The eyes have it

When you’re seeing a child for a well visit, can they see you?

Add amblyopia and strabismus to the long list of diseases and conditions found in children that could be caught during a standard pediatric well visit. These ocular problems, if left untreated, could turn into legal blindness.

Amblyopia, or lazy eye, affects 3% to 5% of the US population. And strabismus—misaligned eyes—affect 5% as well. Treating these types of vision disorders costs the US $32 billion each year.

"In amblyopia, the eyes do not learn how to see," said Virginia ophthalmologist Denise Chamblee, MD. "The brain says, 'This eye sees well, this one does not: I'll ignore everything that comes from the other eye.'" And once the brain wires itself to not take input from an eye, it’s very hard to get it rewired.

Chamblee, vice president for programs with the Children's Eye Foundation (CEF), says that a comprehensive eye exam by an eye doctor isn’t needed. To diagnose these two conditions, a simple screening by a trained health care provider will do. The American Academy of Pediatrics and the American Academy of Pediatric Ophthalmology and Strabismus (which is connected to CEF) concur, recommending early screening too.

How early? The CEF’s See By Three campaign is trying to make it before age 5, and ideally (as the name infers) before age 3. But the trickier questions are who should be screening, and how? After all, only a fraction of all children see pediatricians for well visits. And a physician’s time during those visits, between immunizations and everything else, is already at a premium.

Testing the sight of the toddler set presents a natural problem: many can’t yet recognize the capital letters that make up standard eye charts. The See By Three program is using the four Lea Symbols: a circle, square, apple, and house. With fuzzy vision, the apple and circle look similar, as do the house and square. Clear vision makes the four shapes appear distinct.

The specifics of the program—how many minutes it will take, what charts will be used, what 800 numbers and Web sites will be given to screeners for assistance—are being field tested in two locations. Pediatricians in the Jacksonville, Fla. area, and statewide in West Virginia, are the initial trial subjects. CEF estimates that half of all the pediatricians in West Virginia—and most all of their staff—will be trained in the screening.

“From this program, we’ll learn what works and how we can improve...We’ll take the best model to other cities and states,” Chamblee said.

And pediatricians aren’t the only ones being asked to shoulder responsibility for looking into kids’ eyes. The See by Three program trains both physicians and nurses in the pediatrics office. Family physicians and school nurses are getting rounded up for the effort as well.

One in twenty children have amblyopia or strabismus. A moment of attention will catch it. Perhaps in the near future, a standard component of every well visit nationwide, between the weigh-in and the height measurement, will be a brief eye check.

Three goals of the See by Three Program

• Developing and distributing an informational program to educate health professionals, including pediatricians, family physicians, and school nurses about amblyopia and other ocular diseases.
• The design, implementation, and evaluation of a standard vision screening and treatment program that will be replicated nationwide in primary care physicians’ offices.
• An awareness campaign to explain amblyopia and stress the importance of vision screening in preschoolers.

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