ENCYCLOPEDIA
on Early Childhood
Development

Effective Early Childhood Development Programs for Low-Income Families: Home Visiting Interventions During Pregnancy and Early Childhood

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August 2007, 2e éd.

Introduction

Concern for the health and well-being of young children, particularly children from low-income, socially disadvantaged families, has resulted in the exploration of alternative approaches to delivering services to young families. Home visiting is one venue through which a variety of services can be provided. In this paper, we focus on the impact of services provided in home visiting programs to low-income families with children under 5 years of age.

Subject

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Despite the emphasis on prevention in traditional primary health care and family services, individual office/center-based care requires clients to take initiative to seek out services on their own. Generally, the services provided are limited to health guidance and the treatment of health and illness problems related to the conditions and concerns disclosed (one way or another) by the client to the provider. It has been proposed that home visiting can

a. reach out to those who do not seek services
b. enhance clients' comfort and ability to reveal their conditions,
c. provide opportunities for providers to tailor their support and guidance to clients' real-life situations
d. result in satisfying provider–client relationships.

Despite a broad range of services, home visiting services are expected to augment, rather than replace, center-based health and human services. Visits to families begin during pregnancy or from the time of birth and last until children are between 2 and 5 years of age. Home visiting programs vary dramatically. Differences exist in their underlying theoretical models, characteristics of target families, number and intensity of visits, duration, curriculum, approaches to services, degree of manualization, fidelity of implementation, and background, and training of the visitors.

Problems

Although the history of home visiting spans more than a century, it emerged with renewed force in the 1970s as a promising strategy to promote child health and development, and reduce abuse and neglect in vulnerable, at-risk families. Some of the recently developed home visiting programs have proliferated, encouraged by federal, state/provincial, local, and private support. Despite this encouragement, typically funding for programs has been commonly sought from budgets where funds have not previously been allocated. As a result, policy makers have turned to researchers for answers to questions regarding the relative merits of home visiting programs, and their impact on outcomes. Particular attention has been paid to the outcomes of programs that target families at risk because of low income levels and other adverse social circumstances.

Research Context

Most of the research to date has been designed to determine whether the health and development of children and their families are better as a result of home visit services. Research reports have provided limited information about the programs and their implementation. But apart from some exceptions,[1] investigators have generally not attempted to vary program features and systematically study them.

Key Research Questions

This review is designed to respond to two key questions:

1. What are the outcomes of home visiting programs for low-income families?
2. Do program outcomes differ based on program characteristics?

Recent Research Results

1. What are the effects of home visiting programs?

Several reviews have concluded that home visiting can be an effective strategy to improve the health and developmental outcomes of children from socially disadvantaged families.[2-4] However, effects have not been found consistently and some studies have reported no impact. When effects have been found, they are generally not as large as originally predicted. In addition, effects have not been consistently identified in the same outcome areas. As might be expected, different programs and different levels of program implementation have resulted in different outcomes. Some programs achieve effects while the program is in operation but the effects dissipate after the program ends, while others have reported delayed effects, year(s) after the program ends. In some instances, effects are apparent early on and are sustained for many years after the program ends.[5]

Maternal Outcomes

Some programs that have included mother and family development strategies have demonstrated reductions in closely spaced pregnancies and reductions in total number of pregnancies. Prenatal health behaviours, including reductions in tobacco and other substance abuse, have been reported but have not been consistently associated with improved pregnancy outcomes. More positive parenting attitudes and mother–child interactions have been found. Mothers who were home visited have reported less impairment from substances than those not

visited. One long-term follow-up study demonstrated fewer arrests and convictions in the home-visited group 15 years after the birth of a child.[6] Home visited mothers also have been found more likely to be involved in stable relationships.

Child Health and Development

Although some studies have demonstrated improvement in immunization rates, others have found no improvement in rates of immunization or other preventive services. Of the two major studies reporting a reduction of abuse and neglect as a major outcome, reductions were found in one but not in the other. Although not consistent, some studies have demonstrated reductions in child hospitalizations for injuries and ingestions and for primary care for sensitive conditions. Cognitive testing has resulted in inconsistent findings across studies. Differences between children in families home visited and those not visited tend to be minimal or not sustained.

2. Do program outcomes differ according to program characteristics?

Characteristics of the Participants

Debate about universal versus targeted services continues.[7] However, to date, most programs target those at risk. Programs often focus on adolescents, on socially disadvantaged mothers with their first child, on medically/developmentally at-risk children, or on families with characteristics that place them at risk for abuse and neglect. Evidence is accumulating that mothers with the fewest personal and social resources, including low income, benefit more from the service, at least in the areas assessed, than do those with more resources.[2]

Intensity of the program

Regardless of the number of visits suggested in program manuals, only about half of the recommended visits actually occur. Although an optimal number of visits have not been determined, there is evidence that more visits are better and a threshold may be required to produce effects. In addition to lower than expected rates of visits, programs are reporting higher than anticipated drop-out rates.[8] The rates vary from less than half of families remaining active after one year to nearly all being active after two years.[9] Often the reason for attrition is unknown. Nevertheless, there is now preliminary evidence about what keeps families engaged and invested in visits.

Importance of the Visitor-Family Relationship

Most programs emphasize the importance of a positive visitor–family relationship since programs are voluntary, and visiting depends on the willingness of the family to invest.[10] Indeed, evidence suggests that the quality of the relationship is a predictor of program outcomes. Nevertheless, programs vary in their criteria for defining a satisfactory relationship: some focus on a constructed friendship, others on a teacher–learner relationship, and still others on a therapeutic alliance. Increasingly, evidence suggests that a constructed friendship alone is not sufficient to produce the anticipated outcomes. Such a friendship may provide temporary relief from isolation and despair but may not be sufficient to build the resources necessary to be effective in establishing lasting family, mother, and child outcomes.

Uni-dimensional vs. Multi-Dimensional Programs

Some programs focus heavily on teaching child development and parent–child interaction strategies, others focus on friendship and providing a supportive presence, still others focus on the activities suggested by the family. Some programs are multi-dimensional and address the life course development of the mother, family life, child caregiving, and the fostering of overall development.[11] These programs, which consider both program and individual client goals, attempt to balance the management of current strains with building strengths in the multiple areas necessary to meet future challenges. Evidence is emerging that the impact of multi-dimensional home visiting programs lasts long after the intervention ends. Families set a different life trajectory with fewer closely spaced children, less reliance on public assistance, and greater health and well-being among the children.[12] We know little about how programs work to produce their long-term impact. For example, it is unclear whether children do better because of improved caregiving, increased maternal personal resources, improved family functioning, expanded economic resources, or all of the above.

Conclusions

A broad range of studies have confirmed better health and development in children and more positive environments in home-visit households, and give us reason to hope that home visiting is a strategy that can improve the lives of children at risk.

Not all home visiting services designed to promote the health of families with infants and young children yield comparable outcomes for all children. Although some programs have produced evidence of enduring, long-term family, maternal, and child outcomes, other broadly disseminated programs have not demonstrated detectable effects. Within programs there is

evidence that those at higher risk make greater gains with home visiting than do those with less risk. This difference in program outcomes should not be surprising, given that programs differ dramatically in their clientele profiles, the backgrounds of providers, their explicit and implicit theoretical models, and how well those models have been translated into program content/processes, and subsequently implemented. There is still a need to determine what components of home visiting programs are essential and which produce the greatest long-term impact. Programs vary little in cost per year of service regardless of the professional level of the provider.[13] However, programs that have a lifetime impact have a higher benefit/cost ratio than do those with limited and short-lived impact.

Implications

Just as programs vary, so do their outcomes. Although some of the enthusiasm for home visiting has waned in the past decades as reports of some large randomized trials have failed to demonstrate program effects, evidence from other programs targeted for families at risk (eg, low-income families) has shown enough promise to build on program development momentum. Gomby and colleagues have hailed the scrutiny to which home visiting as a human-service strategy has been subjected, and have concluded that new home visiting program expansion should take advantage of what has been learned to date. They specifically recommend improving the quality and implementation of services and projecting a modest view of program effects.[4]

Interventions that have demonstrated a broad range of effects require significant resources and there will be ongoing pressure to use established program models while reducing the resources involved in their implementation. Caution should be exercised in this area. Preliminary evidence from descriptive studies within programs and meta-analyses of randomized trials (comparing programs with different characteristics) suggest that it will be important to adhere to established program models until there is sufficient evidence to support revisions.[14] Although the scientific literature provides some comparison of effects for programs with different constellations of characteristics, the field of home visits is still in its infancy as far as determining the relative importance of any specific characteristic is concerned.

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