



NSW Department of
Community Services



Prevention and early intervention update – trends in recent research

Introduction

This Research to Practice Note provides an overview of the key findings of the recent report, *Prevention and early intervention update – trends in recent research*¹ (Early Intervention Update). This report builds on the 2005 *Prevention and Early Intervention Literature Review*,² providing an update of current research trends.

The aim of this Research to Practice Note is to provide an overview of current trends in prevention and early intervention research and outline key implications for policy and practice.

Background

The last 20 years has seen a large amount of research into the importance of the early childhood years for later development.³

In particular, university based research studies targeting disadvantaged families indicated that early intervention had positive effects on both short and long term developmental outcomes. Evidence about the impact on brain development of early life experiences, including the role of parenting in shaping children's early years, has helped explain the effectiveness of these early interventions on children's life chances.

This research evidence has contributed significantly to the uptake of prevention and early intervention programs as part of public policy, not only in response to growing rates of child maltreatment reports, but also as a way to enhance general developmental outcomes.

This can be seen in the national roll out of policies such as Sure Start in the United Kingdom, Strengthening Families in Australia, the Early Years' strategy in several provinces of Canada, First Five in California and Brighter Futures in NSW.*

The most commonly used prevention and early intervention strategies are home visiting, child care, parenting programs and multi-component programs. The 2005 Prevention and Early Intervention Literature Review and the current Early Intervention Update focus on these four strategies when reviewing research trends and the evidence about what works.

What are the current research trends?

When thinking about what works in early intervention there is still a substantial reliance on the early benchmark university studies, particularly the Nurse Family Partnership study in Elmira and the High/Scope Perry Preschool program. The Early Intervention Update, however, notes the following trends over the past few years in the research relating to early intervention:

- Larger sample sizes
- Standardised reporting of results
- Drilling down – ‘what works and for whom?’
- Shift towards multi-component and community strategies
- Shift towards a cost-benefit approach

The trend towards research that is based on larger sample sizes has occurred primarily because of the rolling-out by governments of early intervention programs and an increase in consortia-based research and government funded longitudinal studies. These studies now often report results in a similar way using effect sizes, which makes it easier to compare the effectiveness of different programs.

This shift to larger population level studies appears to have reduced the significance of the effects of early intervention programs noted in early studies. This may be, in part, because most change is recorded in the most disadvantaged families and university studies have tended to target these families. The majority of families in the general population need the programs less and so change very little as a result of them. By averaging the amount of change across the many families who do not change, and a few who change a lot, the overall result is one of only modest change across the population.

This has led to an increasing emphasis on looking closely at not only what works, but for whom it works, so that money is spent on those who need it most. In addition there is increasing concern with the comparative cost-benefits of programs. This focus on cost-benefit analysis is the result of government attempts to maximise the outcomes from the budget allocated to early intervention services in terms of degree of change and numbers of families assisted.

* In New South Wales, the Brighter Futures Early Intervention program, a large scale government initiative providing targeted support to vulnerable children and families, has been rolled out across the State over a five year period (2003/04-2007/08).

It will take another five to ten years to see the comprehensive results and to fully benefit from these larger scale studies.

What are the findings from the current research?

Home visiting

Home visiting is not a single intervention but rather a strategy for delivering a range of services. Home visiting programs are diverse and provide a broad range of interventions designed to improve family functioning, enhance child development and/or reduce the potential for child maltreatment.

The evidence for the effectiveness of home visiting is mixed, particularly as a stand-alone strategy to improve outcomes for children from vulnerable families. Many of the significant findings found in the earlier university studies of home visiting programs were diluted when delivered on a larger scale.

Nevertheless, home visiting may provide a useful platform to identify those families who need extra support. Home visiting enables the visitor to observe the environment in which families live, identify and tailor services to meet the needs of families, and build relationships in ways that may not be possible with other early intervention strategies.

Home visiting has been found to improve maternal welfare, with current acceptance that home visiting produces the greatest gains for mothers with less direct benefit for children.⁴ The most successful home visiting programs aim to improve the wellbeing of both mothers and children.

The evidence for the effectiveness of home visiting in terms of preventing child maltreatment is inconsistent. However, outcomes in this area appear to improve when home visitors provide case management services, serve children under three, provide parent-child activities and work with teenage parents.

To impact on child maltreatment, programs need to be of sufficient length to address the multiple and complex factors that contribute to child abuse and neglect. Most home visiting programs are offered for around two years, starting off with greater intensity and then reducing frequency after about six months. The significance of program duration is evidenced by the success of programs that are delivered both in the antenatal and postnatal periods.⁵

Retention of families in home visiting programs is a major issue when considering program effectiveness. In practice, families often receive about half as many visits as intended. The findings of several studies suggest that the most vulnerable families are more likely to refuse to engage from the outset and also drop out early.⁶ This highlights the importance of strategies to actively engage such families. Active engagement strategies are considered in more detail in the practice implications section of this note.

Home visiting is most effective where home visitors are well-trained and families have greatest initial need, or where families perceive that their children need services because of underlying biological reasons such as low birth weight, prematurity or special needs.

Home visiting is also most effective and the effects are longer lasting if it is used in conjunction with high quality child care.

The key features of an effective home visiting strategy include:⁷

- The ability to accurately identify and target families who need more intensive support;
- Programs where services are delivered by more highly trained and qualified home visitors;
- Programs where home visitors are experienced in dealing with the complex needs of many 'at risk' clients;
- Programs of long enough duration to impact upon parenting or risk factors that contribute to child maltreatment;
- Programs that match program designs to the needs of the client group and
- Programs that focus on improving both maternal and child outcomes.

High quality child care

High quality child care has been shown to be the most effective and cost beneficial single early intervention strategy to enhance child developmental outcomes, in particular language and cognitive development.⁸ The link between high quality child care and positive child outcomes appears to be especially strong for children from disadvantaged families, with effects for these children being larger and longer lasting.⁹

Positive outcomes however are dependent on the quality of care being high. Where the quality of care is low, child care can be detrimental. Vulnerable children are particularly susceptible to the negative effects of poor quality care, but they also benefit the most from high quality care. Research into child care quality has found factors such as staff qualifications and training, lower child to staff ratios and smaller group sizes are associated with higher overall quality of care. High quality is reflected in the day-to-day experience of children including warm, positive and stimulating staff-child interactions, age appropriate activities and a safe and healthy environment.

Child care has not generally been used as a direct intervention strategy to reduce abusive and neglectful behaviour of parents, but rather as a strategy to offset the effects of maltreatment and promote developmental health and wellbeing. However, it may be that an indirect effect of high quality child care is to reduce child abuse and neglect. Not only is there less opportunity for parents to maltreat their child, but respite from the challenge of parenting is also provided. In high quality centres parents are also likely to be offered informal parenting support by staff.

The effectiveness of high quality child care as an early intervention strategy is enhanced if it is combined with a strategy that simultaneously targets parents. High quality child care is rarely introduced as a single strategy intervention for families at risk because the positive effects have been shown to be improved when combined with a home visiting or parent education program.

Parenting education

Research has documented that the risk of child maltreatment is heightened when parents lack necessary child rearing skills, social supports and knowledge of child development.¹⁰ Thus parenting programs are frequently provided as an early intervention strategy with the aim of increasing parental knowledge of child development, assisting parents to develop parenting skills and normalising the challenges inherent in parenting.

Most recent research has focused on behaviourally-based parenting programs as an intervention for child behavioural problems and for child abuse and neglect. The three key behavioural parenting programs that have continued to develop an evidence base are Triple P (Positive Parenting Program), Incredible Years and Parent Child Interaction Therapy (PCIT). The evidence suggests that such parenting programs have a moderate effect on child behavioural problems, at least in the short term.

Parenting programs based on behaviour management principles are regarded as the most effective. There is a lack of evidence regarding programs based on relationship approaches, such as attachment based parenting programs.

The influence of parenting programs in reducing the incidence of child maltreatment remains unclear as this outcome has generally not been measured directly. There is some evidence that such programs influence parenting attitudes, emotions and behaviours that may be associated with child abuse.¹¹ Further research is needed to explore the precise relationship between the promotion of parental competence and the prevention of child maltreatment.

Parent training programs with the following features have been found to be more effective in preventing child abuse:

- inclusion of a home visitor;
- programs that offer a combination of centre-based and home-based settings;
- programs with a greater number of sessions, and
- programs that involve both individual and group components.¹²

The quality of the relationship between the parent and the program facilitator also appears to influence outcomes. The better the quality of relationship, the greater the improvements in parenting practices by the end of the intervention.¹³

Parent training has been found to be less effective overall for economically disadvantaged families.¹⁴ This review found that individual parent training was more effective than group parent training for economically disadvantaged families. It is also well established that high risk families are less likely to enrol in parenting programs and more likely to drop out prior to completion.

There is a lack of studies that examine the long-term effectiveness of parenting programs and, for those that do, outcomes appear to deteriorate over time.¹⁵ There is also a lack of evidence about the cost-effectiveness or cost benefits of parenting programs.

Multi-component strategies

No single early intervention strategy is as effective as a combined approach which targets both child and parent, for example when high quality child care is provided in conjunction with another strategy, such as a linked home visiting program delivering parent education.¹⁶

The most successful early intervention programs have been aimed at socially disadvantaged families and have combined strategies. Notably effective programs have been the High/Scope Perry Preschool program, the Abecedarian Program and the Chicago Child-Parent Centres, all of which have been rigorously evaluated with outcomes for participants traced into adulthood.¹⁷

The translation of this type of service from benchmark university based studies into large scale public program is still in its infancy but its adoption is becoming increasingly widespread. The exception is the Chicago Child-Parent Centres which have shown positive results similar to those found in university based studies when implemented as public policy involving large numbers of disadvantaged children and their families.

What are the implications for practice?

Active engagement for hard to reach families**

An increased interest in what works to enrol and retain vulnerable families in early intervention programs has developed in response to high refusal and drop out rates particularly by those families who have the greatest need. As high risk families have the potential to gain the most from participation in early intervention programs, ensuring high rates of participation of these families is important.

Most studies concerning engagement concentrate on only one or two strategies, resulting in a collection of small scale studies offering single factor, sometimes contradictory explanations for participant decisions.

Strategies to increase engagement can be employed at an agency or an individual caseworker level. Strategies with the strongest evidence base include:

- **Following up quickly** – Low income mothers were less likely to drop out early in a post-partum parent intervention program if they were followed up after a week rather than a month. Active follow up after a missed appointment, with caseworkers attempting to re-establish contact at least three or four times, is also suggested.
- **Frequent maintenance of contact** – Higher participation rates were maintained in the first four months of an intervention program for new mothers if contact was weekly rather than monthly. Organising a number of contacts

at the initial meeting, through whom the family can be reached, has been found to increase retention rate significantly.

- **Offer services during a time of transition** – Families have been found to be more responsive to taking up services during periods of transition such as a first pregnancy.
- **Respecting the family** – this includes telephoning families the day before to confirm appointments. Caseworkers should also be punctual and reliable, where possible avoiding cancelling appointments or cutting appointments short. Mothers were also found to be more likely to engage with their caseworker where they felt the caseworker listened and understood them.
- **Similar background** – programs that match participants and providers in terms of parenting status, age and ethnicity were significantly more likely to retain families longer in the program.¹⁸

Family engagement with parenting programs has been found to improve if pre-program interviews are held, providing information about the importance of attendance and adherence to the program, eliciting commitment and developing plans for overcoming barriers to attendance.¹⁹ Financial incentives have also been found to increase rates for recruitment and retention.²⁰

The importance of the practitioner-family relationship

There is mounting recognition of the critical importance to the effectiveness of early intervention programs of the relationship between the practitioner and the family.

Besides good interpersonal skills, researchers examining the effectiveness of home visiting have tried to establish whether there are strategies that could help form positive and trusting enough relationships to act as a springboard for change. The following strategies have been identified:

- Engage the parent/s before the birth of the child. Starting antenatally seems to increase effectiveness;
- Assist parents achieve change in something they see as their most immediate problem, thus signalling positive intent and usefulness; and
- Demonstrate personal qualities that give parents the message you are working with them rather than monitoring and judging them. This includes showing conscientiousness and respect.²¹

** A fuller discussion of active engagement strategies can be found in the DoCS discussion paper: *Active engagement: Strategies to increase service participation by vulnerable families*.

Establishing trusting relationships with vulnerable parents is often the most difficult. Whilst building a trusting relationship cannot be reduced to a formula of behaviours, there are a number of key strategies emerging from the literature, including: the importance of communication style; the provision of practical, material support; facilitating ease of access to services and developing strategies to maintain contact.

Relationships take time to build, making stability of staff critically important. Staff turnover can have a big effect on success rates. For instance, the high staff turnover rate amongst nurses in the Nurse Family Partnership program in Memphis was seen as a likely explanation for the more limited results than the same program in Elmira.²²

Whilst the practitioner-family relationship is important, there is a need to also recognise the complexity and multiplicity of factors that can impact on families' lives and the difficulty one person has in bringing about change.

Service co-ordination and flexibility

Research demonstrating the effectiveness of multi-component strategies compared with single component strategies has led to a call for 'joined-up' services which are accessible and locally-based.

Universal and primary care services across the health, education and community sectors are likely to be more effective if coordinated with one another, in order to address multiple environmental risk factors and respond to families with complex needs. Because risk factors cluster together and are cumulative, interventions that focus on single issues are unlikely to lead to lasting change. The problems of families with complex needs often transcend the capabilities of any single discipline or service.

Services also need to be flexible, with less rigid eligibility requirements so that they can respond to the emerging needs and problems of children and families rather than waiting until problems become established. There is no fixed sequence of intervention strategies that will be relevant to all families.

Universal compared with targeted provision of services

Research suggests that providing services that target disadvantaged families is a more cost-beneficial strategy than universal service delivery. However, to identify those families who might benefit the most from more intensive early intervention may require screening or monitoring on a universal basis.

This could occur most easily at transition points in family life, for instance, 'well-baby' checks through home visiting after the birth of a child.

Services targeting disadvantaged families need to avoid stigmatisation of the service and service users. Service users may be particularly distrustful and therefore less likely to engage with services perceived as 'welfare programs' for 'problem families'. An approach that targets vulnerable subgroups on a universal basis such as by disadvantage locations and/or first time mothers potentially avoids this problem.

Conclusion

There has been an increase in the roll out of large-scale prevention and early intervention programs by governments in recent years. This has contributed to a shift in the research relating to early intervention, including a reduction in the noted significance of the effects of early intervention programs. There is increasing emphasis at looking closely at what works for whom and the comparative cost-benefits of programs. High quality child care has been found to be the most effective and cost beneficial single early intervention strategy to improve child developmental outcomes, in particular language and cognitive development. However, high quality child care is rarely introduced as a single intervention for vulnerable families because the positive effects have been shown to be improved when combined with a home visiting or parent education program. Strategies to actively engage families in early intervention programs are essential given the most vulnerable families are most likely to refuse to engage and also drop out early. Promoting positive practitioner-family relationships and providing coordinated and flexible services also appear to be important for successful early intervention program delivery.

Further reading

- Watson, J. & Tully, L. (2008). *Prevention and early intervention update – trends in recent research*. NSW Department of Community Services, Centre for Parenting and Research: Sydney.

Endnotes

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The DoCS Research to Practice program aims to promote and inform evidence-based policy and practice in community services.

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