

# The Impact of Scoliosis on the People Living with It and Their Families

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Scoliosis is an abnormal curvature and rotation of the spine. It causes progressive deformity of the skeletal structure and changes in the overall posture of the patient. Scoliosis can also cause serious emotional stress, especially in adolescents. However, it is quickly becoming a concern amongst the adult "baby-boomer" population, as indicated by a recent study that found scoliosis in 68% of adults over 60.<sup>1</sup>

The physical complications of scoliosis can be quite serious, ranging from pain and muscle soreness, to organ dysfunction.<sup>2</sup> This can include gastro-intestinal complications like chronic constipation or diarrhea, and severe cardio-pulmonary distress as the ribs constrict and compress the heart and lungs. This dysfunction can become so severe that 60% of patients with scoliosis may die as a result of complications with the heart & lungs.<sup>3</sup> Research and statistical analysis show that people suffering from scoliosis have a life expectancy that is 14 years less than that of the average population (for comparison, according to the National Cancer Institute, the average cancer patient loses 15.5 years off of their life).<sup>4, 5</sup> Some of the other ailments associated with scoliosis include headaches, chronic fatigue, joint pain, difficulty sleeping, loss of concentration, and depression.<sup>6</sup>

The emotional effects of scoliosis can be every bit as real and serious as the physical effects. Research shows that three out of four women with scoliosis never marry.<sup>7</sup> Children with this condition often suffer from jokes and teasing by their classmates due to the deformity associated with their scoliosis. They are commonly unwilling to be involved with school activities that require them to wear a swimming suit or other clothing that might easily reveal the curvatures in their spine, all of which leads to social isolation. To complicate the issue, many of these children are told to wear bulky and uncomfortable braces for up to 23 hours a day, further limiting their physical activities and involvement with other children. Long term statistical studies show these patients are more prone to depression and alcoholism later in life.<sup>8</sup>



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The financial effects of scoliosis can be extremely difficult on the families. The average cost of the bracing procedures can run up to \$10,000 or more. Once the curve develops to around 45 degrees, the cost of the scoliosis surgery can approach \$140,000, not including all the pre and postsurgical medical needs. Even with good insurance coverage (say, eighty percent), the patient's portion of the expenses can easily exceed \$15,000 to \$20,000. In addition, many surgeries need to be repeated, especially if they are conducted before the patient and their spine have finished growing. In healthcare, there is no "Money-back Guarantee;" if the fusion fails for any reason, the patient does not get a discount on the second (or third) operation.<sup>9, 10</sup>

While we chiropractors hold ourselves out as the spinal experts, we have historically had little to offer the scoliosis patient. This must change. We need to develop an understanding of the underlying causes of this condition so that we can develop the appropriate treatment protocols to effectively treat this condition. People living with scoliosis deserve more options than observation, bracing and surgery.

A search of the literature reveals that there have been around 9700 articles on chiropractic; 14.7% of these are on the topic of low back pain, whereas 1.4% of them are about scoliosis.<sup>11</sup> This is significant considering that there are more than ten musculoskeletal conditions that chiropractors manage besides low back pain! Currently, a case report published by three chiropractors on the chiropractic treatment of scoliosis is listed as the Most Highly Accessed Article of All-Time in its publishing journal.<sup>12</sup> Doctors of chiropractic working with scoliosis have been featured in numerous media outlets around the country, including CBS, ABC, NBC, & FOX News, for their groundbreaking efforts. The recent report on the burden of musculoskeletal disorders in the United States published by The Bone and Joint Decade estimates that over 2.6 billion dollars are spent each year on hospitalization costs to treat scoliosis and scoliosis-related complaints each year.<sup>13</sup> The need for chiropractors to get involved with scoliosis has never been greater than it is today.



Even if a chiropractor is not interested in dedicating the necessary resources to work with severe cases of scoliosis, we all have an obligation to understand it, and to be able to educate our patients with scoliosis effectively and responsibly. The biomechanical insight gained from working with patients with scoliosis can help you achieve better results in your patients without scoliosis, as well. There are seminars on scoliosis currently offered by chiropractic colleges and techniques that empower the doctor of chiropractic to better diagnose, educate, and manage patients with mild cases of scoliosis, and to develop a referral network of advanced specialists in this condition to refer severe cases to.

When someone is first diagnosed with scoliosis, it is logical for them to think of visiting a chiropractor—a doctor of the spine—to help them with their condition. We must respect our responsibility as primary care providers to provide these individuals with accurate information. We must know when it is appropriate to treat them, when it is appropriate to refer them to a chiropractic scoliosis specialist, and when referral to an orthopedist is necessary.

Above all, we must not take lightly the burden that scoliosis can impose upon the individual and upon our society.

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