Physicians' perspectives on chiropractic treatment

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The objective of this study was to examine general practitioners’ opinions and behaviours concerning chiropractic. The study was a secondary analysis of the data collected in a cross-sectional survey of 400 general practitioners from Alberta and Ontario that assessed opinions and behaviours concerning several types of complementary medicine. The response rate was 52%. Twenty-eight percent indicated they had considerable knowledge about chiropractic, overall 58% found chiropractic useful or very useful and 43% believed that chiropractic is efficacious for neck and back problems. Forty-four percent of the total sample stated they referred patients to chiropractors, primarily for back pain, musculoskeletal indications in general and chronic pain. Efforts need to be made to further improve the relationship between general practitioners and chiropractors and, thus, establish chiropractic as a viable treatment option.

KEY WORDS: chiropractic, physician, complementary.

Introduction
Patient use of and demand for complementary practitioners such as chiropractors has continued to steadily in-
crease in recent years. Data from a recent Canadian health survey indicated that 20% of those responding reported having visited a complementary practitioner in the six months prior to the survey compared to 50% who reported having seen a conventional practitioner within the same time frame. This proportion had increased to 22% by 1993. Forty-three percent of these people stated they had used chiropractic services within the preceding six month period.
This growing interest in complementary medicine has been attributed in part to a disenchanted with conventional medicine. Patient-reported scepticism towards conventional medicine and dissatisfaction with physicians are strongly associated with the use of complementary medicine. Others have described conventional care as impersonal, costly, inconvenient, unavailable, inaccessible and/or too complicated and technologically oriented. In addition, many patients are drawn towards complementary medicine because of its focus on holistic care and patient responsibility for health and well-being.

Although it is tempting to dichotomize the two disciplines, and to suggest that consumers desire one or the other form of care, this is not the case. Complementary care, as the name implies, is most often used as an adjunct to, and not a replacement for, conventional medicine. It becomes important then to understand the interface between conventional and complementary medicine. In addition to the patient, an important part of this interface is the general practitioner, who often fulfills a gatekeeper role for patients entering the health care system.

Several studies have explored physicians' knowledge, attitudes and behaviours concerning a broad array of complementary treatments. Each of these studies has explicitly included chiropractic or manipulation. Relative to other complementary therapies, chiropractic seems to enjoy the widest acceptance among the medical community. The results of these studies are summarized in Table 1.

As the results demonstrate, the attitudes, behaviours and knowledge of general practitioners concerning chiropractic vary widely. Overall, it appears that chiropractic is still not recognized as an integral, needed and legitimate part of health care by many members of the conventional health care system.

In 1992, we conducted a cross-sectional survey of general practitioners from Alberta and Ontario to assess opinions and behaviour concerning complementary medicine. The data indicated that the physicians surveyed perceived themselves to be most knowledgeable about chiropractic, acupuncture and hypnosis and perceived these therapies as being most useful. These findings have been reported in detail elsewhere. In order to examine physician knowledge, attitudes and behaviours specifically associated with chiropractic, a secondary analysis of the data collected in the previous survey was undertaken.

**Methods**

A questionnaire was mailed to a random sample of 400 general practitioners (200 in Ontario and 200 Alberta). The questionnaire assessed sociodemographic information, and attitudes and beliefs about a number of complementary therapies including chiropractic. Elements of the survey were adapted in part from previously used questionnaires. Respondents were asked to rate their level of knowledge of chiropractic, and its perceived usefulness and effectiveness. Questions about complementary therapies in general asked whether the physicians had received training in any techniques, whether they desired any training, what complementary therapies they perceived their patients were using and their referral practices. Respondents were encouraged to write comments on any issues raised by the survey on the back of the questionnaire. Physicians not returning the questionnaire within one month were mailed up to two reminders. A subsample of non-respondents were then mailed a brief one-page questionnaire addressing age, sex and perceived usefulness of complementary medicine.

Descriptive analysis was applied using the chi-square test or the t-test depending on the level of measurement. The study was approved by the Conjoint Medical Research Ethics Board at the University of Calgary.

**Results**

Of the 192 eligible physicians in Alberta, 118 (62%) returned the questionnaire and 82 (43%) of the 192 eligible physicians in Ontario returned the questionnaire. Seventeen of the 40 non-respondents returned the brief questionnaire (43%). Most physicians surveyed were male (76%), practiced in urban settings (69%) and graduated from Canadian medical schools. The mean age of the sample was 44 (SD = 9.5). Non-respondents did not differ significantly from respondents with respect to age, sex, and the proportion that perceived at least one complementary approach was useful.

Approximately two-thirds of the physicians surveyed perceived a demand for complementary therapies (n = 130, 65%). The majority of these physicians (91%) indicated chiropractic to be the most popular approach relative to other such therapies. Of the physicians who reported they referred patients to complementary practitioners (n = 107), 87 (81%) indicated they referred patients for chiropractic treatment. Thus, 44% of the total sample stated...
<table>
<thead>
<tr>
<th>Source and Year</th>
<th>Sample Size and Country</th>
<th>% Who Endorse Chiropractic</th>
<th>% Who Refer Patients</th>
<th>Degree of Knowledge/Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anderson &amp; Anderson (1987)</td>
<td>Britain $(n = 222)$</td>
<td>32% considered it to have a valid theoretical base</td>
<td>50% had referred patients</td>
<td>28% had working knowledge, 5% had training</td>
</tr>
<tr>
<td>Blumberg, Grant, Hendricks, Camps &amp; Dewan (1995)</td>
<td>USA $(n = 572^*)$</td>
<td>21% would encourage chiropractic use</td>
<td>47% 'willing' to refer</td>
<td>not assessed</td>
</tr>
<tr>
<td>Goldszmidt, Levitt, Duarte-Franco &amp; Kaczorowski (1995)</td>
<td>Canada $(n = 121)$ (Quebec)</td>
<td>70% perceive degree of usefulness</td>
<td>58% had referred patients</td>
<td>10% have considerable knowledge of service, 3% have training</td>
</tr>
<tr>
<td>Hadley (1988)</td>
<td>New Zealand $(n = 173)$</td>
<td>66% thought chiropractic useful</td>
<td>55% had referred patients</td>
<td>73% had some or greater knowledge, 3% had training, 11% were practicing</td>
</tr>
<tr>
<td>Lynöe &amp; Svensson (1992)</td>
<td>Sweden $(n = 330)$</td>
<td>47% have positive attitude regarding manual therapy</td>
<td>18% either treated with or prescribed manual therapy</td>
<td>not assessed</td>
</tr>
<tr>
<td>Reilly (1983)</td>
<td>Britain $(n = 86)$</td>
<td>19% felt chiropractic useful</td>
<td>7% referred for manipulation</td>
<td>19% had some knowledge, 7% practiced manipulation</td>
</tr>
<tr>
<td>Wharton &amp; Lewith (1986)</td>
<td>Britain $(n = 145)$</td>
<td>89% felt chiropractic useful</td>
<td>43% referred to nonmedical practitioners</td>
<td>45% had moderate to very good knowledge, 26% had training, 24% were practicing</td>
</tr>
<tr>
<td>Visser &amp; Peters (1990)</td>
<td>Netherlands $(n = 360)$</td>
<td>80% had a positive attitude towards manipulation</td>
<td>not assessed</td>
<td>61% had moderate to thorough knowledge, 9% applied manipulation</td>
</tr>
</tbody>
</table>

Table 1
General Practitioners' Opinions and Behaviour Concerning Chiropractic or Manipulation
they referred patients to chiropractors. Ontario physicians were significantly more likely to refer patients to a chiropractor than Alberta physicians (60% and 32% respectively). These referrals were primarily for back pain, musculoskeletal indications in general, and chronic pain. The two main reasons given for referral were non-response to conventional medicine and patient preference (i.e., request).

Very small percentages of general practitioners indicated they had received training in chiropractic \((n = 1, 1\%)\) or that they wished to receive training \((n = 11, 6\%)\).

The general practitioners' knowledge of chiropractic and their perceptions of its usefulness and effectiveness are presented in Table 2. Although some differences were found between Ontario and Alberta physicians with respect to these variables, none were statistically significant.

Comments relating to chiropractic were abstracted from the qualitative data collected from patients responding to the question 'please describe what has influenced your opinion about alternative (i.e., complementary) medicine.' Close to one-fifth of the comments offered by the physicians mentioned chiropractic specifically \((38/200)\). The majority of these physicians indicated their positive view of chiropractic was due to the feedback they had received or results they had observed in patients or family members who had received chiropractic care \((16/38)\). A number based their endorsement of chiropractic treatment upon the services they had received from these practitioners, or from professional interactions they had with them \((5/38)\). Two practitioners reported their positive views arose from reading scientific literature. In approximately 25% \((10/38)\) of the accounts physicians balanced their comments, describing both positive and negative experiences they had observed with respect to chiropractic. While chiropractic for musculoskeletal problems was endorsed, chiropractic for other conditions (e.g., asthma,

<table>
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<th>Table 2</th>
<th>General Practitioners' Opinions of Chiropractic</th>
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<tbody>
<tr>
<td></td>
<td><strong>Level of Knowledge</strong></td>
</tr>
<tr>
<td>Province</td>
<td>A Lot</td>
</tr>
<tr>
<td></td>
<td>Considerable                  Some             Low    None</td>
</tr>
<tr>
<td>Ontario ((n = 81))</td>
<td>5 (6%)</td>
</tr>
<tr>
<td>Alberta ((n = 117))</td>
<td>5 (4%)</td>
</tr>
<tr>
<td></td>
<td><strong>General Usefulness</strong></td>
</tr>
<tr>
<td>Province</td>
<td>Very Useful                                Useful    Somewhat Not Very Useless</td>
</tr>
<tr>
<td>Ontario ((n = 79))</td>
<td>13 (17%)</td>
</tr>
<tr>
<td>Alberta ((n = 115))</td>
<td>7 (6%)</td>
</tr>
<tr>
<td></td>
<td><strong>Effectiveness for Neck/Back Problems</strong></td>
</tr>
<tr>
<td>Province</td>
<td>Very Effective                             Effective Somewhat Not Very Ineffective</td>
</tr>
<tr>
<td>Ontario ((n = 78))</td>
<td>11 (14%)</td>
</tr>
<tr>
<td>Alberta ((n = 113))</td>
<td>6 (5%)</td>
</tr>
</tbody>
</table>
diabetes) was frowned upon – again, the opinions were based on anecdotal reports from patients. Finally, five physicians provided negative anecdotal reports with a couple suggesting chiropractors were out for financial gain.

Discussion
Without exception, all of the Alberta and Ontario general practitioners surveyed indicated they had some degree of knowledge of chiropractic and the majority found it generally useful and efficacious for back and neck problems. It seems reasonable to conclude that in theory, a considerable proportion of Canadian physicians are accepting of chiropractic as a legitimate type of health care, primarily for musculoskeletal complaints. Practice appears to be lagging behind this opinion however. Despite the fact that 58% of those surveyed agreed that chiropractic was useful to very useful, only 44% indicated they actually referred to chiropractors. Moreover, it was implied that these referrals occurred either after conventional therapy had failed or at the patients’ request and presumably patients’ requests arose out of a dissatisfaction with the current treatment. This discrepancy between opinion towards chiropractic and referral rate was previously reported in a survey of physicians from Quebec. Taken together with the primary reasons for referral (i.e., failure of conventional treatment and patient request), such discrepancies may indicate a reluctance on the part of some physicians to refer outside the sphere of conventional medicine and suggest that while physicians are willing to concede chiropractic may have some degree of usefulness, it may be perceived as a last resort, ‘couldn’t hurt, might help’ measure. Chiropractic is apparently not viewed as a viable treatment option upon the patient’s initial presentation. The difference between opinion and referral rate may also reflect problems in the referral process, such as the lack of a professional relationship between the physicians and chiropractors.

Significant differences were found in referral practice between Alberta and Ontario. Although no significant differences were found between the Alberta and Ontario data regarding knowledge or perceived usefulness, the data from this sample as a whole differed from similar information gathered in the Quebec study. A much smaller proportion of physicians in the latter study reported having considerable knowledge of chiropractic (10% vs 28%) and a smaller proportion perceived chiropractic to be at least somewhat useful (70% vs 90%). These data show that there is considerable regional variation in physicians’ knowledge and referral behaviour which might be due to various reasons including historical and political circumstances, ethnic traditions, availability and regional demand and differences in the provincial health care systems.

Although it has previously been reported that patients do not generally share the fact they visit complementary practitioners with their general practitioners, it is interesting to note that an important factor influencing general practitioners’ opinions about chiropractic appears to be patients’ reports as demonstrated by the qualitative data we collected. Patient experience, either positive or negative, may therefore bias physician opinions and subsequently influence practices. Related to this point, it is important to draw attention to the fact that patients tend to use both conventional and complementary practitioners. As health care consumers they may shop around for, and use, multiple services in their quest for wellness. Both conventional and complementary practitioners alike need to be aware that this may be occurring in order that contraindicated therapies are not prescribed and services are not unnecessarily duplicated.

The results of this survey are limited by the low response rate which introduces the possibility of respondent bias. Future research may address what practitioners perceive would facilitate the integration of conventional and chiropractic services in order that patient care be optimized.

Although the relationship between conventional and complementary practitioners has been described as antagonistic in the past [cited in Hewer],17 the results of our survey suggest that much progress has been made in diminishing the gap between general practitioners and chiropractors. Efforts to further improve this relationship, and to establish chiropractic as a viable treatment option, may include education about chiropractic theory as part of the medical curriculum, shared practice rooms and established registers of (chiropractic) practitioners.
References


ERRATUM


In the September issue, the institutional affiliation of one of the authors of this manuscript was incorrectly listed.

The correct listing is as follows:

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