

Study Reveals Most Children Experience Back Pain

Editorial Staff

Significant positive correlation with age, previous back injury, volleyball, females, and time spent watching television.

A new study published in a Scandinavian medical journal¹ examines the occurrence of back pain among school-aged children in France. While other studies have shown a prevalence of back pain in children as great as 40 percent, this paper presented the experience of a defined population of children and associated risk factors.

The authors surveyed 1,178 school children, ages 6-20 (mean age: 12.8 years) with a previously validated questionnaire. They found:

- > "... cumulative prevalence of back pain was 51.2 percent.
- > "Lumbar and leg pain, and thoracic pain were more common.
- > "After multivariate analysis, five qualitative variables were correlated with back pain with a statistical, significant positive correlation with age, previous back injury, volleyball, female sex and time spent watching television."

Over 73 percent of the children had experienced back pain at least once (please see the graph on the front page). While numerous correlations were tested, only these were found to be significant:

Age ($p=0.0000$): "The relative risk for 5-9 year-olds was started at one. Other relative risks were calculated with regard to this age. At 10-12 years, the relative risk was 2.79 (95% CI: 2.69-6.49). AT 16-20 years, the relative risk was 16.5 (95% CI: 9.90-27.47)."

Previous back injury ($p=0.0000$): "The relative risk of having back pain with a previous back injury was 5.40 (95% CI: 2.97-9.80)."

Satchel carrying: "Of 274 children, 188 (68.6%) had back pain when they carried their satchels by hand. Of 80 children, 43 (53.7%) had back pain when carrying over the shoulder, and of 807 children, 363 (45%) had pain when carrying on the back. There was a significant correlation between presence of back pain and the satchel carrying position ($p<0.0000$)."

Smoking: "Among those who smoked, 113 had back pain (83.1%) and 23 (16.9%) did not. Among children who did not smoke, 390 had back pain (59.2%) and 269 (40.8%) did not."

Television: "The prevalence of back pain was over 50% among those who spent more than

1 hour a day watching television."

Volleyball ($p=0.001$): "The relative risk of having back pain if participating at volleyball was 3.21 (95% CI: 1.48-6.99)"

Conclusion

The care of pediatric back pain is a significant area that obviously should be addressed by chiropractors. Judging from the results of the Scandinavian study, as age and lifestyle changes occur, more attention to these conditions is warranted. Parents should be counseled to discuss potential back problems with their children and seek regular examinations.

Reference

1. Troussier B, Davoine P, de Gaudemaris R, Fauconnier J, & Phelip X: Back pain in school children: a study among 1178 pupils. Scand J Rehab Med 26: 143-146, 1994.

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