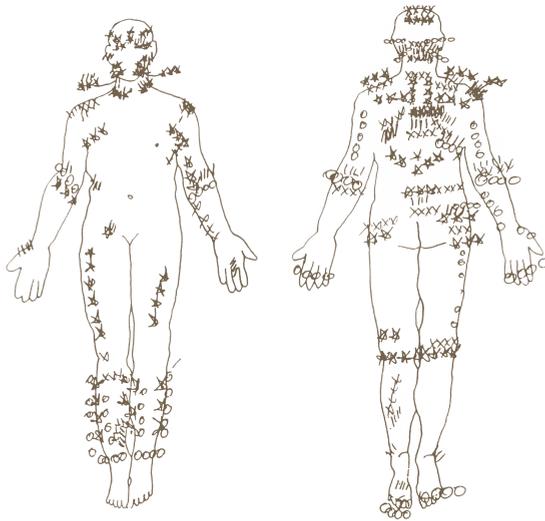


## CHAPTER 2

# Characteristics of chiropractors and their patients in Belgium

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## ABSTRACT

### Objective

The purpose of this study is to describe the characteristics, practice characteristics, and opinions of chiropractors and the sociodemographic characteristics and the type of complaint of patients presenting to chiropractors in Belgium.

### Methods

In 2008, all doctors of chiropractic in Belgium ( $N = 101$ ) were asked to provide personal sociodemographic and practice-specific information via postal questionnaires. The participating practitioners presented written questionnaires to a maximum of 10 consecutive patients to collect sociodemographic and clinical data on the patients. Descriptive analyses were used.

### Results

In total, 80 doctors of chiropractic (79.2%,  $n = 80/101$ ) participated, providing information on 517 patients. Belgian doctors of chiropractic are predominantly male (75%), have a mean age of 44 ( $SD = 14$ ) years, and have been in practice for 18 years on average. They typically treat neck and/or low back pain with or without radiating pain (85% of all complaints). Patients have a mean age of 43 ( $SD = 16.4$ ) years, 54% are female, and most patients are employed (70%). Patients present with musculoskeletal complaints of moderate intensity, averaging 5 on a 0 to 10 numeric rating scale. Chiropractors spend, on average, 36 minutes on a new patient and 15 minutes on follow-up consultations. Diversified technique (93%) is the most often used technique, followed by mechanical-assisted (Activator) spinal manipulative therapy (41%). Ergonomic advice and instruction in exercise therapy are most often used in conjunction with spinal manipulative therapy. Most chiropractors would like to have the legal authority to request diagnostic imaging (87%).

### Conclusions

This is the first study describing doctors of chiropractic and their patients in Belgium. Chiropractors in Belgium primarily focus on the treatment of neuromusculoskeletal complaints in adults, with emphasis on the spine. Patients presenting to the chiropractor consult with musculoskeletal complaints of moderate intensity that moderately affect their activities of daily living.

The World Federation of Chiropractic defines chiropractic as “A health profession concerned with the diagnosis, treatment and prevention of mechanical disorders of the musculoskeletal system, and the effects of these disorders on the function of the nervous system and general health. There is an emphasis on manual treatments including spinal adjustment and other joint and soft-tissue manipulation.”<sup>1</sup> Within Europe, chiropractic is recognized under specific chiropractic legislation in all Scandinavian countries, the United Kingdom, Switzerland, Liechtenstein, Italy, and Malta. In Belgium, chiropractic is considered complementary medicine and from a strict legal standpoint, practicing chiropractic is still considered practicing medicine without a license.<sup>2,3</sup> Profiles of chiropractic patients have been described in Sweden, Denmark, the Netherlands, and the United States.<sup>4-7,15</sup> The characteristics of chiropractors have also been described in detail in the United States, the Netherlands, the United Kingdom, Germany, and Finland.<sup>8-15</sup>

In 2004, according to the statistics of the Belgian federal government,<sup>16</sup> 1.5% of the Belgian population consulted a chiropractor; this implies that more than 150 000 people were treated by doctors of chiropractic that year. At the time of the study and according to the administrative council of the Belgian Chiropractic Union (BCU), there are 101 practicing chiropractors representing 139 private practices, averaging 1 chiropractic practice per 76 000 inhabitants. No further information is currently available on the characteristics of chiropractors and/or their patients in Belgium, and there are no publications as to why patients consult with a chiropractor. Therefore, the purpose of this study is to provide a description of the sociodemographic characteristics, the practice characteristics, their opinion on the scope of their chiropractic practice, and the techniques used on new and existing patients of chiropractors in Belgium and to provide information on the sociodemographic characteristics and on the type of complaints of the patients presenting to chiropractors in Belgium.

## METHODS

### **Ethics Review**

This study is part of a larger study (the relative impact of the biopsychosocial factors as predictors of outcome in patients treated by chiropractors for neck pain and/or low back pain [LBP]). Ethics approval was obtained from the University hospital at the University of Ghent, Belgium (registration no. B67020095664) and from the VU medical centre of the Vrije Universiteit Amsterdam, the Netherlands (registration no. 2008/232).

## **Recruitment**

The BCU is the only professional organization in the country, representing 95% of all practicing chiropractors in Belgium. All 101 members of the BCU were informed by e-mail in August 2008 about the study and were invited to participate. The 18 chiropractors who did not respond to the mail were contacted by phone by the primary author in the period between September 1 and 5, 2008: of those 18, 11 entered the study.

## **Chiropractic Practitioners**

All participating doctors of chiropractic were asked to complete a 28-item postal questionnaire. The questionnaire contained various categories, ranging from demographic characteristics of the chiropractors, type of practice, scope of practice, techniques used, and treatments delivered, to the diagnostic procedures performed on new patients. Thereafter, the chiropractors were asked to recruit 10 consecutive new patients presenting to their office in the period from September 15 to October 10, 2008, for participation in the study.

## **Patients**

New patients were defined as patients who were never before treated by a chiropractor and/or had not consulted a chiropractor within the last 6 months. Only patients with sufficient writing and reading skills in Dutch and/or the French language were asked to participate; however, it was left up to the discretion of the recruiting chiropractors whether or not the patients selected for this study had indeed sufficient writing and reading skills. There were no other inclusion or exclusion criteria. The questionnaire was translated from Dutch into French by an accredited translation office (Miles Translations). The questionnaire was designed to take less than 15 minutes to complete. Patients completed the questionnaire immediately before the first consultation. The self-administered questionnaire contained questions about demographic characteristics, the chief complaint, and past and present investigations/treatments for the chief complaint. The degree of pain, limitation of activities of daily living due to the chief complaint, and treatment expectations were scored on an 11-point numeric rating scale (NRS). On the 11-point NRS, for those questions regarding pain and disability, 0 represented no pain/no disability and 10 represented unbearable pain/severe disability; and for the question regarding expectations of treatment efficacy, 0 represented no expectations of a treatment effect and 10 represented very high expectations.

## **Data Analysis**

The analyses were limited to descriptive statistics. Continuous variables were expressed as a mean and standard deviation, except when the data were skewed, in which case the median and interquartile range were presented. Categorical variables were expressed as a percentage. Data were entered in SPSS for Windows, version 15.0 (SPSS, Chicago, IL).

TABLE 1. CHARACTERISTICS OF BELGIAN CHIROPRACTORS (N = 80)

<b>SOCIODEMOGRAPHIC CHARACTERISTICS</b>	<b>MEAN [SD]</b>	<b>%</b>
Age (y)	44 [14]	
Male chiropractors	47 [15]	
Female chiropractors	39 [9]	
No. of years in practice	18 [14]	
Sex, male		75
College of graduation		
Europe AECC		45
IFEC		3
North America Palmer College		24
NCC		11
Life college		4
CMCC		3
LACC		1
Other		10
Type of practice		
Solo		53
Group practice (>1 chiropractor)		36
Multidisciplinary practice		8
Multidisciplinary + group practice		4
Average no. of patient contact hours/wk	33 [14]	
Average no. of wk in practice/year	47 [2]	
Average time spent with a patient on the first visit	36 [11]	
Average time spent with a regular patient	16 [5]	
Do you make house calls? Never		74
Do you have other degrees? No		59
If yes, which degree?		
Medical doctor		1
Physical therapist		26
BSc		8
MSc		6
Does your practice have a secretary?		
No		61
Yes, full time		19
Yes, part time		20
Practice/technique info		
What chiropractic techniques are often used in your practice?		
Diversified		93
Activator		41
Gonstead		21
Applied Kinesiology		19
Sacro-Occipital Technique		14
Specific upper cervical		10
What other forms of treatment are being used in your practice?		
Ergonomic advice		81
Instruction in exercise therapy		81
Trigger point therapy		79
Advice to use ice/heat after a treatment		74
Manual or mechanical traction		50
Supplements		31
Massage		28
Orthoses		23
Active exercises in the practice		13
Cox flexion-distraction		11
Other treatments (dry needling, homeopathy, ice/heat application)		<5

Dietary advice on a regular basis?		43
Advice to use supplements to complement CMT treatment?		18
Work with the same dietary supplements company?		8
Scope of practice		
Do you feel your scope of practice is limited to Tx of NMS complaints? Yes		38
What falls within the scope of chiropractic?		
Treatment of NMS complaints		99
Treatment of children between 1 and 7 y old		94
Treatment of infants between 0 and 1 y old		88
Request diagnostic imaging		87
Treatment of pseudovisceral complaints		66
Treatment of visceral complaints		58
Treatment of asthma		45
Treatment of animals		29
Prescription of medication		23
Write leave of absence notes		
No		38
Write short sick notes (1-3 d)		20
Write sick notes up to 1 wk (3-7 d)		20
Write sick notes unlimited in time		23
Practice characteristics		
What do you consider to be your specialty?		
No specialty		58
Neurology		11
Sports		11
Orthopedics		10
Children		4
Other		5
Do you have an additional chiropractic degree? yes		13
Do you treat children between 7 and 14 y old?		
No		0
Occasionally (<1×/mo)		17
Sometimes (1-4×/mo)		49
Often (N1×/wk)		34
Do you treat children between 1 and 7 y old?		
No		4
Occasionally (b1×/mo)		31
Sometimes (1-4×/mo)		36
Often (N1×/wk)		29
Do you treat infants younger than 1 y old?		
No		10
Occasionally (b1×/mo)		47
Sometimes (1-4×/mo)		19
Often (N1×/wk)		24
What percentage of your patients is referred by a medical doctor?		
1%-10%		51
10%-25%		23
25%-50%		16
0%		8
>50%		3
Do you routinely send a report of findings to the referring physician? Yes		51
Research		
Do you read scientific literature?		78
Are you interested in scientific research with regard to chiropractic?		81

AECC = Anglo-European Chiropractic College; IFEC = Institut Franco Européen de Chiropratique; NCC = National College of Chiropractic; CMCC = Canadian Memorial Chiropractic College; LACC = Los Angeles College of Chiropractic; CMT = chiropractic manipulative therapy; NMS = neuromusculoskeletal

To check for data entry errors, a random sample of 10% of the entered items (all items from every 10th questionnaire, both from chiropractors and from the patients) was checked by an independent researcher. In total, 3 errors of 1337 entered items were detected. There were no missing data; therefore, the authors have confidence in the completeness of their data and the quality of data entry.

## RESULTS

In total, 79.2% (n = 80/101) of the chiropractors participated by returning their questionnaires; and 517 patients of the potential 800 returned the patient questionnaires. In total, 29 chiropractors returned all 10 patient questionnaires, whereas the remaining chiropractors returned from 2 to 9 questionnaires (median, 4.45). Of those who did not return all 10 patient forms, the author contacted a sample of 10 chiropractors to find out the reasons for not returning all the questionnaires. The most important factors were (1) not enough new patients presented during the study period (n = 4), (2) chiropractors or their secretaries failed to be consistent in asking the new patients to participate (n = 4), and (3) some chiropractors started recruiting patients on a later date because of vacation (n = 2).

The characteristics of the Belgian chiropractors and their practices are presented in Table 1. Table 2 presents data on the types of diagnostic techniques they use, and Table 3 shows details about the treatments they give. Table 4 presents the results of the patient surveys. The most important results are discussed in the next section.

TABLE 2. DIAGNOSTIC PROCEDURES PERFORMED BY THE CHIROPRACTOR ON A NEW PATIENT (N = 80)

DIAGNOSTIC PROCEDURE USED ON NEW PATIENTS	OFTEN TO ALWAYS (%)
Static palpation	88
Motion palpation	85
Analysis/discussion of diagnostic imaging	80
Visual posture analysis	72
Orthopedic examination	64
Neurologic examination	54
Anamnesis using a printed questionnaire	38
Blood pressure measurement	18
Abdominal examination	5
Examination of heart and lungs	5
Examination of vision and hearing	5
Posture analysis using instrumentation	1

## DISCUSSION

This study is the first comprehensive description of the characteristics of chiropractic practitioners and their patients in Belgium. In general, the sociodemographic characteristics of both the chiropractors and the patients are in line with previously published data from North America and other countries in Europe.<sup>4-15</sup>

In the United States, chiropractic is a large and well-established health care profession.<sup>14,15,17</sup> That situation is different in Europe where the chiropractic profession is less well established; whereas Denmark still has 1 chiropractor per 12 000 inhabitants,<sup>5</sup> the chiropractic profession in Belgium – with only 1 chiropractor per 76 000 inhabitants – is a small player within the Belgian health care system. In Belgium, chiropractic is still considered practicing medicine without a license.<sup>3</sup> According to the present study, 75% of the chiropractors surveyed in Belgium are male. This corresponds with figures from Scandinavian countries with 80%, 71%, and 70% in Finland, Norway, and Sweden, respectively.<sup>12</sup> In the Netherlands (68%),<sup>7</sup> Germany (63%),<sup>11</sup> and Denmark (51%),<sup>5</sup> these figures are lower.

Half the number of chiropractors surveyed in Belgium are solo practitioners (52%), and most chiropractors do not have a secretary (Table 1). Nevertheless, one can see a strong tendency toward group practices in the younger generation (<5 years in practice), where only 14% have a solo practice; this follows recent developments in primary care. Only 10% of the participating chiropractors share facilities with other health care professionals, which corresponds with the number found in the Netherlands.<sup>13</sup>

Chiropractors in Belgium primarily focus on the treatment of neuromusculoskeletal complaints, with an emphasis on the spine. This statement can be supported by looking at the nature of the complaints of the patients presenting to the chiropractor in Belgium (Table 4); in total, 85.5% of their patients have LBP and/or neck pain with or without radiation to the leg, arm, or head as chief complaint. Like in other European countries,<sup>4-8</sup> 55% of the patients are female with a mean age of 43 years (Table 3). Almost three quarters of the chiropractic practitioners in Belgium never do house calls, more than half the chiropractors indicate that they seldom or never take the blood pressure or do an abdominal examination on a patient presenting for the first time to their office, and close to 70% of chiropractors seldom to never perform auscultation of the lungs or listen to the heart. Chiropractors primarily rely on static and motion palpation, the analysis of diagnostic imaging, visual posture analysis, and tests from the orthopedic examination to evaluate a new patient presenting to their office. Chiropractors in Belgium do not have the right to prescribe medication, write sick notes, or request diagnostic imaging either. Unlike the situation in Switzerland, where chiropractors have had certain prescription medication rights since 1995 and chiropractors there consider this to be an advantage,<sup>18</sup> the inability to prescribe medication does not seem to pose a problem for the large majority of the Belgian chiropractors. However, a

TABLE 3. SOCIODEMOGRAPHIC CHARACTERISTICS OF PATIENTS CONSULTING A CHIROPRACTOR IN BELGIUM IN 2008 (N = 517)

SOCIODEMOGRAPHIC VARIABLES	MEAN [SD]	%
Age (y)	43 [16.4]	
Sex: female		54.7
Highest level of education		
Elementary school		20.1
High school		33.3
Nonuniversity higher education		30.9
University		12.2
Postuniversity (PhD, 2nd Msc)		3.4
Employment status		
Employed? Yes		70.3
If no, what is your status?		
Retired		13.2
Student		6.6
Housewife/houseman		3.5
Unemployed		1.2
Disabled		1.0
Referral source		
Family/friends/acquaintances		65.8
Medical doctor		20.8
Self		9.2
Other therapist		4.2

large majority (86.5%) of the chiropractors would like to have the legal authority to request diagnostic imaging (Tables 1 and 2).

Although chiropractors in Belgium view themselves as musculoskeletal specialists, 63% of the Belgian chiropractors feel that the scope of their practice is not limited only to the treatment of musculoskeletal disorders. Still, a very small percentage (1%) of their patients present with non-musculoskeletal complaints, which is consistent with figures found in the Netherlands.<sup>7-13</sup> These results differ from those from one North American study in the late 1990s reporting that 10.3% of the patients present with non-musculoskeletal complaints, ranging from allergies over fatigue to asthma.<sup>15</sup> Hawk et al<sup>19</sup> already reported that the reality is likely to be different than the perception; although two thirds of the Belgian chiropractors see the treatment of visceral complaints within their scope of practice, the figures found in this study (1% non-musculoskeletal complaints) support the finding of Hawk et al that patients see a chiropractor for musculoskeletal problems.

In line with figures from North America reported by Coulter et al,<sup>14</sup> the treatment of choice for most chiropractors is the high-velocity, low-amplitude thrust. Ergonomic advice, instruction in exercise therapy, soft tissue work such as trigger point therapy, and advice to use ice or heat after a treatment also are used on a very regular basis. In contrast to the practice in North America,<sup>15</sup> Belgian chiropractors do not use physical

modalities or electrotherapeutic techniques. Although approximately 90% of the chiropractors consider the treatment of infants (0-1 year old) and young children ( $\leq 14$  years of age) within their scope of practice, only a small proportion (4%) of the practicing chiropractors indicate that their specialty lies with the treatment of children; and young children represent only a marginal portion (1.2%) of the patient population. Only 3% of the patients referred by the medical doctor were younger than 18 years, and none of those were younger than 15 years. These figures differ from the Danish situation where, according to the Danish National Board of Health, 16 600 pediatric patients visited a chiropractor in the period from September 2007 through September 2008. Babies were by far the most common pediatric patients in Denmark.<sup>20</sup> The ability to read and write Dutch or French was listed as the only inclusion criterion; perhaps this was not well interpreted by the participating chiropractors because the parents of young children were allowed to complete the questionnaires. This can explain in part the small number of children in this sample.

Communication between chiropractors and the referring physician is also a topic that needs to be addressed and improved upon in Belgium. Although more than one patient in 5 (21%) is referred to chiropractic care by their medical doctor (as opposed to 17% in the Netherlands<sup>13</sup> and 11% in Denmark<sup>6</sup>), possibly indicating a developing acceptance of chiropractic as one of the options in the treatment of patients with musculoskeletal complaints, only half the chiropractors provide a report of findings, either written or by phone, to the referring physician. Langworthy et al<sup>21</sup> reported on a similar situation in Norway and indicated that, with increasing emphasis on multi-disciplinary health care, greater understanding and better communication – using a shared vocabulary – are needed to optimize the benefits of such an approach to patient management.

In line with data from Denmark<sup>5,6</sup> and from the survey of chiropractic patients in Europe,<sup>8</sup> approximately half the patients (47.6%) had acute or subacute complaints. This high number might be attributed to the way the question on duration was posed. We specifically asked for the duration of the current episode; an acute exacerbation of a chronic complaint might therefore also have been reported as acute complaints. The numbers on chronic cases with symptoms present for over a year (24.8%) also correspond with numbers from Denmark (21%).<sup>5,6</sup> The total percentage of chronic patients (38%) is substantially lower than that found (77%) in the Netherlands.<sup>7</sup> Although Belgium and the Netherlands are neighboring countries, the patient population presenting to chiropractors seems to differ on some points. This finding is noteworthy because the profession has a very similar legal status and profile within the respective national health care systems. One possible explanation for the higher number of patients with chronic complaints in the Netherlands might be that the manual therapy profession – a specialty within the physical therapy profession – has a substantial presence in the Netherlands, whereas it is almost nonexistent in Belgium; therefore, in the

TABLE 4. PATIENT-SPECIFIC CLINICAL CHARACTERISTICS OF PATIENTS PRESENTING TO CHIROPRACTORS IN BELGIUM IN 2008 (N = 517)

CLINICAL BASELINE VARIABLES	% OR MEAN [SD]
Chief complaint	
Both neck pain and LBP	25.3
LBP radiating into 1 leg	21.4
LBP	16.3
Neck pain radiating into the arm	9.9
Neck pain	7.6
Interscapular pain	6.0
Neck pain with associated headache	5.0
Headache	1.9
Pain in the leg	1.8
Pain in the arm	1.6
Chest pain	0.4
Other	2.7
Did you ever have the same complaint before? % No	40.3
Duration current episode	
<3 d	13.2
3 d-6 wk	34.6
6 wk-3 mo	12.6
3-6 mo	7.5
6 mo-1 y	6.4
>1 y	24.8
Has the current complaint been treated before? % No	35.2
If yes, by whom?	
Medical doctor	31.9
Physical therapist	26.3
Osteopath	16.1
Medical specialist	15.9
Other chiropractor	7.9
Manual therapist	4.1
Other therapist	3.3
How has the current complaint been treated before?	
Medication	48.4
Physical therapy without exercises	18.4
Manipulation	16.1
Physical therapy with exercises	14.1
Mobilization/manual therapy	10.1
Epidural infiltrations	7.4
Advice to rest	6.4
Facet joint infiltration	3.1
Reassurance by the family physician	2.9
Other	5.6
Has the current complaint been examined before? % No	51.3
If yes, how?	
Radiographs	32.7
CT	20.7
MRI	13.7
CBC	8.5
EMG	4.8
Other (urinalysis, bone scintigraphy, ultrasound)	3.8
Did the current complaint lead to leave of absence at work? % Yes	24.5

If yes, how long?	
2 d	15.4
1 wk	28.5
2 wk	14.6
3-8 wk	17.8
≥3 mo	13.8
Incomplete	9.9
Does this complaint hinder your ADLs? (0-10 NRS)	4.6 [2.7]
How would you rate the current pain level on an NRS (0-10)?	4.9 [2.5]
How would you score the pain level last week on an NRS (0-10)?	5.1 [2.5]
What is your expectation with regard to the current treatment on an NRS (0-10)?	7.6 [2.2]

CT = Computed tomography; MRI = magnetic resonance imaging; CBC = complete blood count; EMG = electromyogram; ADLs = activities of daily living

Netherlands, patients with musculoskeletal complaints have multiple treatment options within the manual medicine professions. Rubinstein et al<sup>7</sup> reported that family physicians in the Netherlands preferentially referred patients to other therapists than to chiropractors. Another explanation might be found in the fact that, unlike in Belgium, in the Netherlands guidelines for the family physicians with regard to the treatment of nonspecific LBP, exercise therapy or manipulative therapy is recommended within the first 6 weeks of the episode.<sup>22</sup>

Patients present with musculoskeletal complaints of moderate intensity (4.9 points on a 0- to 10-point pain scale) that moderately affect their activities of daily living (4.6 points on a 0- to 10-point disability scale); yet almost two thirds (64.8%) of the patients presenting to the chiropractor had previously received conservative treatment for their current complaint, and 60% of the patients had a similar episode in the past (Table 4). A little more than one third (36%) of all patients presenting with neck pain and/or LBP lasting longer than 6 weeks were in possession of radiographs. These figures correspond with those found in Denmark<sup>5,6</sup> and the Netherlands.<sup>7,13</sup> For family physicians in Belgium, chiropractic is not the treatment of first choice for their patients with musculoskeletal complaints. This is remarkable because not only do chiropractors in Belgium see themselves as specialists in the treatment of musculoskeletal complaints, also patients who consulted a chiropractor had high expectations with regard to the effectiveness of the chiropractic treatments for their musculoskeletal problem. One of the conclusions from this contradiction could be that the chiropractic profession has an obligation to better and clearly define and explain to potential referral sources the role they can and want to play in the treatment of patients with musculoskeletal complaints of moderate intensity. In 1999, Grol and Grimshaw<sup>23</sup> already described a 5-stage framework within a comprehensive program on implementing evidence-based clinical guidelines in primary care needed for changing practice. One of the focuses for future

research should be to determine how this program can be used to convince the potential referral sources of the added value of chiropractic for them and for their patients with musculoskeletal complaints of moderate intensity.

### **Limitations**

Although the major strength of this study is the high response rate from the chiropractors (79.2%), not all participating chiropractors recruited the proposed 10 patients. In addition, we were unable to control whether the chiropractors invited the first 10 new patients presenting to their office. Therefore, there might be some selection bias, and the intended consecutive sample may have turned into a convenience sample. However, considering the reasons the chiropractors mentioned for submitting less than 10 patients and considering that the chiropractor was aware of the descriptive goal of this survey, it is not likely that our sample is highly selective. The survey instrument was not validated, but based on questionnaires used in similar studies that occurred in other European countries. An additional limitation includes potential recall bias because patients were required to remember and report duration of pain or specific diagnostic procedures.

## **CONCLUSION**

This is the first study describing chiropractic care in Belgium. The sociodemographic and practice characteristics are in line with those seen in other European countries. Although almost two thirds of the chiropractors feel that the scope of their practice is not limited to the treatment of musculoskeletal disorders, only a very small percentage (1%) of their patients present with non-musculoskeletal complaints. Chiropractors in Belgium primarily focus on the treatment of neuromusculoskeletal complaints of adults, with an emphasis on the spine. Patients presenting to the chiropractor consult with musculoskeletal complaints of moderate intensity that moderately affect their activities of daily living.

### **Practical Applications**

- » The sociodemographic characteristics of both the chiropractors and their patients are in line with previously published data from the United States and Europe.
- » Patients present with musculoskeletal complaints of moderate intensity and moderate effect on their activities of daily living.
- » Patients have high expectations regarding the effectiveness of the chiropractic treatments for their musculoskeletal problem.
- » A very small percentage (1%) of the patients present with non-musculoskeletal complaints, which suggests that chiropractors in Belgium, much like in other European countries, by and large concentrate on neuromusculoskeletal complaints.

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