementary treatments. Women, those who were more highly educated, patients from rural practices and those reporting a medium or strong impairment caused by their complaints were more likely to have been treated with complementary medicine (Table 2). Also, younger persons were more likely to have had complementary medicine than older people, but this difference did not reach statistical significance.

Knowledge of complementary medicine. A high proportion of patients (61.1%) were able to name one or more complementary therapies used by their doctor. However, 34 of these patients also mentioned methods which were not used and only 11 patients could name all alternative treatments administered. A total of 121 patients did not know any of their doctors' therapies; 10 gave only wrong statements. Patients' knowledge about complementary methods of treatment available from their doctor differed greatly among the practices. In practices in which only one or two alternative treatments were used (usually herbal medicine and neural therapy) between 23% and 45% of patients made correct statements whereas 56% to 90% of patients did so in practices with more than three methods of alternative treatment available.

Interest in and perceived value of complementary medicine. Only three of the 310 patients expressed a dislike for complementary medicine and 11 patients were sceptical about such methods. Of the patients 68.4% wished to be treated more often and 57.7%

Table 2. Patients who had been treated with complementary medicine, and patients who preferred complementary medicine, by sex, age, level of education, practice setting and seriousness of impairment.

	% of patients <sup>a</sup>		
	Treated with complementary medicine	Preferring complementary medicine	
Sex			
Men (n = 106)	32.1	51.9	
Women (n = 201)	43.8*	61.7	
Age (years)			
≤40 (n = 99)	46.5	<i>76.8</i>	
41–60 (n = 99)	42.4	<i>55.6</i>	
>60 (n = 109)	31.2	44.0***	
Age on leaving school (year	s)		
15 (n = 185)	32.4	50.3	
16 (n = 79)	44.3	64.6	
$19^{b} (n = 43)$	<i>62.</i> 8***	81.4***	
Practice setting			
Urban ( <i>n</i> = 215)	32.1	54.0	
Rural (n = 92)	57.6***	68.5	
Impairment caused by comp	olaint <sup>c</sup>		
None or a little $(n = 71)$	26.8	<i>56.3</i>	
Medium $(n = 95)$	44.2	58.9	
Strong or very strong $(n = 1)$	31) <i>43.5</i> *	63.4	

n= number of patients in group. Three patients excluded who would reject any alternative treatment. Includes those with permission to study at university. Ten patients did not answer this question. \*P<0.05; \*\*\*P<0.001.

preferred complementary medicine to mainstream medicine. Those preferring complementary medicine were more likely to be younger patients, those who were more highly educated, and those in rural practices (Table 2). More women than men preferred complementary medicine, but the difference was not statistically significant. The percentages of patients preferring complementary therapies increased with subjective extent of impairment, but this did not reach statistical significance. Sixty nine of the 122 patients (56.6%) who had already been treated with a complementary therapy by their doctor rated the benefit higher than that of mainstream medicine. More women (61.4% of 88) than men (44.1% of 34), and more patients in rural (64.2% of 53) than in urban practices (50.7% of 69) rated complementary medicine higher than orthodox medicine, but the differences were not statistically significant.

Treatment initiative. A total of 110 patients (35.5%) reported that their doctor had recommended an alternative treatment at least once. More patients in rural practices (51.6% of 95) than in urban practices (28.4% of 215) reported this ( $\chi^2 = 15.5$ , P < 0.001). Only two out of the 14 patients who rejected or who were sceptical about complementary medicine reported that their doctor had suggested an alternative treatment. Few patients (47/307) said that they had asked their doctor for an alternative treatment. Herbal medicine and homoeopathy were the most popular treatments, being requested by 68.1% and 14.9% of these 47 patients, respectively.

Patient satisfaction with the general practitioner. Of all 310 patients 63.9% were satisfied with their doctor. Slightly fewer

patients who preferred complementary therapies to orthodox medicine were satisfied with their doctor (60.9% of 179) compared with patients who did not prefer but accepted these therapies (68.0% of 128). This difference was not statistically significant. The same holds true for patients who wished to be treated more often by complementary therapies: 62.3% of 212 were satisfied with their doctor compared with 67.3% of the 98 patients who were sceptical about such methods or had no opinion.

### Discussion '

or a long time unconventional medical practices have played an important part in patient care. Complementary medicine nowadays appears attractive against the background of the 'health and nature' movement and its recommendations to treat the whole person, although orthodox medicine seems to be unaware of its popularity. In this survey the influence of these developments on the primary care system was explored. As only 56% of the doctors approached were willing to participate, there may have been a selection bias towards those with a greater interest in complementary medicine. Compared with the national data this sample contained fewer doctors who were more than 60 years old, but the difference was not statistically significant.

Doctors in Germany concentrate on few forms of alternative medicine, mainly herbal medicine, neural therapy, homoeopathy, and chiropractic treatment. In other European countries the most common forms of complementary medicine are homoeopathy, acupuncture and the manipulative therapies<sup>22,23</sup> and neural therapy<sup>18</sup> is almost unknown. In the United Kingdom hypnosis and spiritual healing are also used.<sup>5,6,24</sup> These differences seem to reflect the cultural tradition of Germany where herbal medicine, as well as mineral waters and natural food diets, have remained part of recognized health care.<sup>22</sup> Moreover, popularity for homoeopathy and neural therapy might also be influenced by the fact that these therapies have German roots.

The interest in complementary medicine among German general practitioners has increased remarkably in the last years. In 1971 about 30% of the general practitioners in Germany practised mainstream medicine exclusively.<sup>25</sup> In the present study, performed almost 20 years later, only two out of the 40 doctors did not practise any complementary medicine. Compared with surveys in the UK this proportion is extremely high. Reilly found 21% of general practitioner trainees using alternative therapies.<sup>5</sup> According to a study by Anderson and Anderson 25% of general practitioners were actively practising such methods.<sup>26</sup> The high proportion of German doctors practising complementary therapies can be explained by the common use of herbal medicine and neural therapy. These treatments are generally thought to be complementary rather than alternative and therefore, German doctors might be more inclined to practise them and to fulfil patients' expectations.

There was a marked difference between practices in rural areas and those in urban areas. Patients in rural areas were more open minded about complementary medicine. This might be because such treatments are well embedded in traditions of rural medicine. Another possible explanation could be that, in the city, the demand for complementary medicine is also covered by non-medical practitioners, whereas in rural areas general practitioners are the only ones who can be approached by patients.

Complementary medicine appeared to play an important role for the patients who were interviewed in this study. Nearly 60% of them preferred such methods to mainstream medicine, 68% wished to be treated more often by alternative methods. An expected negative relationship was not found between the patients' demand for complementary medicine and their satisfaction with their doctors: a slightly greater number of patients who

preferred complementary therapy were dissatisfied with their doctors compared with those who were more attracted by mainstream medicine. An explanation might be found in the results of Donnelly and colleagues,<sup>2</sup> Moore<sup>4</sup> and Thomas and colleagues:<sup>27</sup> many patients consulting an alternative non-medical practitioner were not dissatisfied with their general practitioner and his or her treatment; they viewed the alternative practitioner as complementary. In the present study, positive attitudes towards complementary therapy were not necessarily associated with critical attitudes against doctors who were in principle representatives of orthodox medicine even if they used, to some degree, complementary medicine.

The most important aim of the survey was to compare doctors' use and patients' views of complementary medicine which might be important for the doctor-patient relationship. There appeared to be open communication between the general practitioner and the patient in the case of complementary medicine. Many patients knew which complementary therapies were used by their doctors; this knowledge, however, differed among the practices. It was not possible to detect factors responsible for these differences, but it may have been that patients did not become aware of available complementary methods where their general practitioner administered them only infrequently. Doctors, on the other hand, seemed to know if patients did not like alternative treatments. Patients who were sceptical about these treatments were seldom invited to accept them. Above all, in a market system patients are free to choose their doctor, so that patients who are interested in complementary medicine may be found in practices where many of these therapies are offered.

Some discrepancy was found between the answers doctors and patients gave in terms of requests for complementary treatments. Although only a few patients mentioned having asked their doctors for complementary therapy, general practitioners reported being asked frequently. This difference could be the result of a distorted perception by doctors or patients, and requires further investigation.

Another problem is that patients were obviously more attracted to complementary medicine than were their doctors. Nearly 70% of the patients wished complementary medicine to be used more frequently and 58% preferred these methods to mainstream medicine. Skrabanek and McCormick<sup>28</sup> warn doctors about meeting their patients' demands before a critical appraisal of alternative medicine has been carried out; but doctors should be aware of their patients' wishes for, and views of, alternative methods.<sup>21,29</sup> In this way the general practitioner can become a bridge between organized health care and non-orthodox methods. Further investigations should give unbiased information about complementary medicine to the general practitioner so that he or she can successfully recommend medical treatment and frankly discuss problems with the patient. Consequently, fewer patients would be afraid to 'confess' to the general practitioner their contacts with non-medical practitioners. This could result in a more complete picture of the patient's problems and desires with regard to treatment.

Appendix 1. Seven statements about the doctor-patient relationship used to assess patient satisfaction.

My doctor tells me everything about my illness.

Mostly my doctor spends enough time with me.

I feel comfortable with my doctor.

I trust my doctor completely and would tell him very personal things.

The doctor is interested in me as a person and not as a number.

The doctor takes notice of my wishes.

I have never been disappointed with my consultations.

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