

Home Visitation Program Benefits New Mothers

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*, are from controlled, randomized trials conducted in two settings: among low-income African American mothers in Memphis, and among an ethnically and racially diverse group of low-income Denver women.

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 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).

Among children born to women with low psychological resources (limited intellectual functioning, mental health, and

In managing insomnia

A good night's sleep...



AMBIEN treats all 3 symptoms of insomnia

Symptom	AMBIEN Benefit
Trouble falling asleep	Rapidly induces sleep vs placebo ¹
Trouble staying asleep	Reduces number of awakenings vs placebo ²
Waking too early	Increases total sleep time vs placebo ³

AMBIEN is indicated for the short-term treatment of insomnia. In elderly or debilitated patients, or patients with hepatic dysfunction, treatment should be initiated with a 5-mg dose and patients closely monitored. Due to its rapid onset of action, patients should take AMBIEN right before going to bed and when ready for sleep. Patients should not take AMBIEN unless they are prepared to get a full night's sleep (7 to 8 hours) to avoid residual effects. Until they know how it will affect their physical or mental performance upon awakening, patients should not drive or operate hazardous machinery after taking AMBIEN or any other sleep medication. During short-term treatment with AMBIEN, the most commonly observed adverse effects in controlled clinical trials were drowsiness (2%), dizziness (1%), and diarrhea (1%). Because individuals with a history of addiction or substance abuse are at increased risk of habituation and dependence, they should be under careful surveillance when receiving AMBIEN or any other hypnotic. AMBIEN is classified as a Schedule IV controlled substance. Sedative hypnotics have produced withdrawal signs and symptoms following abrupt discontinuation. Hypnotics should generally be limited to 7 to 10 days of use, and reevaluation of the patient is recommended if they are taken for more than 2 to 3 weeks. Prescriptions for AMBIEN should not exceed a 1-month supply.

©2005 Sanofi-Synthelabo Inc.

Fetal Origin Hypothesis Discounted

Impaired fetal growth does not raise cholesterol levels in adulthood appreciably, according to Rachel Huxley, D.Phil., of the University of Sydney, and her associates.

Proponents of the "fetal origins" hypothesis hold that fetal undernutrition is linked to higher risk of coronary heart disease and related conditions such as high blood pressure, impaired glucose tolerance, and high cholesterol. But it can be argued that there were many methodologic flaws in the collection and interpretation of data supporting this hypothesis. Dr. Huxley and her associates conducted a systematic review of 79 relevant studies involving a total of 74,122 subjects, including 25 studies involving more than 45,000 subjects that were never included in previous examinations of this issue.

They found that for every 1-kg decrease in birth weight, there is only a 2.0-mg/dL rise in cholesterol in later life, which they characterized as a weak link unlikely to affect public health. "Assuming that nutritional intervention in pregnancy could increase birth weight by as much as 100 g, this association would translate into only approximately 0.19 mg/dL lower total cholesterol level," which would reduce coronary disease risk by less than 0.025%. In contrast, dietary intervention in adulthood can reduce cholesterol level by 15 mg/dL, for a 15% lower CHD risk, they said (*JAMA* 2004;292:2755-64).

—Mary Ann Moon

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,” 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.

Women enrolled in the nurse home visitation program had fewer subsequent pregnancies or births and longer intervals between births.

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

The evaluation done by Mr. Aos’ orga-

nization 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 youth, 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. ■

...on course toward better days



- 2.5-hour half-life⁴
 - Long enough to provide restful nights
 - Short enough to provide refreshed awakenings
- Minimal drug effect on next-day functioning^{2*}
- Low abuse potential at recommended doses^{5,6}
- The #1 prescribed sleep agent in the US⁷



¹Zolpidem tartrate worldwide.

*Next-day residual effects were evaluated in 7 studies involving normal volunteers. In 3 studies in adults (including 1 study in a phase-advance model of transient insomnia) and 1 study in elderly subjects, a small but statistically significant decrease in performance was observed in the Digit Symbol Substitution Test (DSST) when compared with placebo. Studies in nonelderly patients with insomnia did not detect evidence of next-day residual effects using the DSST, the Multiple Sleep Latency Test (MSLT), and patient ratings of alertness.⁴

Please see brief summary of prescribing information on back.

sanofi aventis

Sanofi-Synthelabo Inc., a member of the sanofi-aventis Group
57-050004

Visit our Web site at www.ambien.com

AMBIEN[®]
(ZOLPIDEM TARTRATE)[®] **CV**
5-MG & 10-MG TABLETS

Restful nights, refreshed awakenings