provided by Analysis and Policy Observatory (APO)



No 1 2006

# **POLICY BRIEF**

Translating research evidence to inform policy and practice

## Early childhood and the life course

What happens to children in the early years has consequences right through the course of their lives. There are many opportunities to intervene and make a difference to the lives of children and young people. The evidence shows the most effective time to intervene is early childhood, including the antenatal period. This Policy Brief explores the issues that impact the health, development and well-being of children and therefore their life course. These issues will be addressed from ecological and economic perspectives.

### Why is this issue important?

Many children and young people displaying worsening (or unacceptably poor) outcomes in many areas of health and development (Keating and Hertzman, 1999; Richardson and Prior, 2005; Stanley, Prior and Richardson, 2005). These outcomes can have consequences much later in the life Many of the health and wellbeing problems we see in adults - obesity and its associations such as diabetes and heart disease, mental health problems, criminality, family violence, poor literacy, unemployment and welfare dependency - have their origins in pathways that begin much earlier in life, often in early childhood (Halfon and Hochstein, 2002; National Crime Prevention, 1999). This does not mean that what happens in early invariably childhood determines development; however early experiences set children on developmental trajectories that become progressively more difficult to modify as they get older (Hertzman and Power, 2003; Shonkoff and Phillips, 2000).

The problems noted above have associated social and financial costs that cumulatively represent a considerable drain on society and undermine Australia's productivity. (Richardson and Prior, 2005). Economic costs include reduced skill levels which make Australia less competitive internationally, suboptimal workforce participation and productivity, increased welfare payments, and increased costs of treatment services.

We do not fully understand all the causes of these problems, but they are clearly associated with the social and economic changes of the past few decades (Richardson and Prior, 2005). While a majority of families and children are doing well, parenting generally has become more stressful and complex, and there is an increasing number of families with multiple problems.

"... health and wellbeing problems we see in adults ... have their origins much earlier in the life course, often in early childhood."

#### What does the research tell us?

**The ecological perspective.** The health, development and well-being of children, as well as the functioning of their families, is shaped by environmental factors.

For young children, the antenatal, family, and social environments are critical. The family environment is important because young children develop through their relationships with others; in the early years this means parents and caregivers (National Scientific Council on the Developing Child, 2004a). Genes predispose children to develop in certain ways, but it is their social environments that have an especially large impact. This is why Professor Clyde Hertzman









has characterised the brain as "an environmental organ" (Hertzman, 1999). The younger the child, the more vulnerable is the brain to environmental influences. Adverse experiences in the early years are particularly damaging, shaping the development of young children's brains in ways that have long lasting effects (National Scientific Council on the Developing Child, 2004b, 2005).

For families, their immediate community and wider social environments are critical (Eckersley, Dixon and Douglas, 2001; Zubrick, Silburn and Prior, 2005). The support a family receives from their extended family and/or community is vital. Other factors that impact family functioning and support good developmental outcomes include:

- how well their basic needs (income, employment, housing) are met
- their social connectedness
- access to quality services and facilities including child care, preschool and kindergarten
- family friendly workplace arrangements to facilitate the achievement of a balance between work and family commitments

For children and families alike, development is shaped by the ongoing interplay among sources of risk or vulnerability on the one hand, and sources of resilience or protection on the other (Shonkoff and Phillips, 2000). Single risk factors on their own are not usually sufficient to explain adverse developmental outcomes. Outcomes are determined by more than one risk or protective factor. Risk factors are cumulative, and their impact on individual children and families vary depending on the child's age and length of exposure:

- the younger the child the more vulnerable he/she is to environmental risk
- the longer the children are exposed to environmental effects and risk factors the greater the likelihood of later sub-optimal outcomes

Because risk factors tend to cluster together, intervention early in the life course can remove or ameliorate multiple risk factors, leading to improved developmental trajectories. In this way early intervention can improve outcomes in multiple areas later in the life course (Shonkoff and Phillips, 2000).

The current ways of responding to developmental problems – which is to wait until problems have become established and then try to remediate them – are expensive and relatively ineffective. The evidence indicates that intervening early in the life course to prevent or reduce later problems gets better results. Studies of good quality early intervention programs have shown that:

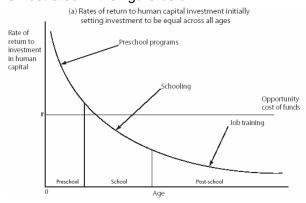
- they lead to improved psychosocial and health outcomes in the long-term
- they are particularly effective with children from disadvantaged backgrounds
- the earlier the intervention begins (and the longer it lasts), the more effective it is likely to be
- interventions need to address multiple environmental risk factors simultaneously rather than focusing on single issues. Intervention programs that address a single aspect of child and family functioning are likely to fail by ignoring other factors that can undermine family functioning and child development
- sustained intervention over time (rather than intervention at a single time point) is most likely to be effective
- the nature and intensity of the intervention may vary over time because of changing circumstances and developmental needs, and needs to be flexible

"... intervening early in the life course to prevent or reduce later problems gets better results."

**The economic perspective.** Intervening early makes economic sense.

Cost benefit studies have shown that prevention and early intervention are cheaper more effective than treatment. Educational outcomes illustrate this finding. On the basis of an extensive analysis of the evidence, James Heckman, a Nobel prizewinning economist, concludes that once children fall behind in their learning, they are likely to remain behind (Heckman, 2000). Gaps in performance open up early and stay mostly constant after eight years of age beyond that age, school environments can only play a small role in reducing these differences. Intervention for deprived environments in the early years becomes progressively more costly (and less effective) as children grow older. What predicts both cognitive and social emotional abilities and consequently success at school, are early family environments (Cunha, Heckman, Lochner and Masterov, 2005).

Heckman argues that economic returns on initial investments are much higher in the early years than when children are older. This is illustrated in the figure below.



Heckman concluded that "the most economically efficient way to remediate the disadvantage caused by adverse family environments is to invest in children when they are young" (Heckman, 2000).

"... focus on the treatment of established problems or conditions is not sustainable."

# What are the implications of the research?

- Intervening early in the life course has the greatest potential to prevent or significantly ameliorate some of the health and wellbeing problems seen in adult life. Policies that support this stance make sound economic sense. Investing in the early years provides a significant economic return on investment.
- We do not yet have the capacity to influence the biology of development, except during the antenatal period. However, we are able to modify the environments that are known to shape the course of child development and family functioning.

 Policies that focus on the treatment of established problems or conditions are not sustainable. It is more efficient and effective to intervene early in the developmental pathway. Many current services have rigid eligibility requirements which require them to only address established problems and are not able to shift from treatment to providing support when the problems are first emerging and more amenable to change.

"... modify the environments that are known to shape the course of child development and family functioning."

- The most direct way of improving childhood and outcomes in thus influencing the life course is to ensure that all caretaking environments in the early years are consistently nourishing, stimulating, and meet the health and developmental needs of young children. Disadvantage in this context is not only about lack of money but also about environments that do not provide the cognitive and social-emotional stimulation that young children need. Interventions need to focus on supporting efforts to provide a nurturing and stimulating family environment and to appropriately support parents in their caretaking role. Similarly, when young children spend time outside the home, the caretaking environment needs to be the best we can make it.
- Because risk factors cluster together and are cumulative, interventions that focus on single issues are unlikely to lead to lasting effective change. The problems of families with complex needs often transcend the capabilities of any single discipline or service, so that a multi-disciplinary, multiservice approach is necessary.
- Given the wide range of environmental risk factors that can influence family functioning and therefore child development, a multi-service and wholeof-government approach to policy and planning is needed, crossing the health, education and community sectors.

### **Considerations for policy and programs**

There is a need for greater investment early in the life course.

- Expenditure in the early years should be regarded as an investment and is analogous to investing in physical infrastructure for the long term. Investment in early childhood needs to be incorporated into the economic debate about other forms of infrastructure.
- All policies need to be scrutinised to ensure that they do not inadvertently compromise the ability of families to provide appropriate nurturing and stimulating environments for young children whether inside or outside the home. In pursuing economic objectives and increased labour force participation, governments need to be mindful of possible unintended negative consequences for children and families.
- There should be greater alignment between Commonwealth and State government policies regarding young children and their families in order to maximise investment. Efforts should be made to identify common strategies that impact positively on young children and their families, as well as to explore possibilities of sharing resources and avoiding duplication.
- Policies to improve educational outcomes need to focus on the early years, because gaps in abilities open up early, well before children start school. They need to take into account that learning begins at birth and that a child's early environment has a major impact on success at school.
- Childcare needs to be conceptualised as an opportunity for learning and socialisation rather than child minding. Policies need to focus on creating a quality early learning environment; this means having staff with appropriate qualifications and training, and child/staff ratios that are appropriate to the developmental needs of the child.
- All young children, and especially those from disadvantaged families, should have the opportunity to attend quality early learning programs in childcare and preschool settings. This means addressing the financial and other barriers that prevent access for many children.
- Universal and primary care services across the health, education and community sectors need to be better coordinated with one another, in order to address multiple environmental risk factors and respond to the needs of families with complex needs.
- Services need to be more 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.

**Policy Briefs** aim to stimulate informed debate about issues that affect children's health and wellbeing. Each issue draws on current research and international best practice.

A multi-disciplinary team from the Centre have developed these policy briefs.

An advisory group of national and international experts in children's policy and service delivery provides advice and peer review.

#### References

A full list of references and further reading used in the development of this policy brief is available from www.rch.org.au/ccch

### Next Policy Brief

Policy Brief No 2 "Quality in early childhood services" will be released in April 2006.

The Centre for Community Child Health is at the forefront of research into early childhood development and behaviour. The Centre is committed to translating research to inform public policy, service delivery and practice.

Tel: +61 3 9345 5137 Email: email.policy@rch.org.au Web: www.rch.org.au/ccch

Centre for Community Child Health Royal Children's Hospital Flemington Road Parkville 3052