Public Perception of Chiropractic: A Survey

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ABSTRACT: Background: There is limited data on the public’s perception of chiropractic. Objective: To identify the public’s perception about what chiropractic is and their views about chiropractors’ role in health care. Design: A survey was conducted to gather the public’s perception using a 29-item questionnaire. The questions related to any history of chiropractic use, their opinion on chiropractic, risks or concerns regarding care, chiropractic education, etc. Results: Of the 182 respondents, the majority (76%) believed that chiropractors work with bones, muscles and joints, with only 10% believing that chiropractors work on the nervous system. Only 18% believed that prevention was a focus of chiropractic care. Of the 155 responses regarding satisfaction with chiropractic care, 81% were happy with their treatment, 6% were unhappy and 12% were unsure. For the 6% that were unhappy, concerns related to costs and the number of visits required. Most respondents believed that chiropractors treat people adolescent age and above. Thirty-four percent (34%) and 56% believed that chiropractors are as well trained as GPs and physiotherapists, respectively. Sixty-four percent (64%) of participants perceived that chiropractic is not dangerous, 57% were interested to know more, and 19% responded that they needed convincing to see a chiropractor. Conclusion: Participants in general were interested in chiropractic and held no real concerns regarding risks or cost involved, however there appears to be a lack of information available to the public for them to be better informed about chiropractic. This information could help the profession’s efforts in making chiropractic a better-understood and more-accepted modality through effective education and communication.

INDEX TERMS: MeSH: CHIROPRACTIC; PATIENT CARE; PATIENT EDUCATION; ATTITUDE TO HEALTH; HEALTH PROMOTION. (Other) PUBLIC PERCEPTION; PROMOTION.

INTRODUCTION

Chiropractic is the largest and most regulated of the alternative therapies, and the number of people using chiropractic is steadily increasing worldwide.1-3 Despite this dramatic increase in use, little empirical information exists about why patients seek chiropractic care, especially in Australia.

Many views exist as to who seek chiropractic care and for what reasons. Studies from the United States have reported that chiropractic patients are more likely than medical patients to be white, middle-aged and to have high school as their highest level of education.4 Although the public is increasingly seeking chiropractic care, it appears to be a highly focused alternative, largely for spinal pain syndromes and not for broad-based musculoskeletal or neurological complaints. Studies have shown that patients perceive chiropractic as a health profession with limited scope, focusing mainly on backs, pain and mobilisation.2,4,7 Sixty percent of patients go to chiropractors for low back pain only (one-third of these consultations were in a primary care role) and the remainder with head, neck and peripheral symptoms.3,4,8 Approximately half of the patients utilising care have chronic symptoms; many of them seek chiropractic as a last resort. Only 2-5% of patients seek care for conditions other than musculoskeletal complaints. These include hypertension, asthma, as well as other common primary care conditions, prevention and wellbeing, in which they receive standard health advice in regard to physical fitness and nutrition.3

Over the years, the public has perceived chiropractic to be a modality of “bone cracking” only. Some perceive this as dangerous and risky; however serious complications from spinal manipulation are extremely rare; approximately 1 case per 100 million lumbar manipulations may result in a complication such as cauda equina, and 1 in 400,000 cervical manipulations may cause cerebrovascular accidents.3

While the repertoire of chiropractic care is quite large, it is unknown what percentage of the public is aware of this. For example, chiropractors provide many other treatments to complement the adjustment, such as soft tissue therapy, hot/cold therapy, ultrasound, electrical stimulation such as TENS, and rehabilitation. Chiropractors often give advice on therapeutic exercises, general fitness recommendations, nutrition and relaxation techniques, as well as using other forms of complementary and alternative medicines like massage and acupressure.3 It is also not known whether the public is aware that plain film radiography has been used by chiropractors ever since its development at the beginning of the 20th century.3
The educational requirements to qualify as a chiropractor have also changed over the past three decades. Chiropractic education has developed in various countries including Australia and Canada, from a situation where it was generally taught in independent schools into a position where it is now taught in universities with a more evolved relationship with mainstream sciences.

The acceptance of chiropractic in the overall health care system remains very limited. Historically payments for chiropractic care have come directly from patients’ pockets. Over the past few decades, chiropractic has been included in a substantial proportion of private and public health insurance plans, workers’ compensation and all forms of managed care. This allows a greater percentage of the public to take advantage of chiropractic care.

An understanding of the general public’s perception of the chiropractic profession would help us to communicate with and educate our patients more effectively.

METHODS

A 29-item questionnaire (Appendix 1) was administered to 182 participants. The multiple-choice survey took approximately 10-15 minutes to complete. Participants were drawn from a range of workplaces and public areas in Sydney and homes (doorknocking) in Canberra and Tasmania. For example, students (not involved in chiropractic training) at Macquarie University, staff from a Myer store and people on local sidewalks were included. The survey asked for information on participants’ sex, age, education level and postcode of residence, in addition to the 29 questions related to their opinion on chiropractic, any history of chiropractic use and referral, risks or concerns regarding care, chiropractic education, health insurance and Medicare. For any question that could have more than one response ticked, the total number of responses for that question was taken as the denominator for calculating percentages rather than the number of respondents. This study was approved by the Macquarie University Human Ethics Committee (Ref no: HE27May2005-M04136).

RESULTS

Responses to only the most important questions of the survey have been described under Results and Discussion; however, a spreadsheet of summary results for all the questions is available from the corresponding author.*

Demographics

One hundred eighty-two (182) surveys were completed. Of these approximately 40% were male and 60% were female. The majority (84%) of respondents specified they were Australian; 14% of participants were aged over 58, and 2.3% over 68. With regard to education, approximately 54% of participants had a year 12 qualification or less, 13% had university education, and 33% had completed a TAFE or another qualification not specified.

Conditions Perceived to be Treated by Chiropractors

Of the 182 participants, only 79 (43%) had previously been to a chiropractor, and 101 (55%) had not. Back pain (40%) and neck pain (21%) were the predominant reasons for people to attend a chiropractor. Headache (9%), muscle pain (10%), joint pain (8%) and sports injury (10%) were also noted. Only 1% saw a chiropractor for repetitive strain injury (RSI) and 0.3% for “other” conditions. Most (81%) were happy with their treatment, 6% were unhappy, and 12% were unsure. For the 6% that were unhappy, the concerns were cost and the number of visits required.

The respondents’ reaction to a suggestion that they visit a chiropractor were similar, regardless of whether they had previously seen one or not: 18% needed convincing, 56% were interested to know more about chiropractic,
and the remainder responded that they do not need to see a chiropractor because they ‘had no pain’ (11%), they ‘did not have a problem that a chiropractor could treat’ (8%), or because they ‘were fit and healthy’ (6%).

Concerns Regarding Chiropractic Work

Two questions in the survey addressed this area. The biggest concerns regarding chiropractic care (Question 15) were that 30% of responses indicated uncertainty about what chiropractic could do for them, and cost was the main concern for 20%. Twenty-seven percent (27%) said they had no problems at all with chiropractic (Table 1). In terms of whether participants found chiropractic to be dangerous (Question 16), 9% thought it was dangerous, 27% of participants were unsure, and 64% of respondents did not perceive it as dangerous.

Perceptions of What and Whom Chiropractors Treat

The perception of what body parts chiropractors worked with appeared to be predominantly bones, joints and muscles; the nervous system figured in only 10% of the 537 responses (Table 2).

In terms of the types of patients seen by chiropractors (Table 3; Question 12), of the 884 responses, only 7% indicated that pregnant women, 8% babies, 12% children and 7% persons with learning disabilities are seen by chiropractors. The majority of participants believed that mainly patients of adolescent age and above are treated by chiropractors.

In response to Question 13, 57% responded that chiropractic treats the cause of problems, 18% believed that chiropractic helped in prevention, 18% believed that it treated symptoms only and 8% were unsure on what chiropractic care does.
failure to relieve pain associated with many conditions may be some of the reasons people are turning to alternative therapies such as chiropractic.\textsuperscript{11-13} Of the 155 responses regarding satisfaction with chiropractic care, 81\% were happy with their treatment. Of the 10 who stated they were not happy, 3 participants commented that the chiropractor they saw required them to come in many more times than they felt was appropriate for their treatment. These comments are important, because they were not solicited by the survey but were voluntarily provided by the participants. This perception could be the result of either a lack of proper patient education from the chiropractor regarding the required frequency, or simply over-servicing by the chiropractor.

Back and neck pain were the most common reasons for which people went to a chiropractor. While these areas are frequently treated in chiropractic clinics, headaches, joint pain sports injury and RSI are just as important. Chiropractors often help patients with forms of repetitive stress and give information and assistance with regard to ergonomics, posture and stress reduction. In our survey, less than 1\% of participants had seen a chiropractor for these entities. This is similar to the observations of Coulter \textit{et al.}\textsuperscript{4} that patients seek chiropractic care almost exclusively for musculoskeletal symptoms. The results also suggest that currently the perceived role of the chiropractor in the health care system is a narrowly focused one and not a broad-based alternative.

Chiropractic care attempts to determine and treat the cause of dysfunction within the nervous and musculoskeletal systems and prevent continuing problems. In response to Question 11 of the survey regarding which body parts chiropractors work on, the most common answers were bones, joints and muscles. Despite the fact that 43\% of participants had seen a chiropractor and 80\% knew someone who had, only 10\% knew that chiropractors worked with the nervous system, implying that patients and the public may not have enough information regarding the tenets of chiropractic.

Treating the cause of symptoms and working on prevention of musculoskeletal and neurological complaints is a significant focus in chiropractic care. More than half (57\%) of the participants perceived that chiropractors work on the cause of problems, but only 18\% believed that prevention was also a focus. One of the ways in which chiropractors could further their cause is to inform and educate the public that prevention is always far better than cure and that chiropractic is in a position to provide preventative care.

In terms of treatment modalities delivered by chiropractors (Question 10), massage was perceived by participants as the most common form of care (27\% of the 458 responses), followed by adjustments (22\%). This may be an indication that chiropractors in general may be heading away from adjustments towards more soft tissue procedures, or simply a wrong notion by the public on what chiropractors actually do. It is interesting to note that chiropractors spend a number of years learning and practising the art of the adjustment to directly influence the nervous system and reduce subluxation, yet only 22\% of the 458 responses (representing 55\% of the 182 participants) perceived this as the primary mode of treatment. It is possible that due to the number of different chiropractic techniques available in practice, patients who have sought chiropractic treatment may not have attended clinics in which “bone cracking” (adjustment) is a major part of treatment.

On attitudes regarding consulting a chiropractor, the most common answer (57\% of the 178 responses) was that they were interested and wanted to know more. This indicates an opportunity for chiropractors to collectively promote their profession. This could be done \textit{via} a range of methods depending on the location and community dynamics, for example, through stalls at local fairs, providing spinal screenings, advice on posture, presentations at community meetings or \textit{via} audio-visual media. It was observed in our study that only 49\% of the participants knew where their local chiropractor was located, suggesting that chiropractors also need to enhance their local profile. Our survey suggests that word of mouth is extremely important in the referral of new patients, with 32\% of the 92 respondents citing referrals from family members and 24\% from friends. Maintaining a good rapport with the local GP is also of vital importance, as 26\% of respondents indicated that chiropractic care was suggested by their GP. Therefore co-management could be a strategy adopted by more chiropractors.

Our results of 47\% of chiropractic users being educated to Year 12 or below support an earlier report.\textsuperscript{4} In response to Question 12, the perception of the majority of participants (66\% of the 884 responses) was that people of adolescent age or older are the usual patients for chiropractors.

Two questions aimed to gather information on the concerns that participants had regarding chiropractic care. The two main answers were that people either did not have any concerns (27\% of the 208 responses) or that they didn’t know anything about chiropractic treatment (40\%). Cost was a factor for just over 20\% of the responders. While 64\% of participants felt that chiropractic was not dangerous, the 27\% who were unsure and the 9\% who felt that chiropractic was dangerous, provide a window of opportunity for the chiropractic profession to better educate the public.

Question 28 asked participants if they believed chiropractors provided a good community service. Most (70\%) said yes, 29\% were unsure and only 3 participants said no. This reiterates the fact that the public are not against chiropractic per se, but simply do not have enough information to form an opinion. The number of participants who thought chiropractors provided a good community service was lower than that reported by Teitelbaum.\textsuperscript{12} This difference may be due to our survey being conducted in metropolitan areas. Teitelbaum\textsuperscript{12} suggested that the general rural population expended more effort to read and seek information about maintaining a general state of good health and wellness for themselves and their families. This difference may also be due to the isolation and the limited resources in rural areas compared with the numerous choices available in metropolitan areas for alternative and complementary therapies.

With regard to training, 56\% of the respondents believed that chiropractors were as well trained as physiotherapists, and 34\% believed that chiropractors were as well trained as GPs. This may explain why only a small number (0.3\% in our survey and 2-5\% reported by Meeker \textit{et al.)} seek chiropractic care for conditions other than musculoskeletal.
The results of this study should be considered in the context of the limitations inherent to small sample size and the use of a closed-ended questionnaire. The use of an open-ended questionnaire might have elicited more detailed information. Also, some of the questions and answers could have been worded differently, for example the use of ‘only’ in Question 10. Responses to Question 18, which asked about the education of chiropractors, may have been influenced by the information and consent form handed out with the surveys (a requirement of the Macquarie University Ethics Committee), with information in it explaining that the survey was being conducted to meet the requirements of the degree of Master of Chiropractic Science.

Our findings reflect those of the World Federation of Chiropractic’s Identity Consultation Task Force\(^5\) that the chiropractic profession should strive for a common public identity for the profession within health care, the most appropriate being “the spinal health care experts in the health care system.”

**CONCLUSION**

It appears that the general public does not have an informed opinion about chiropractic. It is the responsibility of the profession to acknowledge and hopefully change this, as it has implications on further growth and development of chiropractic. Despite the great advances that have occurred over the past decades in terms of chiropractic education, repertoire of treatment and increasing patient numbers, there is scope for improvement in the public’s perception of chiropractic. There appear to be no real concerns regarding the perceived dangers, cost or commitment, rather the distinct lack of information available to the public for them to form an informed opinion. This clearly shows that to increase public knowledge and therefore promote the profession more effectively, we need to educate the public on the tenets of chiropractic and the fact that chiropractors are neuromusculoskeletal specialists who influence the body’s well being via specific movements called adjustments.

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**REFERENCES**

Appendix

SURVEY: THE PUBLIC PERCEPTION OF CHIROPRACTIC

Highest education level [Year 10/Year 11/Year 12/TAFE course/University degree (undergraduate)/University degree (Masters)/Other]
What is the postcode of your residence?
What is your nationality?

1. Do you know what a chiropractor does? [Yes/No/Unsure]
2. Have you ever been seen and/or treated by a chiropractor before? [Yes/No/Unsure]
   If you have answered yes, please go to question 3. If you have answered no, please go to question 5.
3. If you have sought chiropractic treatment, who was it that suggested you see a chiropractor? (You may tick more than one.) [Family member/Friend/GP/Physiotherapist/Other]
4. If you have sought chiropractic treatment, why did you seek care? [I knew straight away the chiropractor would help./My GP referred me./I had heard good things and thought it might help./Last resort as nothing else was working./Other]
5. Do you know someone who has been treated by a chiropractor before? [Yes/No/Unsure]
6. If yes, what relation is this person to you? [Family member/CLOSE friend/Acquaintance of friend/Other]
7. What have you, or someone you know, been treated by chiropractors for? (You may tick more than one.) Bachache/Headache/Neck pain/Muscle pain/Joint pain/Sports injury/Repetitive stress injury (RSI)/Other
8. Were you or this person satisfied with the treatment provided by the chiropractor? [Yes/No/Unsure]
9. If someone you know suggested you should see a chiropractor, what would your immediate thought be? [No, I am fit and healthy./No, I am not in pain./I do not have a problem a chiropractor can treat./I would need convincing./I am interested and would want to know more.]
10. Which of the following do you think chiropractors do? (You may tick more than one.) [Only “crack bones” (called adjustments)/Do massage and other soft tissue techniques/Use ultrasound and other machines/Use hot and cold packs/Rehabilitation/Give nutritional advice/Unsure]
11. In your opinion, what part of the body do chiropractors work with? (You may tick more than one.) [Bones/Joints/Muscles/Back only/Nervous system/Arteries, veins and lymphatic system/Other]
12. Who do you think chiropractors treat? (You may tick more than one.) Elderly/Middle aged/Adults/Adolescents/Children/Babies/Pregnant women/People with learning disabilities
13. What do you think chiropractic care does mainly? [Treats symptoms only/Treats the cause of the problem/Prevention/Unsure]
14. How often do you think you would need to see a chiropractor? [Once every year/A few times a year/Regularly/Only when in pain/Unsure]
15. Your biggest concern regarding chiropractic work is: [Don’t know anything about it/Unsure what it can do for you/The cost/What commitment is required?/I have no concerns/Other]
16. From your own understanding of chiropractic, do you think it is dangerous? [Yes/No/Unsure]
17. If you thought your GP would not like you visiting a chiropractor, would you still see one? [Yes/No/Unsure]
18. What education do you think chiropractors need in order to practise? [TAFE course/University degree (undergraduate)/University degree (Masters)/Apprenticeship]
19. Do you think chiropractors are as well trained as GPs? [Yes/No/Unsure]
20. Do you think chiropractors are as well trained as physiotherapists? [Yes/No/Unsure]
21. Do you think chiropractors can diagnose general health conditions? [Yes/No/Unsure]
22. Do you think chiropractors can take x-rays themselves and report on them? [Yes/No/Unsure]
23. Where do you think most chiropractors work? [Private practice/Hospitals/Public medical centres]
24. Do you think chiropractors should be part of the public health system? [Yes/No/Unsure]
25. Do you think chiropractic is covered by health funds? [Yes/No/Unsure]
26. Do you think chiropractic should be covered by Medicare? (public health system) [Yes/No/Unsure]
27. If chiropractic were covered by Medicare, would it encourage you to use its services? [Yes/No/Unsure]
28. Do you think chiropractors provide a good community service? [Yes/No/Unsure]
29. Do you know where your local chiropractor is located? [Yes/No/Unsure]