



ORIGINAL ARTICLE

# Chiropractic care amongst people with multiple sclerosis: A survey of MS therapy centres in the UK

Elizabeth A. Carson, Gabrielle Swait, Ian P. Johnson, Christina Cunliffe\*

McTimoney College of Chiropractic, Kimber Road, Abingdon, Oxon OX14 1BZ, United Kingdom

Received 27 January 2009; accepted 4 March 2009

## KEYWORDS

Chiropractic;  
Multiple sclerosis;  
United Kingdom;  
Survey;  
Attitudes;  
Awareness

## Summary

**Objective:** Many of the musculoskeletal symptoms associated with multiple sclerosis (MS) can be managed with physical therapy. Chiropractors are well placed to deliver this, but the extent of their involvement in the team management of multiple sclerosis in the UK is unknown. The present study investigates the level of awareness and use of chiropractic by people with MS in the UK.

**Methods:** A retrospective cross sectional postal survey design was employed, utilising a structured, self-administered questionnaire and convenience sampling of individuals aged over 18 years with a definitive diagnosis of MS who were members of UK MS Therapy Centres.

**Results:** Ninety-one per cent of respondents had used complementary therapy modalities of some kind, with physiotherapy being the most popular (52%), followed by massage (44%), then chiropractic (42%). Of those that had used chiropractic, 68% used it to manage their MS symptoms and most would recommend it to others with MS. Just under half had consulted their General Practitioner for approval prior to receiving the treatment, with 79% obtaining support. Of those who did not use chiropractic, 78% cited lack of knowledge about chiropractic as the main reason. All of the MS therapy centres contacted during this study offered physiotherapy and massage, but none offered chiropractic.

**Conclusions:** There is moderate uptake of chiropractic by people with MS in the UK together with a willingness to recommend it. Further awareness of the potential benefits of chiropractic amongst stakeholders may help its integration into the team management of MS.

© 2009 Published by Elsevier Ltd on behalf of The College of Chiropractors.

## Introduction

Multiple sclerosis (MS) is an inflammatory demyelinating condition of the central nervous system (CNS), producing a large variety of symptoms, and progressive functional impairment, which varies widely with each individual. Commonly reported symptoms

\* Corresponding author. Tel.: +44 01235 468551;

fax: +44 01235 468554.

E-mail address: c.cunliffe@mctimoney-college.ac.uk (C. Cunliffe).

include: mobility challenges, fatigue, pain, visual disturbances or blindness, impaired cognition, and problems with bowel and bladder function. This long-term, chronic neurological disorder is sometimes benign, frequently remitting, but often progressive with gradually increasing disability. The damage caused by MS can occur anywhere in the CNS and, as a result, symptoms can be extremely diverse, with a gradual loss of function a common result.<sup>1</sup> Symptoms can come and go quite unpredictably, and no two people experience them in exactly the same way. Most of the symptoms of MS can be effectively managed, and complications avoided, with regular care by a neurologist and allied health professionals.<sup>1,2</sup>

Between three and seven people per 100,000 globally are diagnosed with MS each year and, in the UK, prevalence is approximately 100–120 per 100,000. In all, 85,000 people in the UK are currently estimated to have MS.<sup>3</sup>

Usually diagnosed between the age of 20 and 40, MS tends to affect people at a crucial stage in their lives when they are establishing their careers, setting up home and having a family. Awareness of the treatment options available to manage a chronic neurological illness lasting upwards of 30 years is clearly important both for those with MS and those involved in their healthcare.

Sensible symptom management is recognised as a key factor for optimising quality of life for most people with MS.<sup>4</sup> Positive outcomes for physiotherapy and neurorehabilitative interventions for a number of specific MS impairments have been reported.<sup>7–11</sup> It would seem that chiropractic may potentially fit well into this overall model of care, particularly for management of musculoskeletal symptoms.<sup>14</sup> As many as 85% of those with MS are reported to use Complementary and Alternative Medicine (CAM) at some stage over the course of their disease<sup>5</sup>, with half the GP practices in England now providing access to CAM in some form.<sup>6</sup> In 2003, chiropractic was the second most frequently used CAM modality cited by those with MS in the USA.<sup>12</sup> There is, however, no comparable information for those with MS in the UK. Such information is vital for the rational delivery of healthcare services and for decisions relating to the dissemination of healthcare information so that informed choices can be made. The purpose of this study was therefore to scope the level of awareness and utilisation of chiropractic amongst people with MS in the UK.

## Materials and methods

A retrospective, cross sectional postal survey design, with a structured, self-administered ques-

tionnaire was used. The main themes explored were the number of people who use chiropractic, the frequency of its use in comparison with other forms of treatment and the extent of General Practitioner support for using chiropractic, as experienced by MS patients.

After obtaining institutional Research and Ethics approval, a list of 30 National MS Therapy Centres was obtained from the UK Multiple Sclerosis Society<sup>13</sup> and all were contacted with a request for volunteers. Eight Therapy Centres responded, offering support and giving their approval for the study to go ahead. Questionnaires were then posted to each Centre for them to distribute to members with MS. Participants were aged 18 or over and had been clinically diagnosed with MS. Participants were advised that completion of the questionnaire confirmed consent to use their anonymised data. This was analysed to produce descriptive statistics for the whole sample.

## Results

A total of 231 completed questionnaires were returned. The sample was predominantly female, aged between 31 and 65 with a mean age of 43, and a mean age at onset of MS of 37 (Table 1). These results compare favourably with the UK national average where the ratio of female to male is 2:1 and average age at onset of between 20 and 40 years.<sup>1,2</sup>

A total of 210/231 (91%) of all respondents had used rehabilitation and CAM modalities of some kind. Physiotherapy was the most popular (52%), followed by massage (44%) then chiropractic (42%) (Fig. 1).

Of those who utilised chiropractic, two-thirds reported that they used it to manage their MS symptoms and most of them (81%) were making regular visits to their chiropractor. The frequency of these visits was approximately once every 3 months (mean = 2.86 months). Of those receiving chiropractic care, 92% said they would recommend chiropractic to other people with MS. Just under half (42%) of those who use chiropractic had consulted

**Table 1** Breakdown of sample by respondents' gender and age groups.

Age range	Male	Female	Total
18–30	1	6	7 (3.0%)
31–50	25	72	97 (42.0%)
50–65	33	65	98 (42.4%)
65+	17	12	29 (12.6%)
Total	76	155	231

Mean age = 43.36; Standard deviation = 12.96.

their GP for approval prior to receiving the treatment, with 79% of these obtaining support.

The majority of respondents with MS using chiropractic (47%) had been influenced to do so by a friend or relative, whilst 35% had obtained information from the MS Society website or from an MS support group. Interestingly, more people had heard about chiropractic from their GP (13%) than from an advertisement (11%).

Payment for treatment was predominantly covered by the individual (74%), with friends or relatives helping with the costs for 13%. The local Primary Care Trust paid for treatment in some 10% of cases, but only 2 people (0.1%) had private health care to cover the cost.

Of the 17 (7%) who no longer received regular chiropractic treatment, the reasons given for this were mostly either due to resolution of symptoms for which they were being treated, or due to issues relating to physical or financial access to chiropractic care, including the following:

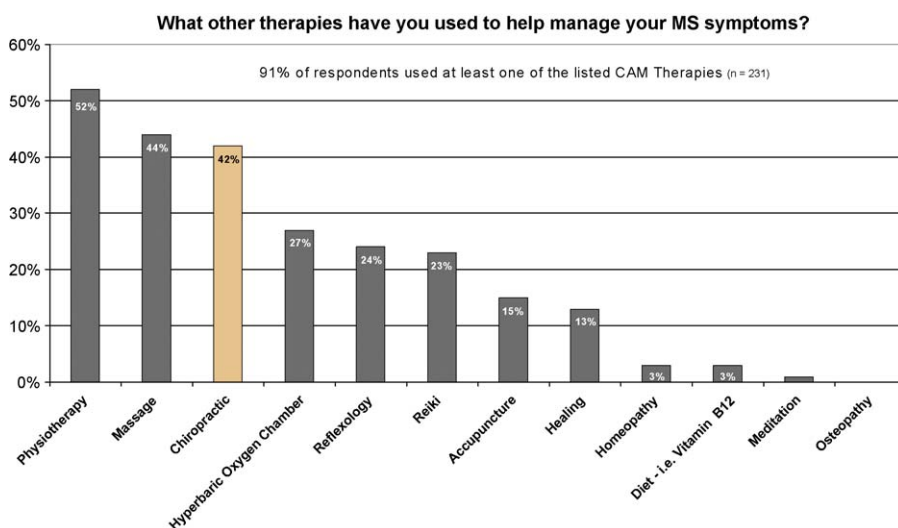
- Recovered from original problem for which chiropractic was sought ( $n = 6$ )
- Travel to the chiropractic clinic was difficult ( $n = 2$ )
- Lack of wheelchair access to the chiropractic clinic ( $n = 1$ )
- Chiropractic was too expensive ( $n = 2$ )
- Physiotherapy was available at the MS therapy centre but not chiropractic ( $n = 1$ )
- Rheumatologist advised cessation of chiropractic care ( $n = 1$ )

Of the 58% of respondents who had never had chiropractic treatment, the majority (76%) said

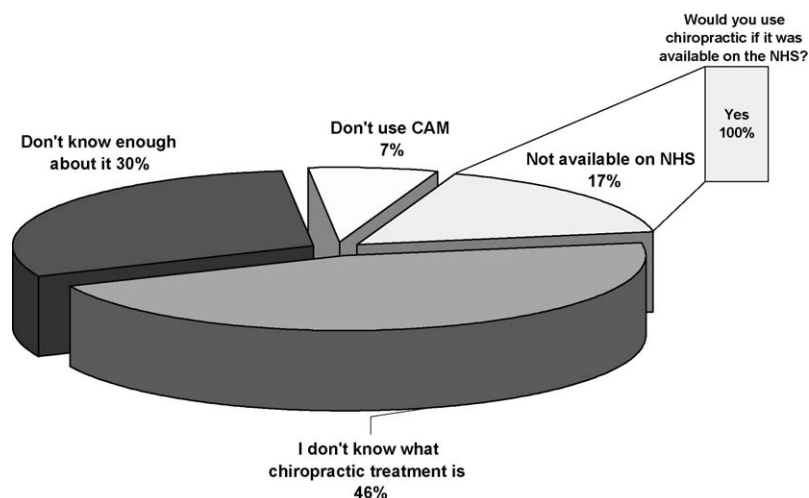
that they did not know what chiropractic was, or did not know enough about it. A smaller proportion (17%) did not use chiropractic because it was unavailable within the National Health Service (NHS); however, all of these respondents said they would use chiropractic if it were available. Only a small proportion (7%) did not use CAM of any kind (Fig. 2). Across all of those who had never used chiropractic, 17% considered it to be inappropriate for MS.

## Discussion

The aim of this survey was to act as a preliminary investigation of whether people with MS utilise chiropractic, and what factors may influence this. The method was chosen so as to be as easy to implement as possible for the participating MS therapy centres; therefore, sample selection was pragmatic, rather than strictly controlled. In this sample of respondents with MS who were recruited via 8 UK MS therapy centres, 42% had chosen to receive chiropractic care. This level of utilisation of chiropractic in the UK would seem to be approximately one-third higher than the utilisation of chiropractic care reported by people with MS in the USA (25.5%) who were on the MS Foundation mailing list.<sup>12</sup> Direct comparison is, however, difficult due to possible differences in recruitment methods and response rates. The higher UK utilisation indicated here could reflect selection bias, with MS respondents who had used chiropractic or CAM perhaps being more likely to respond to the survey; nevertheless, this survey does indicate that chiropractic was well utilised by MS patients who responded.



**Figure 1** Therapeutic approaches used to manage MS symptoms. The y-axis gives the percentage of all respondents ( $n = 231$ ) who had utilised each type of therapy (x-axis).



**Figure 2** Reasons given for not utilising chiropractic. Individual graph segments represent the proportions for different reasons cited as the percentage of all respondents who had not utilised chiropractic ( $n = 134$ ).

Financial limitations, and possibly cultural views relating to expectations of free treatment provision via the National Health Service, may be reasons that prevent MS sufferers from utilising chiropractic. This is supported by our finding that of the 58% ( $n = 134$ ) of respondents who had not used chiropractic, 17% cited lack of availability within the NHS as the reason, and indicated that they would utilise chiropractic if it were available.

Of the 42% ( $n = 97$ ) of respondents in the present study who utilised chiropractic care, the majority stated that they did so to manage their MS symptoms. It likely that most utilise chiropractic care to manage pain, as this is one of the commonest symptoms,<sup>14</sup> although the nature of this survey is such that it may be difficult for MS patients to differentiate primary MS symptoms from secondary, or coexisting chronic spinal problems. There would, however, be prior reason to suppose that chiropractic care may be beneficial in managing musculoskeletal pain in this patient group.<sup>14</sup> Other aspects of chiropractic care that are of potential benefit to all patients with musculoskeletal pain are its psychosocial effects,<sup>15</sup> which have been reported to be important predictors of chronicity for back pain in general practice and occupational therapy environments. However, in the context of UK chiropractic, it has been found that general health and duration of the back pain episode are more important than psychosocial factors in predicting treatment outcomes.<sup>16</sup> This may reflect differences in how chiropractors address or manage psychosocial aspects of back pain, or it may reflect a difference in the type of patients who generally seek chiropractic care. There is some limited evidence that multidisciplinary approaches to management of MS result in psychosocial benefits.<sup>19</sup> While it is unclear how

psychosocial factors may influence response to chiropractic care among MS sufferers, the chiropractic clinician could have a positive role in managing these.

In the present sample, most respondents with MS who utilised chiropractic had heard about it through a friend or relative; however, a substantial proportion (37%) had obtained information from the MS Society website or from an MS support group. This seems to indicate a good level of awareness and positive perception of chiropractic as a treatment for MS sufferers among specialist organisations. Only 13% had heard about chiropractic through their GP. Previous studies investigating the referral of patients by GPs for chiropractic or CAM have indicated relatively low rates.<sup>17,18</sup> This may contribute towards a lack of awareness of the potential role of chiropractic care in MS and be compounded by the lack of information available about current utilisation of chiropractic by MS patients. Of those people with MS who sought GP approval for chiropractic care, most (79%) received support, but the questionnaire did not ask for what specific symptoms such care was sought and approved. The results of the present study, therefore, do not indicate whether the GPs had considered chiropractic care in the context of the overall management of MS, or whether they had simply considered it in relation to an isolated musculoskeletal symptom, such as low back pain.

Overall, while there are some methodological limitations to generalising the results here to all MS patients in the UK, this survey achieved data on a large number of participants. Results indicate that chiropractic was well-utilised among respondents with MS, yet most people learned about the benefits of chiropractic through friends, family and MS sup-

port groups, rather than through their GP or advertisements. This disparity suggests a need for better communication regarding utilisation and the potential role of chiropractic in this population. Practical and financial considerations, as well as lack of knowledge about chiropractic, were the main factors that deterred utilisation of chiropractic among this sample of MS patients. This has implications for healthcare provision for this group. Further investigation is warranted into whether, and for which symptoms, chiropractic might be a useful addition to the multidisciplinary therapeutic approaches that are currently provided for MS patients.

## References

1. Richards RG, Sampson FC, Beard SM, Tappenden P. A review of the natural history and epidemiology of multiple sclerosis: implications for resource allocation and health economic models. *Health Technol Assess* 2002;**6**:1–79.
2. Aronson KJ. Quality of life among persons with multiple sclerosis and their caregivers. *J Neurol* 1997;**48**:74–80.
3. Multiple Sclerosis Trust. Therapists in MS: delivering the long-term solutions, 2006 Multiple Sclerosis Trust UK. [http://www.mstrust.org.uk/downloads/therapists\\_in\\_ms.pdf](http://www.mstrust.org.uk/downloads/therapists_in_ms.pdf) (date of visit July 2008).
4. Thompson AJ. Symptomatic management and rehabilitation in multiple sclerosis. *J Neurol Neurosurg Psychiatry* 2001;**71**(Suppl. 1):ii22–7.
5. Searles G, Murray TJ. The use of alternative medicine by people with multiple sclerosis. *CMCS Consort* 1998;**11**(2):5.
6. Thomas KJ. Trends in access to complementary and alternative medicine via primary care in England: 1995–2001. Results from a follow-up national survey. *Fam Pract* 2003;**20**(5):575–7.
7. Craig J, Young CA, Ennis M, Baker G, Boggild M. A randomized controlled trial comparing rehabilitation against standard therapy in multiple sclerosis patients receiving steroid treatment. *J Neurol Neurophys Psych* 2003;**74**:1225–30.
8. Liu C, Playford ED, Thompson AJ. Does neurorehabilitation have a role in relapsing remitting multiple sclerosis? *J Neurol* 2003;**250**(10):1214–8.
9. Slade A, Tennant A, Chamberlain MA. A randomised controlled trial to determine the effect of intensity of therapy upon length of stay in a neurological rehabilitation setting. *J Rehabil Med* 2002;**34**(6):260–6.
10. DiFabio RP, Choi T, Soderberg J, Hanson CR. Health-related quality of life for persons with progressive multiple sclerosis: influence of rehabilitation. *Phys Ther* 1997;**77**(12):1704–16.
11. Wiles CM, Newcombe RG, Fuller KJ. Controlled randomized crossover trial of the effects of physiotherapy on mobility in chronic MS. *J Neurol Neurosurg Psychiatry* 2001;**70**:174–9.
12. Nayak S, Matheis R, Schoenberger N, Shiflett S. Use of unconventional therapies by individuals with multiple sclerosis. *J Clin Rehabil* 2003;**17**:181–91.
13. Multiple Sclerosis Society. <http://www.mssociety.org.uk> (date of visit July 2008).
14. Dougherty P, Lawrence D. Chiropractic management of musculoskeletal pain in the multiple sclerosis patient. *Clin Chiropr* 2005;**8**:57–65.
15. Main C. ABC of musculoskeletal medicine. *Br Med J* 2002;**325**:534–7.
16. Langworthy JM, Breen AC. Psychosocial factors and their predictive value in chiropractic patients with low back pain: a prospective inception cohort study. *Chiropr Osteopathy* 2007;**15**:5. [10.1186/1746-1340-15-5](https://doi.org/10.1186/1746-1340-15-5).
17. Greene BR, Smith S, Allareddy V, Hass M. Referral patterns and attitudes of primary care physicians towards chiropractors. *BMC Comp Alt Med* 2006;**6**. [10.1186/1472-6882-6-5](https://doi.org/10.1186/1472-6882-6-5).
18. Rogers W. Whose autonomy? Which choice? A study of GPs' attitudes towards patient autonomy in the management of low back pain. *Fam Pract* 2002;**19**:140–5.
19. Turner KF, Stokes L, Kilpatrick T. Multidisciplinary rehabilitation for adults with multiple sclerosis. *Cochrane Database Syst Rev* 2007. [10.1002/14651858](https://doi.org/10.1002/14651858). Issue 2 Art No. CD006036.

Available online at [www.sciencedirect.com](http://www.sciencedirect.com)



ScienceDirect