

HOME VISITING

Home Visiting Programs and Their Impact on Young Children's School Readiness

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Introduction

Home visiting programs are designed and implemented to support families in providing an environment that promotes the healthy growth and development of their children. Programs may target their services to families and caregivers who are at a particular disadvantage when it comes to establishing and maintaining such an environment. They may also focus on families in which the child is more vulnerable than the typical child because of health or developmental concerns.

Subject

Home visitation is a type of service-delivery model that can be used to provide many different kinds of interventions to target participants.¹ Home visiting programs can vary widely in their goals, clients, providers, activities, schedules and administrative structure. They share some common elements, however. Home visiting programs provide structured services:

1. in a home setting;
2. from a trained service provider;
3. in order to alter the knowledge, beliefs and/or behaviour of children, caregivers or others in the caregiving environment and to provide parenting support.²

Home visits are structured in some way to provide consistency across participants, providers, and visits and to link program practices with intended outcomes. A visit protocol, a formal curriculum, an individualized service plan, and/or a specific theoretical framework can be the basis for activities that take place during home visits. Services are delivered in the living space of the participating family and within their ongoing daily routines and activities. The providers may be credentialed or certified professionals, paraprofessionals, or volunteers, but

typically they have received some form of training in the methods and topical content of the program so that they are able to act as a source of expertise for caregivers.³ Finally, home visiting programs are attempting to achieve some change on the part of participating families—in their understanding (beliefs about child-rearing, knowledge of child development), and/or actions (their manner of interacting with their child or structuring the environment)—or on the part of the child (change in rate of development, health status, etc.). Home visiting also may be used as a way to provide case management, make referrals to existing community services, or bring information to parents or caregivers to support their ability to provide a positive home environment for their children.⁴

Problems

Data about the efficacy of home visiting programs have been accumulating over the past three decades. Recent projects have used randomized designs, with multiple data sources and outcome measures, and longitudinal follow-up. These studies have generally found that home visiting programs produce a limited range of significant effects and that the effects produced are often small.^{5,6} Detailed analyses, however, sometimes reveal important program effects.⁷ For example, certain subsets of participants may experience long-term positive outcomes on specific variables.^{8,9} These results and others suggest that in assessing the efficacy of home visiting programs, it is important to include measures of multiple child and family outcomes at various points in time and to collect enough information about participants to allow for an analysis of the program effects on various types of subgroups.

Other difficulties when conducting or evaluating research in this area include ensuring the equivalency of the control and experimental groups in randomized controlled trials (RCTs),¹⁰ controlling for participant attrition (which may affect the validity of findings by reducing group equivalence) and missed visits (which may affect validity by reducing program intensity),¹¹ documenting that the program was fully and accurately implemented, and determining whether the program's theory of change logically connects program activities with intended outcomes.

Research Context

Because home visiting programs differ in their goals and content, research into their efficacy must be tailored to program-specific goals, practices, and participants. In general, home visiting programs can be grouped into those seeking medical/physical health outcomes and those seeking parent-child interaction and child development outcomes. The target population may be identified at the level of the caregiver (e.g., teen mothers, low-income families) or the child (e.g., children with disabilities). Some programs may have broad and varied goals, such as improving prenatal and perinatal health, nutrition, safety, and parenting. Other programs may have narrower goals, such as reducing the incidence of child abuse and neglect. Program outcomes may focus on adults or on children; providers frequently cite multiple goals (e.g., improved child development, parent social-emotional support, parent education).¹²

In this chapter, we focus on the effectiveness of home visiting programs in promoting developmental, cognitive, and school readiness outcomes in children. The majority of home visiting services and research have focused on the period prenatally through 2 to 3 years and thus have not measured long-term impacts on school readiness and school achievement. However, more recent studies have examined the impact on these

outcomes indirectly through changes in parenting practices and precursors to successful school success (i.e., positive behaviour outcomes including self-regulation and attention).

Key Research Questions

Key research questions include the following:

1. What are the short-term and long-term benefits experienced by participating families and their children relative to nonparticipating families, particularly for children's school readiness skills and parenting to support child development?
2. What factors influence participation and nonparticipation in the program?
3. Do outcomes differ for different subgroups?

Research Results

A recent review of seven home visiting program models across 16 studies that included rigorous evaluation components and measured child development and school readiness outcomes concluded positive impacts on young children's development and behaviour. Six models showed favourable effects on primary outcome measures (e.g., standardized measures of child development outcomes and reduction in behaviour problems).¹³ Only studies with outcomes using direct observation, direct assessment, or administrative records were included. Problems identified in a review over a decade ago still plague this field, however.

In most of the studies described, programs struggled to enroll, engage, and retain families. When program benefits are demonstrated, they usually accrued only to a subset of families originally enrolled in the programs, they rarely occurred for all of a program's goals, and the benefits were often quite modest in magnitude.⁵

Research into the implementation of home visiting programs has documented a common set of difficulties across programs in delivering services as intended. First, target families may not accept initial enrollment into the program. Two studies that collected data on this aspect of implementation found that one-tenth to one-quarter of families declined invitations to participate in the home visiting program.^{14,15} In another study, 20 percent of families that agreed to participate did not begin the program by receiving an initial visit.¹¹ Second, families may not receive the full number of planned visits. Evaluation of the Nurse Family Partnership model found that families received only half of the scheduled number of visits.¹⁶ Evaluations of the Hawaii Healthy Start and the Parents as Teachers programs found that 42 percent and 38 percent to 56 percent of scheduled visits respectively were actually conducted.^{14,17} Even when visits are conducted, the planned curriculum and visit activities may not be presented according to the program model, and families may not follow through with the activities outside of the home visit.^{18,19} Finally, in a review of major home visitation research, Gomby, Culross, and Berman⁵ found that between 20 percent and 67 percent of enrolled families left home visitation programs before the scheduled termination date. Recent studies of Early Head Start also show that families with the greatest number of risk factors are the most likely to drop out.²⁰

Most notable, perhaps, is that the assumed link between parent behaviour change and improved outcomes for children has not received general support in research conducted to date. In other words, even when home visitation programs succeed in their goal of changing parent behaviour, these changes do not appear to

produce significantly better child outcomes.^{21,22} One recent exception, however, was a study of the Home Instruction Program for Preschool Youngsters (HIPPY) model with low-income Latino families showing changes in home parenting and better third-grade math achievement.²³ Earlier evaluations of HIPPY found mixed results regarding program effectiveness. In some cohorts, program participants outperformed nonparticipants on measures of school adaptation and achievement through second grade, but these results were not replicated with other cohorts at other sites.

The review of home visiting programs described above included only studies using rigorous designs and measurement. However, a number of models did show significant impacts on child development and school readiness outcomes. The Early Head Start model used a randomized controlled trial design to study the impact of a mixed-model service delivery (i.e., center-based and home-visiting) on developmental outcomes at 2- and 3-year follow-up. Overall, there were small, but significant gains on cognitive development at 3 years, but not 2 years. Studies of the Nurse Family Partnership model followed children to 6 years and found significant program effects on language and cognitive functioning as well as fewer behaviour problems in a randomized controlled trial study.²⁴ In addition, more recent evaluations of Healthy Families America have shown small, but favourable effects on young children's development.^{25,26}

Mixed findings have been found on the effectiveness of home visiting programs to increase early identification of language delays. The Nurse Family Partnership model showed a significantly better detection rate of language delays,¹⁰ while one study of the Hawaii Healthy Start Program did not show evidence of preventing language delays or improving early identification.²⁷

A number of model programs were unable to document program impacts on parenting and home environment factors that are predictive of children's early learning and development through control group designs. An evaluation of Hawaii's Healthy Start program found no differences between experimental and control groups in maternal life course (attainment of educational and life goals), substance abuse, partner violence, depressive symptoms, the home as a learning environment, parent-child interaction, parental stress, and child developmental and health measures.²⁵ However, program participation was associated with a reduction in the number of child abuse cases.

A 1990's evaluation of the Parents as Teachers (PAT) program also failed to find differences between groups on measures of parenting knowledge and behaviour or child health and development.¹⁷ Small positive differences were found for teen mothers and Latina mothers on some of these measures. More recent randomized controlled trial studies with the Parents as Teachers Born to Learn curriculum do find significant effects on cognitive development and mastery motivation at age 2 for the low socioeconomic families only.²⁸ A randomized controlled trial of Family Check-Up demonstrated favourable impacts on at risk toddlers' behaviour and positive parenting practices.²⁹

Randomized controlled trials have also shown that programs are more likely to have positive effects when targeted to the neediest subgroups in a population. For example, in the Nurse Family Partnership model children born to mothers with low psychological resources had better academic achievement in math and reading in first through sixth grade compared to their control peers (i.e., mothers without the intervention with similar characteristics).^{30,31}

The largest randomized trial of a comprehensive early intervention program for low-birth-weight, premature infants (birth to age three), the Infant Health and Development Program, included a home visiting component along with an educational centre-based program.⁷ At age three, intervention group children had significantly better cognitive and behavioural outcomes and improved parent-child interactions. The positive outcomes were most pronounced in the poorest socioeconomic group of children and families and in those who participated in the intervention most fully. The Chicago Parent-Child Center Program also combined a structured preschool program with a home visitation component. This program found long-term differences between program participants and matched controls. Participating children had higher rates of high-school completion, lower rates of grade retention and special education placement, and a lower rate of juvenile arrests.³² Another example showing more intensive programming has larger impacts is the Healthy Steps evaluation showing significantly better child language outcomes when the program was initiated prenatally through 24 months.³³ These studies suggest that a more intensive intervention involving the child directly may be required for larger effects to be seen.

Conclusions

Research on home visitation programs has not been able to show that these programs have a strong and consistent effect on participating children and families, but modest effects have been repeatedly reported for children's early development and behaviour and parenting behaviours and discipline practices. Programs that are designed and implemented with greater rigour seem to provide better results. Home visitation programs also appear to offer greater benefits to certain subgroups of families, such as low-income, single, teen mothers.

Implications

Programs that are successful with families at increased risk for poor child development outcomes tend to be programs that offer a comprehensive focus—targeting families' multiple needs—and therefore may be more expensive to develop, implement, and maintain. In their current state of development, home visitation programs do not appear to represent the low-cost solution to child health and developmental problems that policymakers and the public have hoped for.⁵ However, information that is accumulating about long-term outcomes and effective practices may lead to the development of replicable programs that are capable of producing modest but consistent and positive results for participating target families.

Regarding child development and school readiness outcomes, more recent studies show promise in impacting these outcomes indirectly through promoting positive parenting practices and home supports for early learning. As we learn more about the mechanisms for these impacts, both direct and indirect, research will demonstrate the most effective approach to link home visiting services and early childhood education and child care programs to more fully realize positive outcomes. For example, one possible reason the Nurse Family Partnership model produces such strong effects on child academic achievement relative to other program models is that children whose parents participated in the program were more likely to be enrolled in formal early childhood education programs between 2 and 5 years of age.²⁴ For high risk families, home visiting programs can serve to encourage families to take advantage of preschool programs available to them and their children to further support school readiness outcomes.

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