

Outdoor play linked to children's mental health

October 8, 2010

Kids unwired ... outdoor play reduces stress and anxiety in children.

Dr Kathleen Berchermann sees the most extreme cases of stressed, depressed and anxious kids. At least once a week, she says, she cares for a teenager who has tried to commit suicide.

"It's frightening," said Berchermann, a paediatric specialist at Barnes-Jewish, Missouri Baptist and Progress West hospitals. When she inquires about healthy activities in the teens' lives, almost none mention anything outdoors. They went to summer camp once, they say, and that was wonderful.

Berchermann said she notices her most carefree patients have opposite lives. They are covered in ticks after being out catching frogs, got a hook stuck in their ear while fishing in a creek or have an infected mosquito bite after a camping trip.

Advertisement: Story continues below

"They are the ones waiting an hour to see you and are still giggling when you get in the room," she said.

Children's time in nature is rapidly diminishing. Today's youth spend just four to seven minutes outside each day in unstructured outdoor play such as climbing trees, building forts, catching bugs or playing tag, studies show. Yet, they spend more than seven hours each day in front of a screen.

The question of how this affects a child's development has become increasingly urgent. Last month, the National Wildlife Federation released a comprehensive report *Whole Child*:

Developing Mind, Body and Spirit through Outdoor Play

revealing how the unique benefits of playing outside promote not just physical wellness but also mental.

The report shows that in the past 20 years, the use of antidepressants in paediatric patients has risen sharply, and the United States has become the largest consumer of ADHD medications in the world.

"American kids are out of shape, tuned out and stressed out because they're missing something essential to their health and development," says National Wildlife Foundation education director Kevin Coyle. "It's not just about loss of innocence, the detachment from all things growing and green. It's a serious public health issue we all need to care about."

The report is part of the foundation's Be Out There movement, one of numerous campaigns under way at the federal, state and local levels to connect children to nature. The growing effort was sparked by Richard Louv's 2005 book, *Last Child in the Woods*, which dubbed the effects of the lack of green in children's lives "nature-deficit disorder."

Ron Lovett, 31, of St Louis, was a child before computers and cell phones permeated households. He spent his afternoons with friends playing "army," skateboarding, fishing and carving on tree trunks.

Most people weren't aware of ADHD Attention Deficit Hyperactivity Disorder. He wasn't diagnosed until he was 23, trying to get through college for the second time.

Looking back, Lovett remembers how after roaming the outdoors he felt more focused and calm. His homework was easier.

"If I would've been stuck in front of a TV or a video game," said the quality technician for a sealant manufacturer, "I would probably be in prison."

Losing playtime

Children are losing playtime to homework, sports practices and after-school lessons. A six-year study ending in 2003 showed that kids' discretionary time has decreased 16 per cent, and when they are free, they are plugged in. At the same time, schools have cut back on recess to boost test scores. Child abductions, though rare, make parents fearful of letting kids roam.

Dra Garrett Burriss, a pediatric neurologist, sees many patients with ADHD and emotional disorders. More than other children, he says, those with ADHD and other problems need the mental break that the outdoors provide.

"What is remarkable is that I find that many children don't go out and play, and they don't exercise," Burriss said. "It's too easy to get home and start texting and open up a screen. You don't have to move. You don't have to go to a friend's house."

The decline in green time is not the cause of these medical conditions, Burriss and others say. But increasing outdoor playtime might help protect children from troubling trends:

- About 4.5 million US schoolchildren have been diagnosed with ADHD, an increase of 3 per cent each year since 1997, according to the Centres for Disease Control and Prevention. The disorder can impair academic progress and socialisation.
- Antidepressant use has increased by 49 per cent among US school-aged children, according to a study of 2 million youth

between 1998 and 2002. The largest increase was among preschoolers.

- A survey last year by the American Psychological Association found a third of children ages 8 to 17 reported increasing stress levels. Another recent poll of adults moved stress up the ranks to among the top children's health concerns.

Attention fatigue

University of Illinois researchers found exposure to natural settings significantly reduced ADHD symptoms such as inattention and impulsivity of children, according to a study published in 2004. A possible reason, the researchers suggest, is that nature helps prevent "attention fatigue" by engaging the mind effortlessly.

The *Whole Child* report compiles studies showing how outdoor play leads to happier kids: Children's stress levels fall within minutes of seeing green spaces. Outdoor play teaches kids to collaborate and solve problems. They are more confident, creative and even nicer.

The mounting science is causing doctors and parents to take notice.

"I would far rather write a prescription for safe outdoor play for my patients than see them five years later with depression, anxiety and obesity" said Dr Wendy Kohatsu, family physician and associate professor at the University of California, San Francisco, who reviewed the medical findings in the *Whole Child* report.

Michele Cleveland, 41, of St Charles, has an 11-year-old son diagnosed with ADHD. She recently learned more about the

benefits of outdoor play in an effort to reduce her son's medication, which suppresses his appetite, she said. But daily play is a challenge.

Afternoons are filled with homework, sports practices and Boy Scouts for him and his 7-year-old brother. He has fewer playmates because he struggles to fit in. Cleveland said she is fearful to let her boys play outside alone, so they get on the computer or watch TV while she finishes chores or cooks dinner.

"I need to re-prioritise so I can give kids that time," she said. "The laundry is going to be there no matter what."

As an adult with ADHD, Lovett said he now better understands how time outside cleared the chatter in his head. "The thing about the outdoors that calmed me and gave me peace was feeling the textures of everything," he said, remembering rough bark, cool water and smooth sand. "Even with as much as there is going on outside, it's not as intense as it is inside."

The National Wildlife Federation's physician-reviewed *Whole Child* report includes recommendations for parents and doctors to get kids playing outside:

Caregivers

- Be a role model. Show them how to unplug from media and plug into nature.
- When safe, encourage them to walk or bike to school.
- Enlist friends and neighbours for outdoor play groups.
- Join kids for fun in the backyard, park, garden or nature trail.

Health care providers

- Ask questions about outdoor time and media habits on intake forms and risk assessments. Talk to parents about the link between outdoor time and better health.
- Write a prescription for regular outdoor time.
- Instruct parents to create a nature journal that logs outdoor activities with their kids and the effect it has on their children's mood.
 - Remind parents to limit plugged-in time.