

HOME VISITING

Prenatal/Postnatal Home Visiting Programs and Their Impact on the Social and Emotional Development of Young Children (0–5)

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Introduction

Social and emotional problems in young children can be traced to mothers' prenatal health,^{1,2} parents' caregiving^{3,4} and their life-course (such as the timing of subsequent pregnancies, employment, welfare dependence).^{5,6}

Home visiting programs that address these antecedent risks and protective factors may reduce social and emotional problems in children.

Subject

Home visiting has a long history in Western societies of being used to deliver services to vulnerable populations. In many European countries, home visiting is a routine part of maternal and child health care, although the practice is less established in Canada and the United States.⁷ Over the past 30 years, one of the most promising prevention strategies targeted at decreasing rates of child maltreatment has been to provide health services, parenting education, and social support to pregnant women and families with young children in their own homes. However, reviews of the literature on home visiting programs have been quite mixed.^{8,9}

Home visiting programs vary in their targeted populations, program models, and those who deliver the services. Most operate on the assumption, however, that parents' prenatal health behaviours, care of their children, and life-course affect their children's social and emotional development.¹⁰

Problems

Prenatal tobacco exposure and obstetrical complications have both been implicated in the development of externalizing behaviour problems in children;^{1,2} there is now evidence that the impact of prenatal tobacco exposure is greatest in the presence of a specific genetic vulnerability.¹¹

Child abuse, neglect, and excessively harsh treatment of children are associated with both internalizing and externalizing behaviour problems and later violent behaviour,^{3,4,12} but again, the impact of child maltreatment on severe antisocial behaviour appears to be greatest in the presence of genetic vulnerability.¹³ Family dependence on welfare, large families with closely spaced births, and single parenthood are all associated with compromised social and emotional development in children.^{5,6}

Research Context

While some meta-analyses of home visiting programs suggest that many types of home visiting programs can make a difference in reducing adverse outcomes such as child maltreatment and childhood injuries,^{14,15} meta-analyses can produce misleading results if there are insufficient numbers of trials of programs represented in the cross-classification of home visiting target populations, program models, and visitors' backgrounds. For example, a review on prevention of maltreatment and associated impairment concluded that programs delivered by paraprofessional home visitors were not effective in reducing child protection reports or associated impairments whereas those delivered by nurses evidenced reductions in child maltreatment.⁸

Key Research Questions

Understanding the impacts home visiting programs have had on children's social and emotional development begins with identifying those programs that have affected antecedent risk and protective factors associated with child and emotional development in addition to specific social and emotional outcomes. Specifically, what home visiting program models show the greatest promise for improving pregnancy outcomes, reducing child abuse and neglect, and improving parents' life-course and children's social and emotional development?

Recent Research Results

Improvement of pregnancy outcomes.

Most trials of prenatal home visiting have produced disappointing effects on pregnancy outcomes such as birth weight and gestational age,^{9,16,17} although one program of prenatal and infancy home visiting by nurses has reduced prenatal tobacco use in two trials^{18,19} and has reduced pregnancy-induced hypertension in a large sample of African-Americans.²⁰

Reducing child abuse and neglect and injuries to children.

The program of prenatal and infancy home visiting by nurses, tested with a primarily white sample, produced a 48 percent treatment-control difference in the overall rates of substantiated rates of child abuse and neglect (irrespective of risk) and an 80 percent difference for families in which the mothers were low-income and unmarried at registration.²¹ Corresponding rates of child maltreatment were too low to serve as a viable outcome

in a subsequent trial of the program in a large sample of urban African-Americans,²⁰ but program effects on children's health-care encounters for serious injuries and ingestions at child age 2 and reductions in childhood mortality from preventable causes at child age 9 were consistent with the prevention of abuse and neglect.^{20,22}

Maternal life-course.

The effect of home visiting programs on mothers' life-course (subsequent pregnancies, education, employment, and use of welfare) is disappointing overall.¹⁰ In the trial of the nurse home visitor program described above, there were enduring effects of the program 15 years after birth of the first child on maternal life-course outcomes (e.g., interpregnancy intervals, use of welfare, behavioural problems due to women's use of drugs and alcohol, and arrests among women who were low-income and unmarried at registration).²¹ The effects of this program on maternal life-course have been replicated in separate trials with urban African-Americans^{20,23,24} and with Hispanics.¹⁸

Children's social and emotional problems.

An increasing number of home visiting programs have found beneficial program effects on infants' attachment behaviours and classifications of attachment security.²⁵⁻³⁰ Attachment security is considered a reflection of the quality of parental caregiving and is associated with subsequent behavioural adaptation with peers.³¹

The program of prenatal and infancy home visiting by nurses described above produced treatment-control differences in 15-year-olds' arrests and reductions in arrests and convictions among 19-year-old females.^{32,33} In a subsequent trial with a large sample of urban African-Americans the program produced treatment impacts on 12-year-olds' use of substances and internalizing disorders.³⁴

In the third trial of the nurse home visitor program, nurse-visited, 6-month-old infants born to mothers with low psychological resources (i.e., maternal IQ, mental health, and sense of efficacy) displayed fewer aberrant emotional expressions (e.g., low levels of affect and lack of social referencing of mother) associated with child maltreatment.¹⁸

Finally, a Finnish trial of universal home visiting by nurses³⁵ and two U.S. programs implemented by master's degree-level mental health or developmental clinicians have found significant effects on a number of important child behavioural problems.^{36,37} Additionally, a paraprofessional home visitation program found effects on externalizing and internalizing behaviours at child age 2; however due to the large number of effects measured in this study, replication of the findings is warranted.³⁸

Conclusions

Few home visiting programs have improved pregnancy outcomes, parental life-course, child abuse and neglect rates, compromised caregiving, and children's social and emotional problems. The programs with the greatest promise in affecting these outcomes have employed professional home visitors, with the strongest evidence coming from trials of programs using nurses. In a trial that included separate treatment groups of nurse and paraprofessional home visitors, the nurses produced effects that were twice as large as those of the paraprofessionals.¹⁸

The program of prenatal and infancy home visiting by nurses has produced consistent effects on clinically significant outcomes in three separate trials with different populations living in different contexts and at different points in U.S. social and economic history. These results increase the likelihood that these findings will have applicability to a wide range of different populations within the U.S. today.

Implications

In spring 2010, the Health Resources and Services Administration and the Administration for Children announced the availability of funds for the Affordable Care Act Maternal, Infant, and Early Childhood Home Visiting Program.³⁹ The program emphasizes and supports successful implementation of high-quality home visiting programs that have demonstrated evidence of effectiveness as defined in the legislation. Eight existing home visiting programs met the minimal legislative threshold for federal funding: Early Head Start, the Early Intervention Program, Family Check-up, Healthy Families America, Healthy Steps, Home Instruction Program for Preschool Youngsters, Nurse-Family Partnership, and Parents as Teachers.⁴⁰ In August 2011, the Coalition for Evidence-Based Policy built upon the government's review by evaluating the extent to which programs implemented with fidelity would produce important improvements in the lives of at-risk children and parents.⁴¹ Through this review, one program was given a strong rating (the Nurse-Family Partnership), two were given medium ratings (Early Intervention Program and Family Check-up), and all other programs were given a low rating.

Effective programs, those with strong evidentiary standards and effective community replication, can reduce risks and adverse outcomes for fetal, infant, and child health and development. As policymakers and practitioners decide to invest in home visiting services during pregnancy and the early years of the child's life, they should examine carefully the evidentiary foundations of the program in which they invest. Programs vary considerably in their underlying theoretical and empirical foundations, the quality of the program guidelines, and their likelihood of success.

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