Primary Care Tool Predicts Adolescent Depression

BY KATE JOHNSON
Montreal Bureau

SAN ANTONIO — Primary care physicians may be able to quickly and accurately assess and stratify an adolescent's 1-year risk of developing new-onset major depression using a 20-item checklist, Dr. Benjamin W. Van Voorhees said at the annual meeting of the Society for Prevention Research.

The information could then help physicians guide patients and parents toward reducing the risk by using a variety of therapeutic interventions, including a Web-based approach that he has developed and is now testing, said Dr. Van Voorhees, a pediatrician and internist at the University of Chicago.

"Primary care physicians use a brief list of questions to stratify a person's 10-year risk of cardiovascular disease and to guide their interventions, so we wanted to make this depression risk model just as easy to use in the primary care setting," he said in an interview.

The model, which has a sensitivity of 74% and a specificity of 87%, includes the adolescent's quality of life, mood, social connectedness, and other factors.

Primary care providers now have no alternative to medications or psychotherapy referrals for patients with mild to moderate depression symptoms, he said. "We are trying to create an alternative—to reshape the current paradigm," Dr. Van Voorhees said.

He and his colleagues developed their depression risk prediction model using data from the National Longitudinal Study of Adolescent Health, which involved 6,504 adolescents in grades 7 through 12. Baseline data on the subjects, collected in 1995, included home, school, and parent surveys. Follow-up data were collected 1 year later on 4,791 subjects.

Using a subsample of 3,814 subjects, none of whom had major depression at baseline, Dr. Van Voorhees identified 15 independent variables that could be used to predict the patient's development of major depression in the coming year. The model, which has a sensitivity of 74% and a specificity of 87%, includes the adolescent's social connectedness, quality of life, mood, and other factors.

His research group plans to formally test the prediction model in a prospective study of youth at risk for developing major depression.

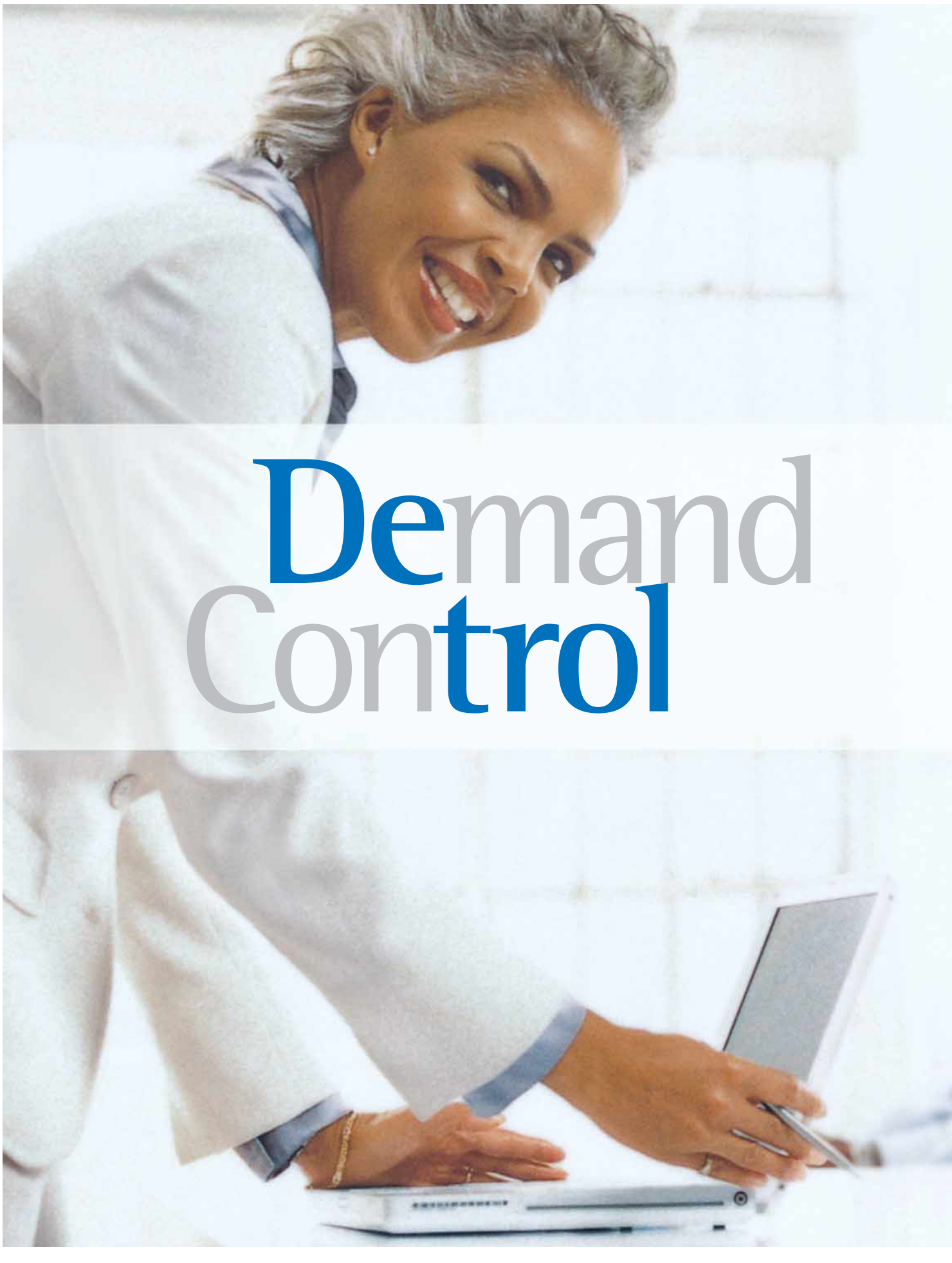
In a separate analysis of the same subset, Dr. Van Voorhees also identified factors that appeared to protect against the development of depression. For example, on a personal level, an adolescent's self-rated health, adequate sleep, and self-efficacy seemed protective. On a family and community level, participation, attachment, and competence seemed protective. "My idea is that if we have a good risk prediction model, we can basically calculate an adolescent's risk at a well-child visit and then give that information to the child and parent," he said. "Then they can choose whether they want to be involved in a preventive intervention.

"We believe that such interventions could be done at low cost and, if designed well, could be efficacious and very acceptable to patients and physicians in community settings."

Patients identified as having moderate risk might consider improving the protective factors in their lives, although whether changes in these areas could actually reduce risk still needs to be explored in a randomized, controlled trial, he added.

For patients identified as having higher depression risk, he suggests a more structured intervention such as Project CATCH-IT, a combined primary care/Web-based intervention that he has developed. Designed for adolescents at moderate to high risk for depression, this program involves an initial "motivational interview" with a primary care physician aimed at helping the adolescent identify personal goals and understand how depression could jeopardize those goals.

During this session, the primary care physician also focuses on boosting the adolescent's motivation to change and increasing his or her interest in the Web-based intervention (a demonstration can be seen at www.animateband.com/siteX/Untitled-1.html). Adolescents can



then work their way through the online modules, which are based on cognitive-behavioral and interpersonal psychotherapy.

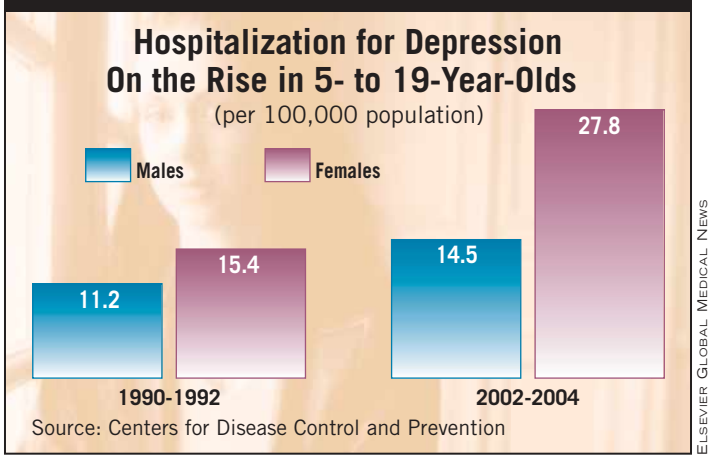
The intervention concludes with a follow-up visit with the primary care physician. If no benefit is observed at this stage, Dr. Van Voorhees recommends face-to-face sessions with a mental health professional.

In a pilot test of Project CATCH-IT, Dr. Van Voorhees' group observed benefits among 14 late adolescents who were at high risk for depression (Can. Child Adolesc. Psychiatry Rev. 2005;14:40-3). "Completers experienced favorable changes in known risk factors with effect sizes similar to those of other preventive interventions for depression," they wrote. However, with no control group in the study, "we cannot know to what degree these changes would have occurred without an intervention," they added.

The aim of depression risk prediction and early intervention is to prevent the development of more serious mental illness, but Dr. Van Voorhees cautions about the potential adverse effects of this approach. "When you are dealing with young people who may be vulnerable and somewhat pessimistic, telling them that they are at risk for depression may make them feel stigmatized," he said. "So the way we approach this is to talk in terms of resiliency.

"We tell them they have high, medium, or low resiliency. High resiliency would mean almost no risk of depression, whereas low would mean they need to take care of themselves." ■

DATA WATCH



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