



Autism Screening Strikes Emotional Chord

Rebecca Voelker

AFTER AN ARTICLE THAT DISCOURAGES routine autism screening appeared online in *Pediatrics*, coauthor Jan Willem Gorter, MD, PhD, heard an array of heartfelt responses. “Some people were upset, especially parents with a child with autism,” said Gorter, an associate professor of pediatrics in the McMaster University Faculty of Health Sciences in Hamilton, Ontario, Canada. “I also got responses of parents who had a child mislabeled with autism initially, and that had a huge impact on the parents’ life and the child’s life.”

The study struck an emotional chord by concluding that sound evidence to support routine screening is lacking (Al-Qabandi M et al. *Pediatrics*. 2011;128[1]:e211-e217). The authors say that currently available autism screening tools have not been evaluated in randomized controlled trials and that treatment is only modestly effective in certain subgroups of children.

Although childhood screening, early detection, and treatment are effective for conditions such as congenital hypothyroidism or phenylketonuria, Gorter and his colleagues say that existing evidence does not show that routine screening for autism does more good than harm. In fact, they say that misdiagnoses can stigmatize children, expose them to unnecessary treatment, and trigger excessive costs.

Gorter noted that the article focuses on routine screening that includes apparently healthy children, not clinical surveillance in which pediatricians evaluate children because they or the parents suspect a problem. The data were taken from a literature search designed to answer 7 questions concerning the appropriateness, feasibility, and value of screening for autism.

In 2007, the American Academy of Pediatrics (AAP) published a clinical report that supports screening all children, regardless of risk factors, for autism spectrum disorders beginning at age 18 months (Johnson CP et al. *Pediatrics*. 2007;120[5]:1183-1215).

For children without risk factors, the AAP report says appropriate evaluation methods include several screening tools that consist of parental interviews, questionnaires, or direct observation of the child. Among them are the Checklist for Autism in Toddlers (CHAT) and the Modified Checklist for Autism in Toddlers (M-CHAT). Both are available at no cost to primary care pediatricians.

The reported specificity of CHAT is at least 98%, but sensitivity is between 18% and 38%. M-CHAT has 93% specificity and 85% sensitivity. Gorter and his colleagues say that M-CHAT, a 23-item questionnaire that takes parents about 5 minutes to complete, is a “promising” tool, but that it misses 15 of every 100 children with autism. They say that none of the currently available screening tests “fulfill the properties of accuracy, namely high sen-

sitivity, high specificity, and high predictive value” in population-based screening programs.

Gorter said he and his colleagues did not intend for their study to split clinicians into “right” and “wrong” camps. “We took a scientific approach,” he said. “We wanted to consider not only what we know about testing itself, but also the impact of the screening program on public health and society at large.”

Catherine Lord, PhD, director of the University of Michigan Autism and Communication Disorders Center in Ann Arbor, said the study lacks a necessary ingredient: a thorough cost-benefit analysis.

“We need to know what is the cost of screening and the benefit of screening, and what is the cost of treatment and the benefit of treatment,” said Lord, who was not involved in Gorter’s research. “It’s certainly not true that we can cure autism, but to say that nobody has ever shown a treatment has any effectiveness, any generalizability, that’s just not true.”

Fred R. Volkmar, MD, director of the Child Study Center at the Yale University School of Medicine, agreed that interventions for autism do make a differ-



Sound evidence to support routine screening for autism is lacking, according to a recent study. Researchers reported that sensitivity and specificity of screening tools are inadequate and treatment is only modestly effective in certain subgroups of children.



ence in outcomes. “The bottom line is, the more the better and the earlier the better.”

Volkmar, who also was not involved in Gorter’s study, said general developmental screening at ages 12, 18, and 24 months can be the foundation for detecting several symptoms that distinguish autism from developmental delays. A correct diagnosis and appropriate care for autism, he said, can be “the difference between somebody being 24/7 in institutional care as an adult and being independent and self-sufficient.”

Several recent reviews indicate that existing studies of interventions for au-

tism and autism spectrum disorders are not particularly rigorous, and so current evidence is not sufficient to show wide-ranging treatment benefits. One review showed that improvements may be linked with children’s baseline IQ levels, but it concluded that early interventions are effective only for some preschool children with autism (Howlin P et al. *Am J Intellect Dev Disabil.* 2009;114[1]:23-41). Another review suggested that Lovaas treatment, which is based on applied behavioral analysis and tailored to individual needs, may produce better outcomes than special education but that any treatment should

be guided by children’s unique needs (Ospina MB, et al. *PLoS One.* 2008; 3[11]:e3755).

But Lord and Volkmar said Gorter and his colleagues are correct to note that access to specialized care is poor. Lord said the major difficulty for pediatricians is time. “Appointments are so short, and they have to see so many kids,” she said. Volkmar noted that well-trained specialists are scarce, and that pediatricians need more education about autism.

“One of the things worth thinking about is taking a big step back and saying, ‘What can we do to enhance pediatricians’ awareness of this?’” he said. □

Cultural Transformation Needed to Solve Public Health Problem of Chronic Pain

Anita Slomski

YESTERDAY I WAS LUCKY; THE PAIN was kind and waited until after I got back home before showing its true colors . . . black and blue. No one sees the colors upon my skin. My pain is internal. It is physical. It is mental.”

This account, from a man describing the ravages of chronic pain on his life, was one of more than 2000 testimonies received by the Institute of Medicine’s (IOM) Committee on Advancing Pain Research, Care and Education from individuals with chronic pain and the clinicians attempting to treat them. The pleas of so many “lent a sense of urgency” to the committee’s call for a “cultural transformation” in how the nation understands and approaches pain management in its report issued in June.

VASTLY UNDERTREATED

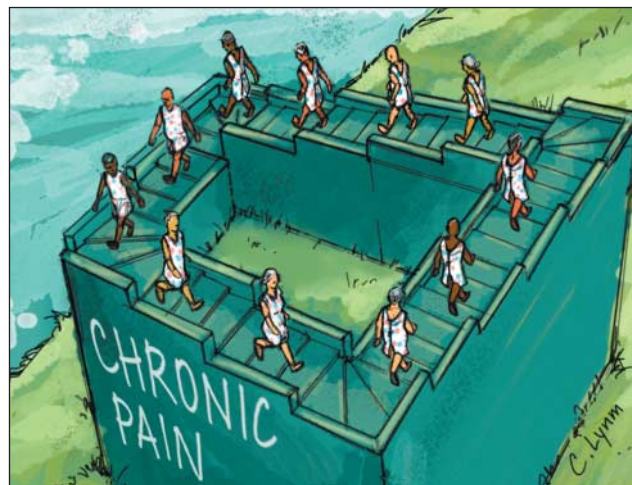
Each year, as many as 116 million adult Americans experiences chronic pain, creating an annual estimated toll that may be as high as \$635 billion or more from medical costs and lost wages and productivity, according to the IOM committee. But chronic pain is vastly undertreated. “It is a public health problem that

requires broad, integrated approaches across the public and private sectors,” said committee chair Phillip Pizzo, MD, dean and professor of pediatrics, microbiology, and immunology at Stanford University School of Medicine in Stanford, Calif.

“The nation needs to recognize that individuals suffering from pain should not be blamed or viewed as attention-seeking or imaging their pain,” he said. In some cases, explained Pizzo, chronic pain becomes a disease in itself, such as diabetic neuropathy, where changes in the periph-

eral and central nervous system perpetuate the experience of pain even after the cause of the pain has been resolved.

The recognition that pain is a serious condition requiring direct treatment is not appreciated by many physicians, including oncologists and others who see patients in pain every day. But referring all patients in pain to pain specialists is no solution. “There are too few pain specialists to deal with the numbers of people in chronic pain,” said committee member Dennis Turk, PhD, professor of anesthesiology and



Chronic pain is vastly undertreated, leaving many patients in an endless quest for relief, according to a new report from the Institute of Medicine. The report urges enhanced continuing education and training to ensure that primary care physicians feel competent treating pain.