Nurse Visitation Benefits New Mothers, Babies

The program has demonstrated the importance of using nurses instead of social workers.

BY CHRISTINE KILGORE
Contributing Writer

A program that sends nurses to visit economically disadvantaged, single mothers during pregnancy and for the child's first 2 years can have long-term benefits, recent data show.

The analysis, which was recently commissioned by the Washington state legislature, shows the largest cost savings of any home visit, child welfare, or early intervention program.

The home visitation program has been developed over 25 years and operates in 21 states and focuses on improving birth outcomes, parenting skills, and children's health and development. It also promotes economic self-sufficiency for families.

Each mother in the Nurse-Family Partnership develops a long-term relationship with one nurse who follows detailed guidelines and is trained in prenatal care and early child development.

The latest data, published in two articles in the journal Pediatrics, come from controlled, randomized trials that have been conducted in two settings: among low-income African American mothers in Memphis, and among an ethnically and racially diverse group of low-income women in Denver.

The women and children in Memphis were interviewed and evaluated 4 years after the program ended, near the child's sixth birthday. Those in Denver were evaluated 2 years after the program had ended.

"The effects of the program … increase the likelihood that nurse-visited children will adjust more effectively as they proceed through elementary school," reported David L. Olds, Ph.D., of the department of pediatrics at the University of Colorado Health Sciences Center in Denver, and his associates (Pediatrics 2004;114:1550-9).

Of the 743 women in Memphis who were randomized to the nurse home visitation program or one of three other intervention groups, those enrolled in the nurse visitation program had fewer subsequent pregnancies and births (1 vs. 1.3 births), and longer intervals between births of their first and second children (34 vs. 30 months).

They also had longer relationships with their partners, used welfare and food stamps for fewer months, and were more likely to enroll their children in some form of preschool or licensed day care.

The children of these nurse-visited women had higher scores on tests of intellectual functioning and receptive language, and fewer behavioral problems in the borderline or clinical range (2% vs. 5%, based on the Achenbach Child Behavior Checklist).

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Among children born to women with low psychological resources (limited intellectual functioning, mental health, and sense of control), those whose mothers met with the nurses had higher arithmetic achievement test scores and expressed less dysregulated aggression and incoherence when asked to respond to and finish story beginnings, the investigators said.

The program "is so effective [because] they've tested [and shown] the importance of using nurses instead of social workers," said Steve Aos, associate director of the Washington State Institute for Public Policy, a nonpartisan organization that produced the analysis that is now gaining focus in Washington state.

"And especially since the program has gone national, Dr. Olds makes sure the program is done by the book. …[He appears to have] hit on a better theoretical model for intervention. But he's also a stickler for training and quality control," Mr. Aos said.

Dr. Olds, who developed and has refined the program over the years, said he hopes to examine more the extent to which the program produces comparable effects across different populations.

Some effects—such as reductions in prenatal tobacco use and reductions in the rates and intervals of subsequent pregnancies—seem to be fairly consistent. Other effects vary among populations.

The Denver data are particularly complex because that study involves a more diverse group of women who were enrolled in various public and private care settings, he noted.

The first trial of the program, which began about 20 years ago, involved low-income white families in rural New York. Researchers showing less alcohol use and better behavior among teenage children of nurse-visited mothers has been published, and the families are still being followed, Dr. Olds noted.

The evaluation done by Mr. Aos' organization at the request of the Washington state legislature showed that the Nurse-Family Partnership costs about $9,000 per family and had a record net benefit of more than $17,000 per child, in terms of welfare, criminal justice system, medical, and other cost savings.

Most of the 160 Nurse-Family Partnership programs across the country are administered through county health programs.

In the long term, however, "things will have to change—there just aren't enough funding streams," said Matt Buhr-Vogel, manager of site development for the new Nurse-Family Partnership national office in Denver.

Hopefully, he said, the data suggesting improved school readiness will interest departments of education and other funders. ■

Primary Care Needs Changes in Training, Reimbursement

BY MARY ELLEN SCHNEIDER
Senior Writer

Leaders in medicine are trying to figure out how to make primary care attractive to students and residents once again.

"We've got to change the way students see primary care," said Michael Whitcomb, M.D., senior vice president of the division of medical education at the Association of American Medical Colleges.

Over the last few years, students have been choosing internal medicine subspecialties over primary care, causing groups like the AAMC, the American College of Physicians, and the American Academy of Family Medicine to reevaluate how to sell primary care to students.

Part of the problem is how students and residents are trained, said Holly Humphrey, M.D., dean for medical education at the University of Chicago. For example, students don't usually get a chance to see the multidisciplinary team approach that works best in primary care, Dr. Humphrey said.

Students training in the hospital see chronic disease management as "overwhelming" and don't see the infrastructure that could make it workable, she said.

But showing the proper management of chronic care patients could be a way to attract more medical students into primary care, said Dr. Whitcomb of the AAMC.

AAMC has formed a group to consider broad issues around improving chronic care, including how a change in emphasis could be one way to attract more students into primary care. This group started its work last fall and is expected to produce a proposal sometime this year, Dr. Whitcomb said.

Trainees and students often don't recognize the gratification of building relationships over many years, said Steven Weinberger, M.D., senior vice president for medical knowledge and education at the ACP.

Dr. Weinberger said he hopes that by redesigning student and resident training, medical school faculty can demonstrate to students that primary care offers the potential for long-lasting relationships with patients.

"We haven't been able to get residents to recognize that because they haven't been exposed to it," he said.

One way that the AAFP is looking to increase student interest is by providing students access to competent role models in family medicine. One of the academy's efforts in this area includes piloting an online mentoring system. The concept began in Ohio where the Ohio Academy of Family Physicians and students from Ohio State University in Columbus have been using the Internet to connect medical students with practicing physicians in the community.

This year, AAFP is testing out the concept of an online mentoring program through similar projects in three states, said Jay Fetter, AAFP's student interest manager.

These organizations are also working on revitalizing primary care at the practice level.

Repairing the payment system, reducing administrative hassles, articulating the value of internal medicine, and redesigning training to better meet the scope of practice, are all important steps, Dr. Weinberger said.

In fact, improving practice issues may be more important to attracting students than making educational changes, said Tod Ibrahim, executive vice president for the Alliance for Academic Internal Medicine.

"I think the generational issues are bigger than anyone realizes," Mr. Ibrahim said.

The federal government could help by offering economic incentives, such as repayment of medical school loans, said Richard Lang, M.D., chairman of the department of general internal medicine at the Cleveland Clinic. Everyone is medicine is working hard, he said, but the salaries for primary care are much lower than other areas of medicine.

Physicians need to be reimbursed for how they spend their time, including phone calls and e-mail consultations.

DR. SMITH

The key is to bring back job satisfaction for practicing primary care physicians, said Lawrence Smith, M.D., dean of medical education at the Mount Sinai School of Medicine, New York.

Dr. Smith predicts that electronic health records could make practice easier in the future. New practice models that revolve around a team of caregivers in a single office, could also help.

Physicians need to be reimbursed for how they spend their time, including phone calls and e-mail consultations with patients, he said.

If this problem isn't addressed, the United States could end up with a system without primary care physicians, Dr. Smith said. While that might be workable for smart, enfranchised patients, most others would be lost in the health care system without a primary care doctor to help them navigate it, he said. ■