

# **VOICES FROM THE FIELD -Prenatal and Postnatal Home Visiting**

### Karen Wade, Clinical Nurse Specialist, and Jan Fordham, Manager Planning and Policy - Healthy Families and Communities, Toronto Public Health

(Published online September 16, 2005)

#### Service perspective

Historically, the provision of home visits to families with young children has been a hallmark of public-health nursing practice designed to improve maternal and child health. During the last 20 years, there has been a proliferation of research on the effectiveness of home visiting programs provided by a variety of professionals, paraprofessionals and lay health advisors on a range of maternal and child health outcomes. More recently, researchers have synthesized the findings of this research in an effort to guide policy, practice and future research.

As each of the Centre of Excellence for Early Childhood Development (CEECD) papers on this topic<sup>1-4</sup> has noted, home visiting programs vary in terms of their primary goals, theoretical underpinnings, populations served, background, training and supervision of service-providers, and duration and intensity of interventions. Most home visiting programs attempt to improve children's health and developmental outcomes and/or reduce child abuse and neglect by altering maternal health-related behaviours and/or parent-child interaction. Some home visiting programs are universal; however, as noted by Kitzman,<sup>2</sup> most programs are directed towards families with children at risk for poor health and development outcomes.

The CEECD papers<sup>1-4</sup> state that the effects of home visiting programs on maternal and child-related outcomes have been mixed. However, there are a number of lessons to be learned from the extant research that can inform service-providers and policy-makers.

Home visiting programs that have the most benefits for children's health and development share a number of features. They are directed towards families and children at risk (i.e. adolescents, socially disadvantaged mothers with their first child, medically or developmentally at-risk children, families with characteristics that place them at risk for abuse and neglect). They are based on theories of development and behaviour change and they utilize a curriculum. Home visiting programs using highly trained intervenors have a greater impact on outcomes and there is some evidence to suggest that nurses are particularly effective in having a positive impact on maternal and child health outcomes, such as children's social and emotional development, maternal caregiving, child abuse

and neglect, timing of subsequent pregnancies, as well as future employment and welfare dependence.

The research also suggests that home visiting programs should be only one component of a coordinated service system for families with young children. For example, Zercher and Spiker<sup>3</sup> state that certain sub-populations of children, specifically those in the poorest families or those who are low birth weight premature infants, benefit from comprehensive early intervention programs that combine home visiting with centre-based or clinic-based interventions focused directly on the child. Such programs have produced short- and longer-term benefits such as improvements in parent-child interaction, cognitive and behavioural outcomes and high school completion, as well as reductions in juvenile arrests. Although not specifically identified in the CEECD papers,<sup>1-4</sup> home visiting services and comprehensive early intervention programs need to be embedded in healthy public policies that address the systemic causes of poverty and family disadvantage.

Children from birth to six years of age comprise 8.3% of Toronto's population (205,200 children).<sup>5</sup> One of the functions of the Planning and Policy section of Toronto Public Health is to contribute to evidence-based programming.

Public-health programming in Ontario is provincially mandated. Some public-health programs are 100% provincially funded, while others are cost-shared between the province and the municipality. The Healthy Babies, Healthy Children (HBHC) program is a 100% provincially mandated and funded prevention/early intervention initiative designed to help families promote healthy child development and help children achieve their full potential. The goal of the program is to promote optimal physical, cognitive, communicative and psychosocial development in children. Specific objectives focus on: enhancing parental support; promoting effective parent-child interactions; increasing parental confidence, knowledge and abilities; and improving child health and development.<sup>6</sup> The program does not specifically address longer-term outcomes related to maternal life course and child development, such as timing of subsequent pregnancies, future maternal employment, maternal welfare dependence, and adolescent criminal and antisocial behaviour. The Nurse-Family Partnership Program<sup>7,8</sup> has been shown to have a positive impact on these longer-term outcomes.

The HBHC program provides a blended model of home visiting services for high-risk families that includes visits from public-health nurses as well as supervised and trained peer or lay home visitors. The lay home visitor is the main contact with the family and the province has stipulated that the ratio of lay visits to professional visits should range between 3:1 to 6:1, with a minimum ratio of 3:1 lay visits to professional visits.<sup>9</sup> The program does not employ a standardized curriculum or identify specific interventions. The frequency and duration of visits are based on the family's needs. Funding constraints preclude the intensity and duration of intervention employed in some of the home visiting programs highlighted in the CEECD papers.<sup>1-4</sup>

A provincially-funded evaluation of the HBHC program during the first two years of implementation found that children in high-risk situations who received HBHC home visiting services scored higher on most infant development measures, such as self-help,

gross-motor skills, fine-motor skills and language development, than children in "highrisk" situations who did not receive these services.<sup>9</sup> However, the long-term impact and cost-effectiveness of the program is yet to be determined.

Implementation of the HBHC program has identified a number of issues that need to be addressed through primary research. These issues, many of which have also been identified in the literature, include:

- Which type of intervenor is most appropriate for different client situations/needs?
- What is the optimal duration and intensity of intervention required to achieve the intended program outcomes?
- Which families have the potential to benefit the most from the program?
- How can clients most at risk be effectively engaged and retained in the program?
- What is the impact of the quality of the relationship between the intervenor and the family on retention in the program and client outcomes?
- Do interventions need to be tailored when provided to culturally diverse populations?

As previously noted, the research also suggests that home visiting programs are only one component of a coordinated service system for families with young children. The HBHC program acts as a catalyst for a coordinated, effective, integrated system of services and supports for healthy child development and family well-being.<sup>9</sup> The Mayor's Roundtable on Children, Youth, and Education is currently developing a framework for integrated service planning and delivery in Toronto. Toronto Public Health continues to work with other stakeholders, through a number of community networks and coalitions, to enhance the service system as well as improve service coordinate services for vulnerable homeless or under-housed young pregnant women. Another initiative has been the development of a Service Coordination Model for Families and the provision of training regarding the model to public-health nurses and staff in community agencies.

Zercher and Spiker<sup>3</sup> note that some children, specifically those in economically disadvantaged families or those who are low birth weight premature infants, benefit from comprehensive early intervention programs that combine home visiting with centre-based or clinic-based interventions focused directly on the child. The federal government's commitment to investing \$700 million in the coming fiscal year with a commitment of up to \$5 billion over five years to universal early learning and child-care programs, distributed in Ontario as part of the province's Best Start strategy, is encouraging. However, the research suggests that the envisioned programs may not be sufficient to promote the optimal development of children who are most at risk. Canadian research needs to be undertaken in large urban environments such as Toronto to evaluate the effectiveness of comprehensive early intervention programs such as those described by Zercher and Spiker.<sup>3</sup> Such early intervention programs are multifaceted and often include parent training, home visiting, counselling, health and nutritional services and referral to community and social service agencies in addition to centre-based early learning and care. As well as directly focusing on the child, the programs focus on the child's parents and/or primary caregivers and the family as a unit, promoting income adequacy, adult education, job training, safe housing, family management skills and healthy lifestyles.

There is evidence to suggest that Canadian children living in low-income families and/or those living in low-income neighbourhoods are more likely to: be born at low birth weight, experience chronic illness, have difficulties with vision, hearing, speech, mobility, dexterity, cognition, emotion, pain and discomfort, experience higher rates of injury and/or have higher mortality rates.<sup>10,11,12,13</sup> In the year 2000, nearly three in 10 (29%) of Toronto children from birth to age five (51,000 children) were living in low-income households (i.e. those whose annual household income fell below Statistics Canada's pre-tax Low Income Cut Offs).<sup>5</sup> The City of Toronto recognizes that poverty is a key determinant of children's health; a cross-departmental committee, including representation from public health, has been established to improve the well-being of children living in poverty. Toronto Public Health is developing a position paper on child poverty that will document the impact of poverty and associated disadvantages on children's health, as well as the impact on their future health as adults. This position paper will be used to inform an action plan related to child poverty.

Research has identified a number of characteristics of effective home visiting programs. However, current policy directions pose challenges to integrating these findings into service delivery. There needs to be continued dialogue among researchers, policy-makers and administrators in order to ensure that best practices are incorporated into home visiting and other early intervention programs. Funding is required so that exemplary programs, which have demonstrated their effectiveness in the United States, can be researched in the Canadian context. Finally, it is critical to continue to advocate for healthy public policies to support families with young children. Without such policies, not all Canadian children will have the opportunity to achieve optimal health and developmental outcomes.

## REFERENCES

- 1. Olds D. Prenatal/postnatal home visiting programs and their impact on the social and emotional development of young children (0-5). In: Tremblay RE, Barr RG, Peters RDeV, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development; 2004:1-7. Available at: <u>http://www.child-encyclopedia.com/documents/OldsANGxp.pdf</u>. Accessed March 31, 2005.
- Kitzman HJ. Effective early childhood development programs for low-income families: Home visiting interventions during pregnancy and early childhood. In: Tremblay RE, Barr RG, Peters RDeV, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development; 2004:1-7. Available at: <u>http://www.childencyclopedia.com/documents/KitzmanANGxp-Home.pdf</u>. Accessed March 31, 2005.
- 3. Zercher C, Spiker D. Home visiting programs and their impact on young children. In: Tremblay RE, Barr RG, Peters RDeV, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development; 2004:1-8. Available at: <u>http://www.child-encyclopedia.com/documents/Zercher-SpikerANGxp.pdf</u>. Accessed March 31, 2005.
- 4. Daro D. Prenatal/postnatal home visiting programs and their impact on young children's psychosocial development (0-5): Commentary on Olds, Kitzman, Zercher and Spiker. Rev. ed. In: Tremblay RE, Barr RG, Peters RDeV, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development; 2006:1-6. Available at: <u>http://www.child-encyclopedia.com/documents/DaroANGxp\_rev.pdf</u>. Accessed October 31, 2007.
- 5. Statistics Canada. *Census 2001*. Ottawa, Ontario: Statistics Canada; 2002. [Custom tabulations].
- 6. Applied Research Consultants. *Project report. Evaluation of the Healthy Babies, Healthy Children Program. The Healthy Babies, Healthy Children Program in the Toronto Public Health Department.* Toronto, Ontario: Integrated Services for Children Division, Ontario Ministry of Community and Social Services, Ontario Ministry of Health and Long Term Care; 2001.
- Olds DL, Eckenrode J, Henderson CR, Kitzman H, Powers J, Cole R, Sidora K, Morris P, Pettitt LM, Luckey D. Long-term effects of home visitation on maternal life course and child abuse and neglect: 15-year follow-up of a randomized trial. *JAMA - Journal of the American Medical Association* 1997;278(8):637-643.
- 8. Olds DL, Henderson CR, Cole R, Eckenrode J, Kitzman H, Luckey DH, Pettitt LM, Sidora K, Morris P, Powers J. Long-term effects of nurse home visitation on children's criminal and antisocial behavior: 15-year follow-up of a randomized controlled trial. *JAMA Journal of the American Medical Association* 1998;280(14):1238-1244.

- 9. Early Years and Healthy Child Development Branch. *Healthy babies, healthy children: consolidated guidelines*. Toronto, Ontario: Early Years and Healthy Child Development Branch, Integrated Services for Children Division, Ministry of Health and Long-Term Care, Ministry of Community, Family and Children's Services; 2003. Available at: <a href="http://chd.region.waterloo.on.ca/web/health.nsf/0/5476CB1C34C3E93B85256B1">http://chd.region.waterloo.on.ca/web/health.nsf/0/5476CB1C34C3E93B85256B1</a> 9004E01AA/\$file/HBHC%20CG%20final%20eng.pdf?openelement. Accessed April 1, 2005.
- 10. Brownell M. Health status: injuries. In: Brownell M, Martens P, Kozyrskyj A, Fergusson P, Lerfald J, Mayer T, Derksen S, Friesen D. *Assessing the health of children in Manitoba: A population-based study*. Winnipeg, Manitoba: Manitoba Centre for Health Policy and Evaluation, University of Manitoba; 2001:101-119.
- 11. Ross DP, Roberts P. *Income and child well-being: A new perspective on the poverty debate.* Ottawa, Ontario: Canadian Council on Social Development; 1999.
- 12. Wilkins R, Houle C, Berthelot J-M, Ross N. The changing health status of Canada's children. *ISUMA* 2000;1(2):57-63. Available at: http://www.isuma.net/v01n02/wilkins/wilkins\_e.pdf. Accessed April 1, 2005.
- 13. Willms JD. Socioeconomic gradients for childhood vulnerability. In: Willms JD, eds. *Vulnerable children: Findings from Canada's National Longitudinal Survey of Children and Youth*. Edmonton, Alberta: University of Alberta Press; 2002:71-102.

#### To cite this document:

Wade K, Fordham J. Voices from the field – Prenatal and postnatal home visiting. In: Tremblay RE, Barr RG, Peters RDeV, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development; 2005:1-6. Available at: <u>http://www.child-encyclopedia.com/documents/Wade-FordhamANGps.pdf</u>. Accessed [insert date].

Copyright © 2005