

## A comparison of the attitudes shown by general practitioners, hospital doctors and medical students towards alternative medicine

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### Summary

The aim of this study was to compare and contrast the views of general practitioners (GPs), hospital doctors and medical students to alternative medicine. A questionnaire was sent to a random sample of 100 GPs and 100 hospital doctors in the South West Thames Regional Health Authority (SWTRHA). A convenience sample of 237 pre-clinical medical students at St George's Hospital Medical School was also given a questionnaire. Eighty-seven GPs and 81 hospital doctors replied. Five therapies were investigated: acupuncture; chiropractic; homoeopathy; naturopathy; and osteopathy. All respondents were asked about their attitude towards and knowledge of these therapies. Doctors were asked how often they referred patients for such treatment and whether they practised it themselves. GPs and hospital doctors had similar levels of knowledge of the therapies. Medical students were the least informed but the most enthusiastic respondents. Seventy per cent of hospital doctors and 93% of GPs had, on at least one occasion, suggested a referral for alternative treatment. GPs were making these referrals more frequently and earlier. Twelve per cent of hospital doctors and 20% of GPs were practising alternative medicine. The majority of the respondents felt that alternative medicine should be available on the National Health Service (NHS) and that medical students should receive some tuition about alternative therapies. A considerable proportion of those doctors referring patients to alternative practitioners were ignorant of their official qualifications.

### Introduction

Much controversy still surrounds alternative medicine, although the view of the medical profession appears to be changing<sup>1</sup>. Yet its popularity with the general public continues to increase. A Market and Opinion Research Institute (MORI) survey of the general population indicated that 31% of a sample of 1826 adults had tried one or more alternative therapies<sup>2</sup> and the consumer magazine *Which?* found that one in seven of nearly 2000 readers had had an alternative medical practitioner consultation in the previous year<sup>3</sup>.

Surveys of GP trainees<sup>4</sup> and GPs<sup>5-7</sup> have been published which suggest that GPs are both interested in and referring considerable numbers of patients to

alternative practitioners. A pilot study of hospital doctors was referred to in one article<sup>4</sup> but no details were given. Medical students have been excluded from previous investigations.

This study compared for the first time the attitudes of GPs, hospital doctors and medical students to alternative medicine.

A recent article stated that the term 'alternative' or 'complementary' medicine is used as a catch-all definition for anything not taught at a Western medical school<sup>8</sup>. With much debate surrounding what should and should not be included in the saturated under-graduate curriculum<sup>9,10</sup> the respondents were asked whether there is a need for some tuition.

### Methods

Five 'complete system'<sup>8</sup> alternative therapies, selected from those discussed in the British Medical Association's (BMA) Board of Science report on alternative medicine<sup>11</sup> were investigated. These were acupuncture, chiropractic, homoeopathy, naturopathy and osteopathy.

Postal questionnaires enclosing a postage paid return envelope, were sent to 100 hospital consultants in the SWTRHA, randomly selected from the *Medical Directory*<sup>12</sup>. Only specialities which could not conceivably involve alternative medicine, for example pathology, were excluded. Postal questionnaires were sent to 100 GPs, randomly selected from the four Family Health Service Authorities (FHSA) that approximately correspond to the SWTRHA (West Sussex FHSA; Kingston and Richmond FHSA; Merton, Sutton and Wandsworth FHSA and Surrey FHSA). A second questionnaire was sent to non-responders. Questionnaires were distributed to the pre-clinical medical students of St George's Hospital Medical School at two well-attended lectures.

All respondents were asked to rate their attitude to alternative medicine on a scale of one to 10, where one represented no interest and 10, active interest. They were then asked whether they had heard of the therapies, whether they knew the principles involved, whether they knew the official qualifications of alternative practitioners, whether they should be formally qualified and licensed by law, whether alternative medicine should be available on the NHS and whether alternative medicine should be taught as a topic course during a doctor's training. In addition, the doctors were asked to estimate the percentage of patients to whom they had suggested a referral to one of the therapies and the percentage of patients who had requested a referral to the therapies. They were asked whether the suggestions or requests were made at the initial consultation, after conventional treatment or both. Finally, they were

Table 1. Number (percentage) of respondents who had heard of and knew the principles of the five therapies, and who knew the official qualifications of the practitioners

	Heard of therapy			Knew principles			Knew qualifications		
	MS <sup>a</sup> (n=230)	HD <sup>b</sup> (n=81)	GP <sup>c</sup> (n=87)	MS <sup>a</sup> (n=230)	HD <sup>b</sup> (n=81)	GP <sup>c</sup> (n=87)	MS <sup>a</sup> (n=230)	HD <sup>b</sup> (n=81)	GP <sup>c</sup> (n=87)
Acupuncture	229 (99)	81 (100)	86 (99)	211 (92)	76 (94)	83 (95)	26 (11)	4 (5)	21 (24)**
Chiropractic	118 (51)	74 (91)	82 (94)***	35 (15)	40 (49)	60 (69)***	13 (5)	8 (10)	33 (38)***
Homoeopathy	219 (95)	80 (99)	86 (99)	164 (71)	73 (90)	79 (91)	22 (10)	17 (21)	33 (38)***
Naturopathy	45 (20)	42 (52)	44 (51)***	10 (4)	13 (16)	8 (9)*	1 (0)	0 (0)	3 (3)
Osteopathy	200 (87)	80 (99)	85 (98)*	137 (60)	67 (83)	73 (84)***	52 (23)	21 (26)	54 (62)***

<sup>a</sup>Medical students; <sup>b</sup>hospital doctors; <sup>c</sup>general practitioners  
Chi-squared test: \* $P < 0.01$ , \*\* $P < 0.001$ , \*\*\* $P < 0.0001$

asked whether they practised any form of alternative therapy.

Responses were compared using the  $\chi^2$  test with nominal data and the  $\chi^2$  test for trend with ordered nominal data. A two-tailed Fisher's exact test was used where the results were in the form of two by two tables. The scores obtained by the three groups on the attitude to alternative medicine scale were compared using the Kruskal-Wallis test. The analysis was done using Clinstat<sup>13</sup>.

## Results

The mean scores on the attitude to alternative medicine scale for medical students, hospital doctors and GPs were 6.0 (SD 2.24), 4.3 (SD 2.34) and 5.5 (SD 2.31), respectively, (Kruskal-Wallis,  $\chi^2=30.2$ , 2 df,  $P < 0.0001$ ).

The percentages of GPs and hospital doctors having heard of and knowing the principles of the five therapies were similar, whereas significantly less medical students had heard of chiropractic, naturopathy and osteopathy. In addition, compared with the doctors, significantly fewer medical students knew the principles involved in all the therapies except acupuncture. The pattern changed with the knowledge of the official qualifications of alternative practitioners, with hospital doctors and medical students having similar responses whilst GPs were significantly more informed (Table 1).

In each group a majority felt alternative medicine should be taught as a topic course during a medical student's training (medical students 84%, GPs 75%,

Table 2. Number (percentage) of doctors suggesting a referral and number (percentage) of doctors who had had patients request a referral to alternative practitioners

	Doctor suggested referral		Patient requested referral	
	HD <sup>a</sup> (n=81)	GP <sup>b</sup> (n=87)	HD <sup>a</sup> (n=81)	GP <sup>b</sup> (n=87)
Acupuncture	47 (58)	57 (66)	33 (41)	59 (68)*
Chiropractic	11 (14)	47 (54)**	7 (9)	44 (51)**
Homoeopathy	17 (21)	43 (49)*	18 (22)	66 (76)**
Naturopathy	3 (4)	0 (0)	1 (1)	6 (7)
Osteopathy	42 (52)	68 (78)*	21 (26)	73 (84)**

<sup>a</sup>hospital doctors; <sup>b</sup>general practitioners  
Chi-squared test: \* $P < 0.001$ , \*\* $P < 0.00001$

Table 3. Proportion of consultations in which doctors have suggested or patients have requested referrals to alternative practitioners. Figures are numbers (percentages) of doctors

Proportion of consultations	Doctor suggested referral*		Patient requested referral**	
	HD <sup>a</sup> (n=81)	GP <sup>b</sup> (n=87)	HD <sup>a</sup> (=81)	GP <sup>b</sup> (n=87)
None	24 (30)	6 (7)	44 (54)	3 (3)
<1%	39 (48)	37 (43)	22 (27)	41 (47)
1-5%	14 (17)	36 (41)	12 (15)	33 (38)
6-10%	2 (3)	6 (7)	0 (0)	6 (7)
11-20%	0 (0)	1 (1)	3 (4)	4 (5)
>20%	2 (3)	1 (1)	0 (0)	0 (0)

<sup>a</sup>Hospital doctors; <sup>b</sup>general practitioners  
Chi-squared for trend: \* $P < 0.001$ , \*\* $P < 0.0001$

hospital doctors 60%). Similarly, a majority felt that all practitioners should be formally qualified and licensed by law (medical students 91%, GPs 91%, hospital doctors 79%). Eighty-five per cent of the medical students felt that alternative medicine should be available on the NHS, compared with 69% of hospital doctors and 76% of GPs.

Seventy per cent of the hospital doctors and 93% of the GPs had suggested a referral to alternative medical treatment (Table 2), but the GPs were making this suggestion more frequently (Table 3). More GPs appeared to be using alternative medicine in a complementary fashion than hospital doctors, as determined by the percentage suggesting a referral at the initial consultation (21% of GPs versus 10% of hospital doctors). Considerably more GPs had had patients request a referral to an alternative medical practitioner (GPs 97%, hospital doctors 46%; see Table 2). As above, GPs were being requested to make a referral more frequently (Table 3) and more commonly at the initial consultation.

Twelve per cent of hospital doctors and 20% of the GPs were practising alternative therapies, acupuncture being equally popular (7 GPs and 7 hospital doctors), but homoeopathy more commonly practised amongst the GPs (9 versus 3 doctors).

## Discussion

As with previous studies of GPs views on alternative medicine<sup>4-7</sup>, the response rate was very high. The responses of the GPs were consistent with those of the previously published research.

Respondents were not asked to list the official qualifications of alternative practitioners or the principles involved in order to keep the questionnaire as brief as possible. However, it was therefore possible that respondents exaggerated their knowledge. Ninety-three per cent (135/145) of a study of Avon GPs<sup>5</sup> felt that complementary practitioners needed statutory regulation. Assuming the *Osteopaths Bill* becomes law, osteopathy will become the first branch of complementary medicine to be formally recognized and regulated in Britain<sup>14</sup>. In our study, 91% of the GPs and medical students and 79% of the hospital doctors felt that all practitioners should be formally qualified and licensed by law. Importantly, our study also revealed that the majority of the respondents did not know what the official qualifications were, despite the high referral rates.

In the MORI poll 74% of the 1826 adults surveyed wanted complementary medicine to be available from the NHS<sup>2</sup> and the majority of the respondents in this study agreed. In a study of 86 GP trainees, 36% (31/86) were referring patients for alternative therapies<sup>4</sup>. Amongst Oxfordshire GPs the proportion referring to alternative practitioners was 59% (130/222) and for these doctors it was estimated that 5000 patients (1.8% of all patients seen) had discussed alternative medicine and 1500 (0.5% of all patients seen) had been referred to alternative practitioners during the previous year<sup>6</sup>. For the 145 Avon GPs, the result was 72% (104/145)<sup>5</sup>. In our study, 93% of the GPs (81/87) and 70% (57/81) of the hospital doctors had made referrals. Osteopathy was the commonest referral by GPs and acupuncture by hospital doctors.

Twenty-one per cent (18/86) of the GP trainees were treating patients using alternative therapies<sup>4</sup>, as were 16% (35/222) of the Oxfordshire GPs<sup>6</sup>. This compares with our result of 20% of the GPs and 12% of the hospital doctors.

Several conclusions can be drawn from this study. First, the popularity of alternative medicine amongst GPs is confirmed and, based on the proportion referring patients to alternative practitioners, it appears to be increasing. In addition, a significant degree of interest amongst hospital doctors is revealed. Pre-clinical medical students, whilst being the least informed of the respondents, had the most positive attitude.

Secondly, a significant proportion of the doctors were practising alternative therapies themselves.

Thirdly, despite the high referral rates of the doctors, knowledge of the official qualifications of alternative medical practitioners is poor. Doctors have an obligation to know the potential benefits and harms of making such referrals and fundamental to this is an awareness of what constitutes a properly trained alternative practitioner.

Fourthly, despite the MBA's Board of Science report<sup>11</sup> concluding that assessments of alternative

therapies 'may not be either necessary or desirable', randomized controlled trials of alternative therapies are now being published<sup>15,16</sup> and the methodological problems associated with trials of alternative medicine are being assessed<sup>17</sup>. However, 'the lack of good scientific work in the field of complementary medicine is still painfully obvious and overwhelmingly huge'<sup>1</sup>.

Finally, alternative medicine encompasses 'more than 100 forms of treatment, none of which has been fully validated'<sup>1</sup>. This study showed that the majority of respondents feel that undergraduate training about alternative medicine is necessary.

Thus, if patients are intent on seeing alternative practitioners or a doctor is considering a referral for alternative therapy, an explanation of the possible benefits and dangers of such treatment could be offered. This would also ensure that doctors knew the official qualifications of alternative practitioners.

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