Lifewire: Report says â€˜more attention needed toward preventing bicycle-related injuriesâ€™

by Ven_Griva

Learning to ride a bicycle is a childhood rite of passage that leaves many a youngster with fond memories - if not permanent scars on their elbows and knees.

Now a study conducted by the Center for Injury Research and Policy at Nationwide Children's Hospital concludes that bicycle-related injuries to young riders in the United States could be a more significant public health concern than previously recognized.

The combined cost in hospital stays for young Americans injured in bicycle accidents is estimated to be $200 million per year, says the study published in the October issue of Injury Prevention.

Children and adolescents aged 20 and younger comprise more than half of the estimated 85 million bicycle riders in the United States. It has been long known that bicycle-related injuries result in more emergency department visits for children than any other recreational sport.

"Bicycles are associated with more childhood injuries than any other consumer product except the automobile," said Dr. Gary Smith, director of the Center for Injury Research and Policy and faculty member at The Ohio State University College of Medicine. "The high rate of hospitalization and use of health care resources identified in our study supports the need for increased attention to bicycle-related injuries."

The first-of-its-kind study focused on the approximately 10,700 U.S. children injured in bike accidents each year and admitted at least overnight to the hospital. On average, those studied remained hospitalized for at least three days.

Among the study's significant findings:

- One-third of children hospitalized in bike accidents were diagnosed with traumatic brain injury.

- Motor vehicles were linked to about 30 percent of bicycle-related hospitalizations.

- The motor vehicle link increased as children got older.

- Helmets, knee pads, elbow pads and wrist guards, if worn, can reduce the severity of bicycle-related injuries.

"The findings from our study can be used to promote targeted prevention strategies to lessen the severity of injury and the number of deaths resulting from pediatric bicycle-related injuries," said Smith, one of the study's authors. "We know that bicycle helmets can reduce the risk of brain injury by up to 85 percent. We need to increase efforts to promote helmet use by children riding bicycles."

WEAK TRICK

It is common to hear middle-aged and elderly Americans complain of a "trick knee," one that "goes out" or "buckles" while they are walking or performing other everyday activities.

Arthritis is one culprit for the phenomenon. Another could be weak leg muscles due to a lack of exercise, says the author of a study published Oct. 16 in the Annals of Internal Medicine.

Researchers studied the knees of more than 2,300 adults between the ages of 36 and 94. Twelve percent said they'd suffered knee buckling at least once in the past three months.

The problem was more common in study participants with X-ray evidence of knee arthritis, but the X-rays from more than 50 percent of those with trick knees in the study showed no signs of arthritis.

Knee buckling is a source of trouble for two reasons, said Dr. David T. Felson, the study's lead author and a professor of medicine at Boston University School of Medicine.

"First of all, it causes falls and fractures," Felson said.

In the BU study, 13 percent of people who reported knee buckling in the past three months said it had caused them to fall.

"It's also strongly associated with functional limitations," Felson said, explaining that when people know they

have a vulnerable knee they tend to avoid activities that could make the joint "go out."

The findings suggest a reason for a puzzling heightened rate of bone fractures among people with knee arthritis, Felson said. This risk has been an enigma because people with knee arthritis, as a group, are relatively heavier and have greater bone density - factors that should lower their fracture risk.

Half of study participants with knee buckling said they were limited in their daily activities. And that could be one explanation for their increased risk of fracture.

Chronic pain and inflammation inhibit contraction of the quadriceps, the muscles at the front of the thigh, Felson said, which can destabilize the knee joint. Knee buckling and subsequent falls might explain the fracture risk linked to knee arthritis, Felson explained.

This implies that exercises to strengthen the quadriceps could help prevent knee buckling, said Felson.

"We don't know this for sure, since this wasn't a trial studying that, but it would make sense that strengthening is a reasonable thing to have these patients do," Felson said.

E-mail Ven Griva at ven.griva@copleynews.com or write to P.O. Box 120190, San Diego, CA 92112.

Â© Copley News Service

Lifewire: Report says â€˜more attention needed toward preventing bicycle-related injuriesâ€™ by Ven_Griva