PROMOTION, PREVENTION AND
EARLY INTERVENTION FOR MENTAL HEALTH IN
GENERAL PRACTICE

Monograph 3

Child behaviour

Overview of the literature

Developed by

CENTRE FOR
Community
Child Health

Partners in Prevention
Mental Health and General Practice

Promotion, Prevention and Early Intervention for Mental Health in General Practice

Series Editors:
Anne O'Hanlon, Abbie Patterson and Jennie Parham
Australian Network for Promotion, Prevention and Early Intervention for Mental Health (Auseinet)

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Auseinet
Flinders University
PO Box 2100
Adelaide, South Australia, 5001

Email: auseinet@flinders.edu.au Phone: 08 8201 7670
Website: www.auseinet.com Fax: 08 8201 7673

Auseinet is funded by the Australian Government Department of Health and Ageing and located at Flinders University. Auseinet supports a national network of people in a wide variety of settings to access knowledge and stimulate discussion on issues relating to promotion, prevention and early intervention for mental health and suicide prevention across the lifespan.

Australian Divisions of General Practice (ADGP) – now known as Australian General Practice Network (AGPN) - is the peak national body representing the Divisions of General Practice across Australia. Its mission is to provide leadership and support for the Divisions of General Practice to achieve quality and vitality in primary health care.

The opinions expressed herein are those of the authors and not necessarily those of the Australian Government Department of Health and Ageing.

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Foreword to monograph series

General practice is a key component of the mental health workforce and this has been reflected in a range of national mental health policies over the past seven years. These include: *National Mental Health Plan 2003-2008*; *National Action Plan for Promotion, Prevention and Early Intervention for Mental Health 2000*; the *Better Outcomes In Mental Health Care Initiative;* and the COAG *National Action Plan on Mental Health 2006–2011*. These developments at a national level have led to a process of reform of primary mental health care in Australia and have provided the impetus for general practice to have a greater role in mental health improvement.

Furthermore, general practice and primary care have been identified as important settings by several national mental health initiatives – *beyondblue:* the national depression initiative; *Mindmatters*: the national mental health promotion initiative in secondary schools; *COPMI*: a national initiative addressing the needs of children with parents who have a mental illness; and *headspace*: The National Youth Mental Health Foundation.

Auseinet is a national initiative funded by the Australian Government Department of Health and Ageing to support the implementation of promotion, prevention and early intervention (PPEI) approaches to mental health in a range of sectors and settings. Since 2000, Auseinet has been a key agency in driving the implementation of mental health PPEI in Australia. In 2003, Auseinet selected general practice as one of four priority sectors to invest in during its second phase of funding (2003-2007). This was consistent with the identification of general practice as an important setting for mental health PPEI activities in the *National Action Plan for Promotion, Prevention and Early Intervention for Mental Health.*

Over the past 4 years, Auseinet, in partnership with the Australian General Practice Network (AGPN), formerly the Australian Divisions of General Practice (ADGP), has undertaken a range of activities designed to build the capacity of the general practice sector to implement PPEI approaches. Activities undertaken as part of the *Promotion, Prevention and Early Intervention for Mental Health in General Practice* project have included a scoping study of PPEI in general practice (O'Hanlon, Wells & Parham, 2004), an audit of training programs that have PPEI content, and, most recently, the commissioning of external experts in the field to develop four Active Learning Modules for general practitioners (GPs).

The learning modules have been accredited by the Royal Australian College of General Practitioners (RACGP), the General Practice Mental Health Standards Collaboration (GPMHSC) and the Australian College of Rural and Remote Medicine (ACRRM). Each module comprises an evidence-based overview of the literature and a related training program. Throughout the project we have maintained an inclusive view of the 'general practice setting' (i.e. GPs, other health professionals and Divisions), but for the purpose of training and accreditation, the modules in the first instance have been designed specifically for GPs.

We believe, however, that there is value in making the overviews of the literature available to a much broader audience. Therefore, we are presenting the overviews as a monograph series that we think will be of interest to the well-established network of people and organisations that support PPEI approaches to mental health.

The *Promotion, Prevention and Early Intervention for Mental Health in General Practice* monograph series comprises:

Monograph 1. Conceptual framework for PPEI and applications in general practice: Overview of the literature (Professor Debra Rickwood);

Monograph 2. Managing the impact of separation and divorce on children: Overview of the literature (Australian Psychological Society);

Monograph 3. Child behaviour: Overview of the literature (Centre for Community Child Health); and

Monograph 4. Older adults: Overview of the literature (The New South Wales Institute of Psychiatry).

This series provides an overview of the best available evidence to date on the conceptual framework for PPEI and its application to children and older people, with specific reference to early identification of mental health problems, assessing risk factors and enhancing protective factors. The overviews also include interventions with individuals, parents, families and carers where appropriate, that can be implemented in the general practice context.

The monograph series is available on the Auseinet website www.auseinet.com.

We would like to acknowledge the many people who have been involved in bringing this phase of the *Promotion, Prevention and Early Intervention for Mental Health in General Practice* project to fruition.

We thank foremost the authors of the monographs: Professor Debra Rickwood; the Australian Psychological Society (Melbourne); the Centre for Community Child Health (Royal Children's Hospital, Melbourne); and The New South Wales Institute of Psychiatry (Sydney). We also wish to acknowledge the input of their respective Reference Groups to the literature overviews and to the modules as a whole.

Thank you to the *Promotion, Prevention and Early Intervention for Mental Health in General Practice* Project Management Group for providing general direction for the project and identifying the priority areas for the evidence-based reviews and training programs. The group reflected the interests of the project partners, Auseinet's own Management Committee, general practitioners, mental health experts, and accrediting bodies. Members during the course of the project were: Professor Lyn Littlefield, Professor Graham Martin, Dr. Chris McAuliffe, Ms. Lesley McBride, Ms. Anne O'Hanlon, Ms. Jennie Parham, Ms. Lynette Pearce, Mr. Phil Robinson, Dr. Darcy Smith, Mr. Julian Thomas, Ms. Tracy Thompson and Ms. Leanne Wells. Thanks to those members who peer reviewed and provided insightful feedback on earlier drafts of the overviews.

We would also like to acknowledge Ms. Lesley McBride for her role in coordinating the development of the overviews and training programs while she was with Auseinet. Our thanks also to Ms. Jill Knappstein from Auseinet for assisting with proofing and layout of the monograph series.

The Editors

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1. INTRODUCTION

Managing the behaviour of young children can be a major source of stress for parents and caregivers. Ensuring that this aspect of children's development is managed well is also a matter of great concern for services, governments and society generally, since failing to do so can lead to debilitating mental health and social problems in later life.

Good mental health is essential for children's learning, social development, self-esteem and resilience to stress throughout the life-course. Over half a million Australian children have significant mental health problems (Centre for Community Child Health, 2006a). The Commonwealth and State Governments of Australia have identified mental health as a significant social and public health priority, and have prepared national strategies to address the problem, including three National Mental Health Plans, the most recent being the *National Mental Health Plan 2003-2008* (Australian Health Ministers, 2003).

These policy directions recognise that providing effective treatment for people who are experiencing mental health problems and mental illnesses are vitally important. However, taking this approach alone will not help to stop the growing burden of mental ill health. There is clearly a need to find ways to strengthen the mental health of the whole population (*promotion*), prevent problems from developing in the first place (*prevention*), and provide effective treatments for people as early as possible (*early intervention*). Accordingly, the Australian Government has endorsed a Promotion, Prevention and Early Intervention (PPEI) approach to mental health.

This overview of the literature focuses on the importance of PPEI approaches to mental health. It recognises that it is preferable to identify and respond to small problems as they emerge rather than waiting until the problems are well established. To support a general practitioner (GP) in adopting a PPEI approach to child behaviour issues, this resource provides an overview of child development based on key features and developmental tasks. This approach has been preferred to the more usual ages-and-stages approach, as the key developmental tasks relate more closely to the long term behavioural outcomes. The overview summarises the research relating to child development, child mental health, parenting, and parent-professional interactions, outlines proven and promising strategies for managing child behaviour problems, and concludes with a list of useful resources for professionals and parents.

1.1 Definitions

(Source: Rickwood, 2007)

Mental health refers to how a person thinks, feels and acts in their day-to-day life. It is how people feel about themselves, their lives and the other people in their lives. It includes how a person handles stress, relates to other people, and makes decisions. It has been defined as a state of emotional and social wellbeing that enables people to undertake productive activities, experience meaningful interpersonal relationships, adapt to change and cope with adversity (World Health Organization: WHO, 1999). Mental health is not the absence of illness, but rather, the ability to cope and feel positive about people and events in life.

A **mental illness or disorder** is a health problem that significantly interferes with a person's thoughts, feelings or social behaviour. It is diagnosed according to standardised criteria, usually the DSM-IV (American Psychiatric Association: APA, 2000) or the ICD-10 (WHO, 1992). Some of the major types of mental illness are depressive disorders, anxiety disorders, psychoses and eating disorders.

A **mental health problem** also interferes with a person's thoughts, feelings and social behaviour, but to a lesser extent than a mental illness. Mental health problems are more common and include the mental ill health that may be temporarily experienced as a reaction to the stresses of life. While mental health problems are less severe than mental illnesses, they still can have a significant impact on a person's future opportunities and sense of wellbeing, and may develop into a mental illness if not effectively treated.

Mental health promotion is about improving wellbeing for all people, regardless of whether they are currently well or ill. It is about optimising people's mental health by developing environments that are good for us all. Mental health is affected by the events that happen in our normal day-to-day lives, as well as by the stressful events that inevitably occur from time to time. Mental health can be promoted by making sure that public policies support the social and emotional wellbeing of individuals and groups. All environments - social, physical, economic, and cultural - need to be supportive of mental health. Community life is important and communities need to be empowered to take the actions that they decide are needed to build their capacity to support their members. All people need to be helped to develop skills to understand, enhance and respond to their mental health needs. Furthermore, mental health services need to acknowledge that they have a responsibility for promoting the wellbeing of individuals and communities, as well as treating illness.

Prevention refers to interventions that have the potential to prevent the onset of a mental health problem or mental illness. Prevention interventions require the identification of risk and protective factors for mental health. These are occurrences in everyday life that can affect mental health. **Risk factors** are occurrences that increase the likelihood that a mental health problem or mental illness will develop (such as stress), while **protective factors** are those that decrease the likelihood (such as good social support). Prevention interventions can be targeted to population groups identified according to the level of risk. There are three different levels of risk applied:

1. *General or universal* – These are interventions that are targeted at the general public or a whole population group. In this case no specific risk factors have been identified, and the intervention is aimed at preventing mental health problems for everyone. Interventions are designed to reduce risk factors and/or increase protective factors that are likely to be relevant to the general population.
2. *At risk or selective* – These are interventions aimed at individuals or population sub-groups whose risk of developing a mental health problem or mental illness is higher than for the general population. Interventions are designed to reduce risk factors and/or increase protective factors for a group identified as being at higher risk, such as people experiencing physical illness.
3. *High risk or indicated* – These interventions are for people who are at very high risk of developing a mental health problem or mental illness. They are designed to reduce risk factors and/or increase protective factors for people at imminent risk of mental ill health, such as people who are victims of violence.

Early intervention refers to interventions appropriate for people beginning to show the early signs and symptoms of a mental health problem and people developing or experiencing a first episode of mental illness. For people at very high risk and showing early signs and symptoms, early intervention aims to prevent the progression to a diagnosable illness. For people experiencing a first episode of mental illness, early intervention aims to reduce the impact of the mental illness in terms of its duration and the damage it may cause to the person's life, and also to foster hope for future wellbeing.

1.2 Overview of evidence for promotion, prevention and early intervention

Promotion approaches

Promotion approaches directed to total populations (sometimes referred to as universal approaches) have a number of features to recommend them. Since the interventions are offered to all children and populations, there is no labelling or stigmatisation involved, and therefore they are likely to be more effective in identifying and reaching all targeted children. Moreover, universal-based programs are particularly beneficial for the most disadvantaged children (Barnett, Brown & Shore, 2004; Karoly, Kilburn & Cannon, 2005; Melhuish, 2003). Although successful promotion/universal interventions typically have very small effects for the average participant, such effects can add up to large benefits for society (Offord, Kraemer, Kazdin et al., 1998).

There is evidence that promotion programs directed at total populations can be effective. In a review of mental health interventions, Greenberg, Domitrovich and Bumbarger (1999) found that such programs produced positive outcomes in either specific symptoms of psychopathology or commonly accepted risk factors associated with psychopathology. An Australian study, the Gatehouse Project, has shown that a school-wide prevention strategy designed to promote social inclusion and commitment to education was effective in reducing student health risk behaviours and improving their emotional well-being (Patton, Bond, Carlin et al., 2006). The study provides support for prevention strategies in schools that move beyond health education to promoting positive social environments.

Implementing an effective universal approach can be challenging. One problem is the difficulty of ensuring the high quality of service needed for such services to be effective (Barnett et al., 2004; Melhuish, 2003). Expanding universal options takes time, and patience is required to build capacity while maintaining or improving quality (Barnett et al., 2004). Another challenge is matching services to needs: universal programs that do not match the needs of families or are not delivered in ways that are easily accessible are not likely to be effective (Scott, O'Connor & Futh, 2006).

Then there is the challenge of ensuring that universal approaches are truly inclusive and able to meet the needs of all children and families, including those with additional needs. Providing universal approaches does not mean providing uniform programs (Carbone, Fraser, Ramburuth & Nelms, 2004; Committee for Economic Development, 2006). Some children and families who are at risk or have additional needs will require additional services (such as more intensive instruction, parent education, home visits, or access to health care services) (Barnett et al., 2004). This means that strengthening universal programs must be coupled with the development of an efficient tiered system of targeted and treatment approaches.

There are a number of good reasons why it is preferable to use a universal/promotion approach rather than a targeted approach (Centre for Community Child Health, 2006b). This is particularly true of behavioural problems in young children, where the boundaries between the normal and the pathological are hard to distinguish. Therefore, the approach recommended in this overview is that primary service providers such as GPs should seek first and foremost to promote positive parenting in all families. However, GPs and other primary health care professionals also need to be aware of the evidence about the importance of early intervention.

Prevention approaches

Prevention approaches that target at risk populations have the capacity to provide intervention before symptoms or disorders are well-established, which is particularly important in conditions where results of treatment are disappointing or treatment services over-stretched. There is

strong evidence that such targeted programs can be effective in improving the lives of children and families (Karoly, Greenwood, Everingham et al., 1998; Karoly et al., 2005; Shonkoff & Phillips, 2000; Williams, Toumbourou, McDonald et al., 2005).

The prevention/targeted approach has some disadvantages. If the selection of targeted individuals or areas can be done accurately, targeted approaches can be an efficient way of preventing later problems. However, there are often difficulties with screening, as screening procedures fail to identify many of the individuals who ultimately develop the problem (Gillham, 2003). Even when risks are relatively easy to identify, the developmental pathways to subsequent poor health and developmental outcomes are complex and poorly understood (Blair & Stanley, 2002; Cowen, 2000), and therefore it can be unclear what form the targeted service should take in order to be effective.

Targeted programs have lower costs than treatment services, and should produce higher returns per dollar invested than universal programs (Karoly & Bigelow, 2005). However, they are more expensive than universal programs because of the administrative costs of determining eligibility and addressing changes in eligibility over time. Like treatment programs, targeted approaches can stigmatise the families they aim to help, which leads to many needy families dropping out of programs, or never approaching them in the first place.

Another key issue is that, although the concentration of those who would benefit from particular interventions may be highest in targeted populations, the absolute number of individuals who develop a disorder may actually be higher in low-risk groups who do not receive the intervention (Offord, 2001; Offord et al., 1998). This reduces the efficiency of the targeted approach.

There are a growing number of authorities arguing that relatively more resources should be allocated to prevention and promotion as opposed to treatment services (Bayer & Sanson, 2004; Coie, Watt, West et al., 1993; Cowen, 1994, 2000; Fonagy, 2001; Huang, Stroul, Friedman et al., 2005; Prilleltensky, Peirson & Nelson, 2001). However, there are disagreements as to what types of prevention activities should be adopted. Some argue for programs focused on those at risk (Coie et al., 1993), while others seek to build and maintain psychological wellness across the population from early on (Cowen, 2000). Fonagy (2001) notes that prevention of sub-optimal mental health is far broader than intervention to prevent mental ill health because there is significant interdependency between physical, social, and cognitive-academic development as well as psychological functioning.

According to Fonagy (2001), the policy justification of prevention can be summarised as follows:

- The majority of people do not receive mental health input from even the best designed services until they have longstanding and serious problems which are resistant to change and are very costly in terms both of time and resources;
- Even those interventions with the best evidence base (pharmacotherapy and psychotherapy) are far less than 100% effective, arguably because they are used so late in the evolution of the disorder;
- The systems resources are insufficient to meet all demands and therefore often sub-therapeutic doses of an intervention of known effectiveness may be offered; and
- Even highly effective mental health treatment services rarely make a serious impact on the population prevalence of the disorder.

On the basis of arguments of this kind, White-Tennant and Costa (2002) conclude that:

> *'No matter how mental health services are delivered, the understanding of mental health is the same: prevention first, promotion always, and intervention when necessary.' (p. 6)*

Early intervention approaches

Early intervention can have two meanings:

- It can refer to interventions *early in the life course*, that is, during the first few years of life. This is sometimes referred to as early childhood intervention. Shonkoff and Meisels (2000) define this form of early intervention thus:

  'Early childhood intervention consists of multidisciplinary services provided to children from birth to 5 years of age to promote child health and well-being, enhance emerging competencies, minimise developmental delays, remediate existing or emerging disabilities, prevent functional deterioration, and promote adaptive parenting and overall family functioning. These goals are accomplished by providing individualised developmental, educational, and therapeutic services for children in conjunction with mutually planned support for their families.' (pp. xvii-xviii)

- It can also refer to interventions that occur *early in the pathway*, that is, interventions for people beginning to show the early signs and symptoms of a mental health or social or health problem.

Both forms of early intervention are important. Many of the health and wellbeing problems we see in adults - obesity and its associations such as diabetes and heart disease, as well as 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 & Hochstein, 2002; National Crime Prevention, 1999). This does not mean that what happens in early childhood invariably determines later development; however, early experiences set children on developmental trajectories that become progressively more difficult to modify as they get older (Hertzman & Power, 2003; Shonkoff & Phillips, 2000).

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 (Centre for Community Child Health, 2006c). 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. The most direct way of improving outcomes in childhood and 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 (Centre for Community Child Health, 2006c).

In addition, there is the evidence that interventions during the early years can be cost effective (Heckman, 2000, 2006; Heckman & Masterov, 2004; Karoly et al., 1998; Karoly et al., 2005; Lynch, 2004; Rolnick & Grunewald, 2003).

Treatment approaches

The great virtue of treatment programs is that they have the capacity to tackle the most difficult and chronic conditions and, some of the time at least, make a difference. There is evidence that treatment programs for a wide range of problems (including health, mental health, drug abuse, crime, family interventions, disability) can be effective (e.g., Farrington, 2002; Fonagy, Target, Cottrell et al., 2002; Guralnick, 1997, 1998; Loxley, Toumbourou, Stockwell et al., 2004).

However, these interventions are not without their problems. The most commonly cited problem is that, by the time they become eligible for treatment services, people's problems are often so severely entrenched that they are difficult to shift (Fonagy, 2001). This reduces the efficiency of such services. Another problem is the cost. Treatment needs to be intensive and tailored for individual families to be at all effective, which makes such services costly in

terms of time, effort and money. A related issue is the difficulty in providing adequate coverage of populations and ensuring that everyone has easy access to these services.

An additional issue for treatment services is that they may stigmatise the families they aim to help, which tends to make the families ambivalent or even hostile to the service. This leads to many needy families dropping out of services, or never approaching them in the first place. Thus, these interventions may inadvertently increase inequalities rather than decreasing them, because it is the most socially excluded who are least likely to benefit from the intervention (Fonagy, 2001).

1.3 Role of GPs – principles and assumptions

The implications of this evidence for GPs is that their approach to helping parents manage young children's behavioural problems should be based upon principles of promotion, prevention and early intervention. These can be stated as a set of key assumptions that are based on evidence of what is known to be effective but also on certain core values about what is important or desirable for our society. Understanding and adopting these principles will greatly assist GPs in supporting families with young children effectively.

The principles are as follows:

- Our job (as professionals, services, governments and society) is to create the conditions families need to raise their children as they (and we) would wish;
- All parents want to do the best for their children, and only fail to do so because their circumstances or resources or personal history conspire against them;
- Effective help is relationship-based: the better the relationship between the professional and the parent, the more helpful/effective the professional will be;
- The primary focus should be on responding to parental concerns, although GPs may also have to back their judgment if there are signs of neglect/abuse but no expression of parental concern;
- The major causes of health and well-being in modern developed nations are social and psychosocial, rather than exposure to malnutrition or disease; and
- It is more effective to respond supportively to early parental concerns and emerging problems than it is to try and remediate developmental or parenting problems once they have become entrenched.

In practice, this means that GPs can best support parents in managing their children's behavioural and emotional needs in the following ways:

- By developing positive supportive relationships with them;
- By sharing their medical knowledge with them;
- By promoting positive parenting practices;
- By being alert to signs of emerging behavioural or relationship problems; and
- By referring them to appropriate sources of help as soon as problems begin to emerge.

The ability of GPs to support parents of young children is critically dependent upon the nature of the relationship they develop with them, not just their medical knowledge. While GPs can help parents greatly by sharing their medical expertise, developing positive relationships depends in turn upon different skills. There are two such sets of skills: communication/ helping skills, and family-centred care/partnerships skills. (These are described at greater length in Section 5.3: Supporting parents.)

2. METHODOLOGY

2.1 Literature search

This overview draws on a wide range of research and practice evidence. The approach used in identifying relevant evidence varied according to the topic covered. For some topics (such as normal child development), the sheer scope of the literature meant that it was more efficient to rely upon authoritative summaries than to conduct a literature search. In other instances, literature searches were conducted, drawing mainly on PsycINFO and CINAHL databases. This was combined with a direct scan of all articles published in more than two dozen key journals since 2000. In addition, material already prepared by the Centre for Community Child Health (CCCH) was consulted. These consist of literature reviews, policy briefs, web-based resources, and training materials.

The main sources of evidence drawn on for each section were as follows:

Section 1. Introduction

This section draws principally on a series of current literature reviews prepared by CCCH (e.g., CCCH 2006a, 2000b, 2000c; Moore, 2005)

Section 3. Normal child development and behaviour

This section is primarily based on authoritative summaries of the child development and intervention literature (e.g., Brooks-Gunn, Fuligni & Berlin, 2003; National Scientific Council on the Developing Child, 2004a, 2004b, 2005; Rutter, 2006; Shonkoff & Phillips, 2000; Siegel, 1999; Zeanah, 2000).

Section 4. Emotional and behavioural problems in infancy and childhood

This section is based on four sources: a literature search, a journal scan, authoritative summaries (e.g., DeGangi, 2000; Marshall & Watt, 1999; Zeanah, 2000), and existing CCCH research summaries (e.g., CCCH, 2006a).

Section 5. Promoting positive parenting experiences

This section is partly based on authoritative summaries (e.g., Bornstein, 2002; Gowen & Nebrig, 2001; Hoghughi & Long, 2004), and partly on existing CCCH summaries (e.g., Moore & Larkin, 2006).

Section 6. Early identification of emotional and behavioural problems

This section is primarily based on previous CCCH work on screening (Oberklaid, Wake, Harris et al., 2002) and on monitoring of children's development (Glascoe, 1997, 1998; Waters, Salmon & Wake, 2000).

Section 7: Proven and promising intervention programs

This section is based upon a recent CCCH compilation of effective interventions for behaviour problems that summarises the research evidence and outlines practical strategies. This web-based review - *Behaviour Problems Practice Resource* – can be found at http://www.rch.org.au/ccch/research/index.cfm?doc_id=9710

2.2 Levels of evidence

The literature search used National Health and Medical Research Council (NHMRC) guidelines for levels of evidence, as shown in the table below.

Table 1. Levels of evidence

Level	*Type of evidence*
I	Evidence obtained from a systematic review of all relevant randomised controlled trials (RCT)
II	Evidence obtained from at least one properly designed RCT
III-I	Evidence obtained from one well-designed, pseudo-randomised controlled trial
III-II	Evidence obtained from comparative studies with concurrent controls and allocation not randomised (cohort studies), case controlled studies, or interrupted time series with a control group
III-III	Evidence obtained from comparative studies with historical control, two or more single arm studies, or interrupted time series without a parallel control group
IV	Evidence obtained from case series, either post-test or pre-test and post-test

Source: NHMRC (1999, p.56)

3. NORMAL CHILD DEVELOPMENT AND BEHAVIOUR

To be able to promote, prevent and intervene early in relation to child behaviour issues, we first need to understand 'normal' child development and behaviour.

3.1 Key features of early child development

Human development is shaped by a dynamic and continuous interaction between biology and experience (Ridley, 2003; Rutter, 2006; Shonkoff & Phillips, 2000).

Genes always have their effect either in correlation or in interaction with the environment (Sternberg & Grigorenko, 2001). Thus, even if attributes are heritable, they can develop very differently in different environments. Rather than nature vs. nurture, we need to think in terms of nature *via* nurture (Ridley, 2003; Rutter, 2006).

Implication: We need to be wary of assumptions or claims about the direct causal impact either of genes or of parenting on children's behavioural development, and recognise that genetic and environmental factors always interact.

The brain is not mature at birth, but is designed to adapt to the environment in which it finds itself (Black & Greenough, 1986; Greenough & Black, 1992; Hertzman, 2004; Shonkoff & Phillips, 2000).

Whether the adaptation is conducive to ongoing healthy development depends upon the nature of the environment.

Implication: We need to ensure that the social and physical environment in which young children are being raised is conducive to their ongoing healthy development.

Children affect their environment as well as being affected by it (Shonkoff & Phillips, 2000).

Children shape the social environment to which they then respond, therefore playing an active part in their own development. Thus, children (even the very youngest) and parents shape each other's behaviour.

Implication: Parent-child relationships (whether positive or negative) are a product of the mutual influence that parents and children have on each other.

Young children develop through their relationships with others (Bronfenbrenner, 1990; Gerhardt, 2004; National Scientific Council on the Developing Child, 2004; Richter, 2004).

Healthy development depends on the quality and reliability of a young child's relationships with the important people in his or her life, both within and outside the family (Gerhardt, 2004; Richter, 2004). Early negative relationships – those that are unresponsive, neglectful or abusive – can therefore have enormous consequences over the course of a lifetime (Hinshaw-Fuselier, Heller, Parton et al., 2004; Howe, 2005; Schore, 2001; Stien & Kendall, 2004; Teicher, 2002).

Implication: We need to ensure that the conditions under which parents are caring for infants and young children are supportive of the parents' efforts to raise their children as they (and we) would wish.

Children's emotional development is built into the architecture of their brains (Gerhardt, 2004; National Scientific Council on the Developing Child, 2005).

Emotional development begins early in life and is a critical aspect of the development of overall brain architecture, influencing all aspects of children's development (National Scientific Council on the Developing Child, 2005). For some key aspects of emotional development (e.g., how a child responds to stress), early experiences determine 'default settings' that become progressively harder to alter over time (Gerhardt, 2004).

Implication: It is just as important to foster children's emotional development as it is their physical, social and cognitive development.

Brain development is life-long and early experiences do not irrevocably determine long-term developmental outcomes (Bailey & Symonds, 2001; Lewis, 1997; Macmillan, McMorris & Kruttschnitt, 2004; Thompson & Nelson, 2001).

However, experiences that begin early, are sustained over time, and are relatively intense shape development, for better or worse, in ways that become increasingly difficult to alter (Shonkoff & Phillips, 2000).

Implication: Crucial as they are, the early childhood years are but one link in the chain of development – ultimately, achieving positive developmental outcomes depends upon the individual and collective strength of all links in the chain.

Human development is shaped by the ongoing interplay among sources of vulnerability or risk and sources of resilience or protection (Durlak, 1998; Luthar, 2003; Shonkoff & Phillips, 2000; Werner, 2000).

Individual development is shaped by the interaction between risk factors that increase the probability of a poor outcome and protective factors that increase the probability of a positive outcome.

Implication: Interventions to promote positive child development and family functioning should include efforts to reduce the number of risk factors and promote the number of protective factors in children's lives.

Development is 'weakly' determined, that is, individual causal factors, whether genetic or environmental, rarely have a significant impact on development on their own (Appleyard, Egeland, van Dulmen & Sroufe, 2005; Blair & Stanley, 2002; Cicchetti & Rogosch, 1997).

Risk and protective factors are multiplicative rather than additive in their effects: the more risk factors (and the fewer protective factors) that are present in a child's life, the greater the likelihood of poor developmental and health outcomes (Atzaba-Poria, Pike & Deater-Deckard, 2004; Durlak, 1998).

Implication: Interventions that address single risk factors (e.g., maternal depression) are unlikely to have a substantial or long-lasting effect, especially when there are many other risk factors present.

The development of children can be significantly affected by continuities and discontinuities in their environments.

Children's development is affected by unexpected changes in their own states (e.g., illness), their families (e.g., divorce) or their communities (e.g., increased unemployment). These can significantly alter the balance of risk and protective factors in their environments, and potentially disrupt their individual developmental trajectories, for better or worse.

Implication: We should be ready to provide appropriate support when major life changes occur in the lives of children.

Children are more vulnerable at times of important transitions.

There are significant transitions that children typically face, such as commencing child care or entering school. These transitional phases, which may be either smooth or characterised by stress and turmoil, are important periods of psychological reorganisation.

Implication: We should be ready to provide appropriate support during significant normative transitions.

3.2 Key developmental tasks faced by children

The key developmental challenges faced by young children are:

1. forming attachments;
2. acquiring self-regulation;
3. developing communication and learning skills;
4. learning how to relate to peers (Shonkoff & Phillips, 2000).

Forming attachments

Human beings are born with the innate bias to become attached to a protective caregiver (Shonkoff & Phillips, 2000). Attachment, the affective bond of infant to parent, plays a pivotal role in the regulation of stress in times of distress, anxiety or illness (Siegel, 1999, 2001). Attachment to a protective caregiver helps infants to regulate their negative emotions in times of stress and distress and to explore the environment, even when it is somewhat frightening.

But infants develop different kinds of attachment relationships: some infants become securely attached to their parent, and others find themselves in an insecure attachment relationship. These individual differences are not genetically determined but are rooted in interactions with the social environment during the first few years of life. Sensitive or insensitive parenting plays a key role in the emergence of secure or insecure attachments (Siegel, 1999, 2001).

In the early years, attachment relationships are the predominant and most influential relationships in a child's life. Early experiences of parents' acceptance and responsiveness to a young child's attachment needs, and their need to explore, start a pathway of positive psychosocial development in the child. If, during interactions with the parents, the child experiences acceptance, sensitive responsiveness to distress and appropriate challenges during exploration and cooperation, a secure model of a relationship is carried forward to other relationships in childhood, adolescence and young adulthood. Otherwise, an insecure model will predominate. Changes in parental responsiveness or disruption of the family can alter the pathway in either direction.

Severe disruptions in attachment can result when young children are exposed to abuse and severe neglect, with long term neurological, social and emotional consequences (Hinshaw-Fuselier et al., 2004; Howe, 2005; Schore, 2001; Stien & Kendall, 2004).

Because the young child's experiences with both mother and father have such a far-reaching impact, parents may need help in four domains: a) understanding child development in general; b) understanding the specific signals of emotional well-being for their individual child, especially if the child has special needs; c) organising sufficient time for sensitive interactions; and d) finding an adequate substitute caregiver for times when the parents cannot care for the young child themselves. Such help is needed before as well as after the child begins to talk (Thompson, 2000).

Acquiring self-regulation

The growth of self-regulation is a cornerstone of early childhood development that cuts across all domains of development (Blair, 2002; Bowlby, 1980; Bronson, 2000; DeGangi, 2000; Shonkoff & Phillips, 2000). This key developmental task involves negotiating *the transition from external to self-regulation*, including learning to regulate one's emotions, behaviours, and attention:

> *'The capacity for self-regulation, ranging from sleeping and settling in the earliest weeks of life to the preschooler's emerging capacity to manage emotions, inhibit behavior, and focus attention on important tasks, reflects young children's*

> *transition from helplessness to competence. Stated simply, early development entails the gradual transition from extreme dependence on others to manage the world for us to acquiring the competencies needed to manage the world for oneself.' (Shonkoff & Phillips, 2000, p. 121)*

Early regulatory tasks include acquiring day-night, wake-sleep rhythms, and learning to regulate crying.

Wake-sleep regulation. Establishing a day-night wake-sleep pattern is one of the early challenges of parenting. Since it involves repeated separations and reunions between the parent and child, mastering this task is very dependent upon the quality of relationship. Secure attachment fosters both social and biological self-regulation, and the repeated experience of predictable routines leading up to bedtime prepares the child for sleep and teaches them how to settle themselves for sleep.

Regulation of crying. Young children cry for a variety of reasons – for example, they are hungry, tired, in pain, in discomfort or distressed. The parent's task is to work out why the child is crying, address the cause, and help them calm down. The child learns how to calm themselves through repeated experiences of being successfully calmed.

Learning to regulate one's emotions, behaviours, and task-oriented capacities is a particular challenge for children with difficult temperaments, as well as for children with a variety of diagnosed disabilities, and for their caregivers. Temperament is now understood in terms of biologically-based differences in the reactivity of the central nervous system and in the capacity for self-regulation (Kagan, 2005; Kagan & Snidman, 2004; Rothbart, 2005). Infants who are particularly fussy and difficult to settle are likely to need extra help in learning to regulate their own behaviours (e.g., calm down from distress, settle for sleep).

Mastery of these early self-regulatory tasks provides a foundation for the mastery of later regulatory tasks such as understanding and regulating emotions, and regulating attention and executive functioning (Keating & Miller, 1999; Webster-Stratton & Reid, 2006).

Emotional self-regulation. The task of parents and caregivers is to help organise and give meaning to the early emotional experiences of their children by responding to their infants' emotional expressions, managing their children's feelings, and later labeling and discussing their emotional experiences (Gowen & Nebrig, 2001). As young children acquire a better understanding of emotions, they become more capable of managing their feelings. Emotion regulation is not simply a matter of learning to suppress emotions, but one of learning to deploy them effectively in relationships and while playing and learning (Gottman, 1998; Tremblay, 1999).

Attentional self-regulation. Besides learning to regulate their emotions, infants and young children need to learn to control behavior and regulate mental processes (Keating & Miller, 1999; Rothbart, Posner & Kieras, 2006; Shonkoff & Phillips, 2000). This involves the development of what is often known as executive functioning, a set of interdependent skills that are necessary for goal-directed activity. These include self-regulation, sequencing of behavior, flexibility, response inhibition, planning, and organisation of behaviour.

Just as the successful mastery of early regulatory tasks of sleeping and calming lays the foundation for the later regulatory tasks of emotional and attentional regulation, the mastery of the latter lays the foundation for the development of social skills on the one hand, and communication and learning skills on the other.

Developing communication and learning skills during early childhood

Research indicates that educational outcomes in adolescence and even beyond can be traced back to academic skills at school entry (Boethel, 2004; Shonkoff & Phillips, 2000). Academic skills at school entry can, in turn, be traced to capabilities seen during the preschool years and

the experiences in and out of the home that foster their development. Children's cognitive skills before they enter school show strong associations with achievement in primary and secondary school and during early adulthood.

Both language development and the emergence of early learning capabilities appear to be relatively resilient processes. Nevertheless, some aspects of language and cognition appear to be less resilient and more open to environmental influence than others, including vocabulary and attentional capacities. These aspects are particularly important to school success, in part because of what they can set in motion once a child enters formal schooling. They are also characterised by striking socioeconomic differences and therefore contribute to inequities in children's life chances. Moreover, the prospects for children with serious delays in language and cognition resulting from developmental disabilities and specific disorders can be seriously constrained and are heavily dependent on early detection and intervention.

In general, language learning is remarkably resilient even under extremely altered circumstances. Because the brain is 'hard-wired' to acquire language in the early years, children can develop language with relatively little environmental support. Under normal circumstances, parents do not need to arrange linguistic inputs according to a particular plan in order for language learning to proceed on course. They do not need to think about when to introduce particular syntactic constructions (e.g., questions, imperatives, passives) into the talk they use with their children. Parents across the globe seem intuitively to provide children with input that is adequate for them to learn how to talk.

However, the specific language that they learn and the quality of their language depend on specific features of the environment in which they learn language (Hart & Risley, 1995, 1999; Mayberry, Lock & Kazmi, 2002). And it is these aspects of language that are often instrumental to subsequent cognitive and social growth. Although basic language development is remarkably robust, the nature and amount of linguistic input is strongly associated with the kind of language children develop. To the extent that problems arise, it is generally not because parents are doing the wrong things, but because they are not doing enough of the right things. The more children are talked to, the more they themselves talk and the more elaborate that talk becomes. Children can be at risk in society, not because they do not have mastery of a language, but because they do not have complete mastery of the dominant language of their society, particularly at the time of formal school entry.

Early language delay does not necessarily lead to later language difficulties although nearly all those who have severe language problems later on show early delays in language. The difficulty is that we cannot yet distinguish between the two groups.

Learning how to relate to peers

The ability of young children to manage their emotions and behaviours and to make meaningful friendships is an important prerequisite for school readiness and later academic success (Bierman & Erath, 2006; Shonkoff & Phillips, 2000; Tremblay, 1999; Webster-Stratton & Reid, 2006).

Establishing relationships with other children is one of the major developmental tasks of early childhood, one which has long term implications. Most, if not all, serious adolescent and adult behavioral and criminality problems can be traced back to the preschool years. However, many children who display early warning signs of high levels of peer aggression and hostility, persistent noncompliance, and callousness to other's distress,become perfectly normal school-age children who go on to lead productive lives. We do not yet know how to distinguish between the two groups, or what form of early intervention will best serve to stabilise conduct disorders in young children. Given our current inability to reliably identify those children who will go on to develop conduct disorders, the best strategy is to foster prosocial behaviour for all children rather than trying to prevent delinquency for a few. Helping parents promote positive social behaviour in their children is therefore an effective preventive strategy.

These four developmental challenges faced by young children - forming attachments, acquiring self-regulation, developing communication and learning skills, and learning how to relate to peers – are distinguishable from one another but closely interlinked. Children with problems with any of these developmental challenges are more likely to have problems in any of the others. For example, children and young people with emotional and behavioural difficulties are far more likely to have communication problems than their peers (Cross, 2004). Again, the ability to regulate one's behaviour and to communicate effectively underpin the development of social competence (Bierman & Erath, 2006).

4. EMOTIONAL AND BEHAVIOURAL CHALLENGES IN INFANCY AND CHILDHOOD

What kinds of emotional and behavioural challenges and problems do children manifest in infancy and early childhood?

- First, there are the challenges that arise for parents and children in negotiating early developmental tasks. The main challenges involve sleeping, managing distress (crying), and feeding; and
- Second, there are the challenges that older children face in learning to regulate their behaviour. These self-regulatory difficulties manifest themselves in two forms: externalising behaviours (e.g., aggression and social difficulties), and internalising behaviours and disorders (e.g., depression and anxiety).

4.1 Emotional and behavioural challenges in infancy

There are three main challenges that face children and parents in infancy. These centre around sleeping, crying and feeding.

Sleeping

Sleep-wake patterns evolve rapidly during early development and are considered to be one of the major developmental or health concerns during this period. Parents' concerns about infant sleep problems are the most common complaint brought to physicians and maternal and child health clinics.

There are two main kinds of sleep problems during the first few years of life:

- repeated awakenings associated with crying (signaling), occurring in one to two year olds; and
- difficulty in falling asleep at bedtime with repeated requests for attention, occurring in two to three year olds.

Prevalence of sleep problems in young children. Between 20-30% of children are considered to be poor sleepers during the first three years of life. High rates of poor sleep have also been documented in preschool and kindergarten children.

Causes of sleep problems. Parent-child bedtime interactions have been consistently shown to be linked to children's sleep. It has been demonstrated that parental presence and active involvement in soothing the child to sleep are associated with an increase in reported sleep problems.

Sleep is also associated with stress and trauma in early childhood. For instance, short-term separation from the mother could result in sleep disruptions. However, contrary to common belief, not all stressors lead to disrupted sleep and there are studies that suggest that sometimes escape to sleep is the preferred mode of bio-behavioural regulation of stress.

Consequences of sleep problems. There is strong evidence to show that children experience significant daytime sleepiness as a result of inadequate or disturbed sleep, and that significant performance impairments and mood dysfunction are associated with such daytime sleepiness. For example, mood problems in children with sleep disturbances are virtually universal, particularly exacerbation of negative mood and, equally importantly, a decrease in positive mood or affect. Regulation of mood, or the use of cognitive strategies to modulate and guide emotions, also appears to be affected by sleep quality and quantity; thus, chronic poor sleep during critical periods of development of affective regulation may have long-term consequences on emotional health. Children's behavioural responses to sleepiness, although highly variable, may be broadly described as manifestations of dysregulation of arousal,

impairment of attention, and failure to inhibit inappropriate behavioural responses (poor impulse control). Higher-level cognitive functions regulated by the prefrontal cortex, such as cognitive flexibility and the ability to reason and think abstractly, appear to be particularly sensitive to the effects of disturbed or insufficient sleep. Finally, health outcomes of inadequate sleep include potential deleterious effects on the cardiovascular, immune and various metabolic systems, including glucose metabolism and endocrine function.

Sleep problems in children are also a significant source of distress for families, and may be one of the primary reasons for caregiver stress in families with children who have chronic medical illnesses or severe neurodevelopment delays. Furthermore, the impact of childhood sleep problems is intensified by their direct relationship to the quality and quantity of parents' sleep, particularly if disrupted sleep results in daytime fatigue and mood disturbances, and leads to a decreased level of effective parenting.

According to Sadeh (2003), research shows that poor or insufficient sleep leads to compromised alertness, cognitive deficits and compromised physiological functioning. Studies of school-age children have demonstrated links between poor or restricted sleep and compromised neurobehavioural functioning. Furthermore, there is a growing body of evidence suggesting that sleep-related physiological phenomena (e.g., snoring and periodic leg movement syndrome), which are prevalent in children, are associated with compromised daytime functioning.

The long-term effects of poor or insufficient sleep are not known. It has been suggested that sleep deprivation in early childhood during critical periods of brain maturation may lead to chronic adverse effects on psychosocial development. However, only limited data from longitudinal studies lend some support to this hypothesis.

Management of sleep problems. There is now a solid body of research regarding empirically-based non-pharmacologic treatment of bedtime problems and night wakings in infants, toddlers and preschoolers. These treatments are based on basic behavioural principles that reduce or eliminate some behaviours (e.g., crying) and reinforce others (appropriate bedtime behaviours). These general strategies include ignoring, differential reinforcement, shaping and behavioural chaining. Such strategies have been shown to be superior to pharmacologic treatments and more acceptable to parents and practitioners. Behavioural sleep management strategies have the further advantage of potentially generalising to the management of other daytime behavioural issues.

Implications. Sleep problems in early childhood are very persistent if not treated. Therefore, it is important to develop strategies aimed at *prevention* of sleep problems, especially in young children, through education for both parents. Furthermore, early detection of sleep problems in children necessitates the development of *systems* for age-appropriate screening and surveillance of paediatric populations.

Crying

All infants cry and all cry for a reason – whether it is pain or anger or boredom. In the first months of life, crying is particularly important as infants have relatively few effective methods of communicating their needs and states.

Aside from clear and diagnosable medical conditions, parents' primary complaint to GPs during the infancy period is that their baby is excessively fussy and cries in ways that cannot be soothed or tolerated.

Prevalence of crying problems. Crying is normally an acute, self-resolving phenomenon that can occur in spite of excellent parental care, and does not usually predict long-term problems.

Infants typically show an increase in their crying across the first three months, with a peak at around six to eight weeks of age. Importantly, crying decreases significantly around three to four months of age, coinciding with important developmental changes in affect, non-negative

vocalisations and motor behaviour. As crying is considered a normal communicative signal, developmental outcomes for children who cry within the normal range are not of concern. Excessive crying may be misattributed if the developmental course of crying is not understood.

However, some infants exceed the typical pattern of crying, such as those who cry long, hard and inconsolably during the first three months or those who fuss frequently beyond three to four months of age. It is these infants who are often believed to be 'at risk' for developmental problems.

Crying in excess of the normative rate during the first three months of life is categorised as colic. Colic is a transient condition that ends around the third to fourth month of an infant's life and appears to have few consequences for the child.

The combination of persistent crying, sleeping, and feeding problems beyond three months of age and multiple parental psychosocial risks have been found to predict poor infant social and emotional development. Such infants have more extensive disturbances, and probably differ in aetiology from cases in which crying occurs solely in the first three months, but the nature of the differences is unclear. The findings imply that infants over three months of age who cry a great deal are at risk for developing long-term socio-emotional problems.

Causes of crying problems. Crying and/or fussing frequently is a characteristic of difficult temperament but can be distinguished from colic in several ways; colic is not a stable phenomenon and it manifests itself as intense crying bouts of long duration, whereas difficult temperament is stable and is characterised by frequent bouts of fussiness.

Because of the persistence of difficult temperament more negative outcomes are likely, particularly if the parental environment is non-supportive. It appears that difficult temperament may tax parents, leading to stressful interactions and negative perceptions.

Management of crying problems. Clinicians receiving complaints of excessive crying and fussing in infants should be aware of these distinctions and seek to clarify the nature of the problem.

Interventions geared towards reducing crying by changing parenting methods have not produced reliable results. Instead, it is recommended that parents be provided with information and support regarding how to contain crying. In particular, parents need to be informed about the neurological vulnerability of infants and the dangers of Shaken Baby Syndrome.

Feeding

Feeding is a developmental skill that matures during the first two years of life (Ramsay, 2004). A feeding disorder is identified when a child is unable or refuses to eat or drink a sufficient quantity of variety of food to maintain proper nutrition (Piazza & Carroll-Hernandez, 2004).

Prevalence of feeding problems. Problems associated with eating occur in 25 to 28% of infants less than six months old, 24% of two year old and 18% of four year old children (Ramsay, 2004). Problems are particularly likely to occur when children are acquiring new skills, or challenged with new foods or mealtime expectations (Black, 2003).

Most eating habits are temporary and are easily resolved with little or no intervention. However, eating problems that persist and undermine children's growth, development, and relationships with their caregivers, lead to long term health and developmental problems (Black, 2003). Severe and chronic feeding problems occur in 1 to 2% of young children (Liu & Stein, 2005).

Causes of feeding problems. Causes of feeding disorder are varied: they are often the result of a number of interacting biological and environmental factors (Piazza & Carroll-Hernandez, 2004). Children who are at risk of developing feeding problems include:

- infants who do not provide clear signals to their caregivers or who do not respond to their caregiver's efforts to help them establish predictable routines

- infants who are premature or ill, and are less able to communicate their feelings of hunger or when they have had enough (Black, 2003).

Parents and caregivers can contribute to their children's feeding problems by pressuring them to eat or using harsh discipline practices about the amount they eat (Black, 2003).

Recommended practices. The parents should eat with children so that modelling can occur and mealtimes are viewed as pleasant and social occasions. Eating together allows children to observe their parents tasting new foods and helps them to let their parents know when they are hungry and when they have had enough, as well as enjoyment of specific foods.

4.2 Emotional and behavioural challenges and disorders in early childhood and preschool

The second set of emotional and behavioural challenges that children face arise in early childhood around the issue of self-regulation. Self-regulatory difficulties manifest themselves in two forms (Campbell, 2006):

- ***undercontrolled or externalising behaviours*** (tantrums, defiance, fighting with peers, impulsivity, and overactivity) that are outward manifestations of problems.
- ***overcontrolled or internalising behaviours*** (worry, anxiety, sadness, and social withdrawal) that represent self-focused expressions of distress.

Many problem behaviours that emerge in the preschool appear to reflect extreme variations in the development of self-regulation (e.g., tantrums, aggression, hyperactivity, inattention), social competence (e.g., cooperation with peers, following directions), and emotional expression that impair the child’s ability to function smoothly in the family, with peers, and in out-of-home settings (Campbell, 2006).

Although some young children showing these potentially symptomatic behaviours will indeed go on to have serious problems that worsen with development, the majority of preschoolers showing hard-to-manage or shy and withdrawn behaviour at home or in childcare will overcome their early difficulties (Campbell, 2006). Only a small proportion of children showing problem behaviour in early childhood will continue on a pathway towards serious adjustment problems in middle childhood.

Problems in preschool children are often evident in higher levels of negative and angry affect, non-compliance and outright defiance with parents and other adults, frequent squabbles with siblings that may include physical aggression, difficulties in the playgroup reflected in fights over toys and lack of cooperative play, and the failure to follow directions and comply with adult requests in preschool or childcare.

Such children may act without thinking, wander aimlessly in the preschool classroom, have difficulty playing alone or with others when unsupervised, and be highly active and disorganised in their play. They may also have tantrums and show oppositional behaviour. Parents may also be concerned about delayed or atypical language development which co-occurs with defiance and aggression.

On the other hand, some young children may be especially fearful, anxious, sad and socially withdrawn, although in general these problems are less likely in young children in the absence of abuse, neglect or other serious disruptions in parenting.

Prevalence studies show that many young children have mild to serious mental health problems that interfere with their daily social and environmental interactions (Bayer & Sanson, 2004). Estimates vary according to the sample and criteria used. For instance, Lavigne, Gibbons, Christoffel et al. (1996) found that 21% of preschool children met the criteria for a diagnosable disorder, with 9% classified as severe. On the basis of this and other studies, Bricker, Schoen Davis and Squires (2004) suggest a prevalence rate of between 13 to 25%. A

similar rate is identified by Bayer and Sanson (2004) who suggest that up to one young person in five will have an emotional disorder at some time during their childhood or adolescence.

Children living in poverty and high risk environments appear to be especially vulnerable, exhibiting rates that are higher than that of the general population (Qi & Kaiser, 2003; Raver, 2002).

Externalising behaviours and disorders

Externalising behaviours include tantrums, defiance, aggression, fighting with peers, impulsivity, and overactivity. These are all manifestations of poor self-regulatory behaviours.

Aggressive and violent behaviour

Prevalence of aggression and violence in children. In a synthesis of evidence regarding young children with challenging behaviours, Powell, Fixsen and Dunlap (2003) found that rates of aggressive behaviours in preschool children ranged between 8 to 25%. They recommend that, given the evidence indicating the link between aggression in the early years and later behavioural and health problems, there should be much more thorough screening of preschool children and appropriate intervention. Another review of the literature (Marshall & Watt, 1999) indicates that between 10 and 15% of preschool children have moderate to severe behavioural problems.

Development of aggression and violence in children. It is commonly believed that children become more violent as they grow older, and that adolescents are more aggressive than young children. It is also commonly believed that children learn to become physically aggressive. However, recent research has challenged both beliefs. By 12 months of age, children have the physical, cognitive, and emotional means of being physically aggressive toward others and will do so as soon as they are able (Tremblay, 2002). Children do not need to observe models of physical aggression to initiate the use of such behaviours. It appears that most children will at some point hit, bite, or kick another child or even an adult.

According to Tremblay (2002), the use of physical aggression reaches its peak between 2 and 3 years of age. By 24 months more than half of the children have been reported to use that behaviour. A difference between boys and girls starts to appear around 15 months of age. In the following years most children learn alternatives to physical aggression. In other words, children don't learn to become aggressive – they are naturally aggressive and learn to regulate their aggression. We socialise children to unlearn their aggressive behaviour patterns during the first years of life. Infancy and toddlerhood thus appear to be the best period to learn alternatives to physical aggression.

However, between 4 and 6% of children have high levels of physical aggression from early childhood to late adolescence (Moffitt, Caspi, Dickson et al., 1996; Nagin & Tremblay, 1999; Tremblay, 2002). These children can be considered to show chronic physical aggression. They are at high risk of causing injuries to others and to themselves. They are also at high risk of many other mental health conditions, school failure, substance abuse, depression, unemployment, spouse abuse, child abuse, and suicide (Campbell, Shaw & Gilliom, 2001; Marshall & Watt, 1999; Prior, Sanson, Smart & Oberklaid, 2000; Tremblay, 2002). There is some evidence that, because of their risky style of behaviour, they are also at high risk of many other health conditions such as cardiovascular problems, cancer, and brain damage.

A longitudinal study by Tremblay, Nagin, Séguin et al. (2004) identified three trajectories of physical aggression during early childhood. The first was composed of children who displayed little or no physical aggression (around 28% of the sample). The largest group (58%) followed a rising trajectory of modest aggression. Finally, a small group (14%) followed a rising trajectory of high physical aggression. Tremblay et al. (2004) conclude that most children have initiated the use of physical aggression during infancy, and most will learn to use alternatives in the following years before they enter primary school. Young children who do not learn to

regulate their aggression during the preschool years seem to be at highest risk of serious violent behaviour during adolescence and adulthood. If children normally learn not to be physically aggressive during the preschool years, then one would expect that interventions that target infants who are at high risk of chronic physical aggression would have more of an impact than interventions 5 to 10 years later, when physical aggression has become a way of life.

Precursors of ongoing physical aggression. According to Barlow, Parsons and Stewart-Brown (2005), parenting practices have been shown to be strongly associated with the development of emotional and behavioural problems in children under 3 years of age. Tremblay et al. (2004) found that children who are at highest risk of not learning to regulate physical aggression in early childhood had mothers with a history of antisocial behaviour during their school years, mothers who start childbearing early and who smoke during pregnancy, and parents who have low income and have serious problems living together. Thomas (2004) found links between harsh, punitive parenting and child aggressive behaviour, both at age 2 to 3 years and at age 8 to 9 years. Children living in punitive environments scored higher in aggressive behaviour than those living in less punitive environments at both ages. This relationship appeared for both genders, and for low-income and higher-income families. Similarly, Webster-Stratton and Reid (2006) suggest that toddlers with impulsive and volatile temperaments often overwhelm parents and interfere with developing positive parent child interactions, and that parents may respond with harsh or inconsistent discipline strategies, which exacerbate child behaviour problems.

According to Powell, Dunlap and Fox (2006), an early manifestation of atypical social-emotional development is the occurrence of challenging behaviours. While some challenging behaviours dissipate during and following the early years, others persist and even escalate, marking increasingly problematic developmental trajectories, school failure, and social maladjustment. Increasing attention has begun to focus on the early identification and prevention of challenging behaviours and on strategies for resolving such behaviours at their earliest appearance. Powell and colleagues discuss what is known about challenging behaviours in the repertoires of toddlers and preschoolers, and present a model of prevention and intervention. Although research in this area is limited, there are encouraging signs that a coordinated adoption of validated practices could substantially reduce challenging behaviours and thereby enhance the social and emotional well-being of children in today's society.

Prevention of aggression and violence. The preschool years are a sensitive period for learning to regulate physical aggression (Keenan, 2002; Tremblay, 2002). This period of childhood is the best window of opportunity for helping children at risk of becoming chronic physical aggressors to learn to regulate their behaviour, and therefore prevent adverse developmental outcomes in later life. Most interventions for children with behavioural problems are designed for school-age children. There is a strong case for early intervention with children who manifest behavioural and emotional problems in the preschool years (Keenan, 2002; MacKenzie-Keating & McDonald, 2001; Tremblay, 2002; Webster-Stratton, 2003).

Reviews of intervention programs for preschool children with behavioural problems indicated that there were many effective parent training programs (Barlow et al., 2005; Lochman, 2003; MacKenzie-Keating & McDonald, 2001). However, such programs on their own are not always effective in reducing a child's behaviour problems (MacKenzie-Keating & McDonald, 2001). This is because aggression is multidetermined and requires intervention across settings (Bryant, Vizzard, Willoughby & Kupersmidt, 1999; Campbell et al., 2001). Other reviews (Domitrovich & Greenberg, 2003; Powell, Dunlap & Fox, 2006; Webster-Stratton, 2003) support the idea that the most effective programs involve interventions across multiple settings. Thus, by working with parents, early childhood teachers, and the children themselves, early onset aggression can be reduced significantly with sustainable results (Webster-Stratton, 2003).

Treatment of aggressive behaviour. Are early patterns of aggressive behaviour irreversible? On the basis of longitudinal data, Thomas (2004) found that children who experienced parenting practices at age 8 or 9 years that were different from the parenting practices they experienced at 2 or 3 years showed behaviour changes. Thus, children whose early parenting environment had been punitive but whose environment became less so scored as low in aggressive behaviour as those whose parenting environment was non-punitive at both ages. Likewise, children whose early parenting environment had been non-punitive but whose environment became more punitive over the course of the six years scored just as high in aggressive behaviour as those whose parenting environment was punitive at both ages.

On the basis of 30 years' research in the development of aggression, Eron (1990) concluded that, without intervention, aggressive tendencies crystallised at about 8 years of age. Evidence to support this comes from studies that show that, if children with aggressive behaviour problems are not treated by 8 years, their learning and behavioural problems become less responsive to intervention and are more likely to become a chronic disorder (cited by Webster-Stratton & Taylor, 2001). This does not mean that aggressive behaviour is untreatable beyond this age. Lacourse, Côté, Nagin et al. (2002) found that aggressive behaviour could be modified after the early years (e.g., between 7 and 9 years of age), but only through intensive preventive intervention, which included parent training and social skills training.

Clinically-defined externalising disorders

Clinically-defined externalising disorders include opposition defiant disorder (ODD) and attention deficit hyperactivity disorder (ADHD) (Campbell, 2006).

Oppositional defiant disorder. Oppositional defiant disorder (ODD) is defined as the presence of four out of eight symptoms of uncooperative behaviour and negative affect (loses temper, argues, defiance or refuses to comply, deliberately annoys others, often blames others, patchy, angry, spiteful) that continue for at least 6 months and interfere with social and cognitive functioning (Campbell, 2006).

This diagnosis is clearly applicable to some 4 and 5 year olds, and even some 3 year olds with serious problems. However, children who were younger at the time of initial assessment are more likely to outgrow their problems, suggesting that this diagnosis becomes more valid by age 4 or 5, when more serious problems can be more easily differentiated from transient age-related difficulties.

Attention deficit hyperactivity disorder. Attention deficit hyperactivity disorder (ADHD) is the most commonly identified clinical problem in preschool children, and is much more common in boys. ADHD is defined in terms of six symptoms of inattention and/or six symptoms of hyperactivity/impulsivity, which must last for at least 6 months and are evident across settings.

Because young children may easily meet criteria for the hyperactive-impulsive subtype (which includes fidgeting, talking excessively, and having difficulty staying seated, taking turns and playing quietly), it is difficult to establish this diagnosis in children younger than 4 or 5 years. A diagnosis of ADHD is most likely to occur when there are also signs of cognitive deficits, poor language development, or oppositional behaviour.

Taken together, ODD and ADHD in young children tend to co-occur, and these behaviour problems are much more common in boys. Their early emergence together, especially in families with high levels of stress and negative coercive parenting, is predictive of problems that may persist to middle childhood and beyond.

Internalising (emotional) disorders

Internalising behaviours include anxiety, sadness/depression, and social withdrawal. These represent self-focused expressions of distress, and are manifestations of over-controlled self-regulatory behaviour.

Compared with externalising disorders, much less is known about the internalising disorders in young children (Campbell, 2006). This is partly because these behaviours must be more extreme than externalising behaviours to be noticed and partly because they are often short lived and transient. Nevertheless, they are not uncommon and can have long-term consequences if not addressed in childhood (Bayer & Sanson, 2004).

Kowalenko, Barnett, Fowler and Matthey (2000), identified risk factors for the development of infant mental health problems, including:

- Children who experience multiple changes of parental figures are more at risk of later psychosocial problems.
- There is a strong association between parental mental health problems and increased risk for poor child health outcomes, but this relationship is highly complex, being dependent upon other risk factors and the role of protective factors (such as the role of alternative caregivers).
- Risks for the infant increase if both parents have mental health problems. Adverse outcomes include low birth weight, impairments in language and cognitive functioning, and in physical and psychosocial functioning.

Anxiety disorders

Surveys of children and adolescents in community populations indicate that anxiety disorders are the most common childhood emotional disorders (Dadds, Seinen, Roth & Harnett, 2000; Muris, 2006). Prevalence rates in school age children range from 10 to 12% (Bayer & Sanson, 2004).

According to Dadds et al. (2000), anxiety varies along a continuum. The degree of distress and impairment of functioning determines what is normal and adaptive and what is problematic. This means that there are difficulties in deciding where normal anxiety ends and clinical anxiety begins. This is especially the case with children. Anxiety that is normal for a preschool aged child may be extreme if experienced by an adolescent.

The focus of children's fears and anxieties changes as they grow older, generally shifting from concrete external things to internalised abstract anxieties. Thus,

- Infants tend to fear strangers, loud noises and unexpected objects;
- Children fear separation from their parents, animals, loud noises, and darkness;
- Between the ages of 4 and 6, predominant fears include kidnappers, robbers, ghosts and monsters; and
- At 6 years, fears of bodily injury, death and failure develop.

The research indicates that anxiety in children is associated with significant psychosocial difficulties. Left untreated, anxiety disorders carry an increased incidence of similar disorders occurring in adolescence and adulthood.

The most salient risk factors emerging in the literature are:

- Temperamental predisposition to shyness;
- Parental anxiety or depressive problems; and
- Exposure to traumatic environmental events.

Dadds and Roth (2001) propose that the development of positive expectations about the future may be a central mechanism in the prevention of internalising disorders, such as anxiety. Children who tend to behave anxiously have internalised beliefs that they are unable to cope with or influence events. These beliefs have developed in interaction with their primary care givers. Thus, children who have a temperamental tendency towards inhibition, and whose caregivers support this tendency are likely to develop negative expectations about future situations or events. Children who later develop internalising disorders such as anxiety or

depression have not developed positive future expectations and/or a sense of control in the events of their lives. These children learn either aggression or avoidance to cope with challenges. Anxious children tend to become avoidant, and eventually develop a sense of incompetence or helplessness in the face of challenges.

Types of anxiety disorder include separation anxiety, generalised anxiety, and specific phobias.

Separation anxiety occurs in 2 to 4% of children and is the most common anxiety disorder found in children. It is defined as 'developmentally inappropriate and excessive anxiety regarding separation from home or significant figures in the child's life', and is the only anxiety disorder that it is specific to childhood. The child's reaction is beyond that expected for his or her developmental level and may at times approach the level of panic. Symptoms may include recurrent excessive distress in anticipation of separation, apprehension about harm occurring to loved ones, reluctance to go to school or away from home, nightmares involving separation, inability to be alone, or repeated somatic complaints (Campbell, 2006; Dadds et al., 2000).

Separation anxiety is most likely to emerge after a life stress such as the loss of a relative or pet, a major illness, or the move to a new neighbourhood (Campbell, 2006). Given that young children may not understand such sudden or dramatic life changes, it is not clear whether we can reasonably call separation anxiety a disorder rather than an appropriate reaction to a stressful, confusing, and/or frightening event.

Separation anxiety is a reliable precursor of panic attacks and agoraphobic states in later life (Dadds & Barrett, 2001).

Generalised anxiety is defined as 'exaggerated or uncontrollable anxiety or worry about events'. It is characterised by self-consciousness, excessive worry about future events (e.g., going to see a doctor), or about past events (e.g., something someone said), and anxiety about performance incompetence.

Specific phobias are characterised by marked fear of the specific feared object or situation which seem out of place and exaggerated beyond usual limits. The intense anxiety leads to avoidance behaviours.

Management of anxiety disorders. Dadds and Roth (2001) suggest that children with anxiety disorders can be helped by being taught problem solving skills. There are specific intervention programs to teach such skills, but the general approach can be implemented by parents and caregivers. It involves parents or caregivers not trying to solve children's problem for them, but instead conveying the message that the child's uncertainties are understood and then helping the children to come up with their own ideas for possible solutions. As a result, the child learns not only to find his/her own solutions, but also that they are competent problem solvers who can have an influence on the events in their lives.

Depression

While it used to be thought that preschool children were too emotionally immature to experience clinical depression, there is now evidence that children as young as 3 years can manifest a valid and clinically significant depression (Luby, Heffelfinger, Mrakotsky et al., 2002; Luby, Heffelfinger, Mrakotsky et al., 2003a; Luby, Mrakotsky, Heffelfinger et al., 2003b; Luby, Sullivan, Belden et al., 2006). This finding has been supported by findings of a unique and stable symptom constellation, family history of related disorders, stability of symptoms and social impairment over time (Luby et al., 2002).

Prevalence of depression. Epidemiological evidence suggests prevalence rates for depressive symptoms of 10-15% for preschool age children (Hawes, 2005). Prevalence rates of diagnosable depression have been estimated at approximately 2% in mid-childhood, and 4-7% in adolescence. While pre-pubertal boys and girls exhibit similar rates of depression, females are up to three times more likely than males to develop depression after puberty (Hawes, 2005).

Indicators of depression. One specific indicator of depression in young children is the inability to enjoy activities and play (Luby, Mrakotsky, Heffelfinger et al., 2004). Other indicators (identified by Bayer, Sanson & Hemphill, 2006) include:

- clings to adults;
- looks sad, miserable, unhappy;
- gets upset over little things;
- irritable or cranky moods;
- easily disappointed;
- tends to be fearful or afraid of new things or new situations;
- appears miserable, unhappy, tearful or distressed;
- feelings easily hurt;
- disturbed by change;
- gives no response when other children attempt to communicate;
- prefers to play alone than with other young children;
- moves away from the children's group games;
- watches the children play rather than participating; and
- shy/timid with other children.

Causes of depression. The specific causes of childhood depression are not well understood (Campbell, 2006; Hawes, 2005). The evidence suggests that there are multiple pathways to depression, and that the impact of particular risk factors on a child will depend on the presence or absence of other risk or protective factors. Hawes (2005) reports that the known risk factors for childhood depression include:

- parental depression or other psychopathology (e.g., substance abuse);
- child abuse and neglect;
- high levels of rejection/criticism in parent-child relationship;
- early parental loss (i.e. through death, separation, abandonment);
- authoritarian and controlling parenting styles;
- discordant relationships within the family; and
- socioeconomic adversity.

5. PROMOTING POSITIVE PARENTING PRACTICES

Professionals (such as GPs) can help parents of young children in several key ways:

- They can promote the concept of 'good enough' parenting;
- They can share with them their knowledge of family issues including child development and child rearing practices; and
- They can support parents to build good working relationships and partnerships with them.

5.1 'Good enough' parenting

A useful concept when working with parents is the notion of 'good enough' parenting. Hoghughi and Speight (1998) credit Winnicott (1965) as being the first to use the concept of 'good enough' parenting:

> *'In doing so he was recognising that it is unhelpful and unrealistic to demand perfection of parents, and to do so undermines the efforts of the vast majority of parents who are in all practical respects 'good enough' to meet their children's needs' (p. 293).*

They define good enough parenting as 'a process that adequately meets the child's needs, according to prevailing cultural standards which can change from generation to generation' (p. 294).

Another way of thinking about 'good enough' parenting is that it involves the provision of sufficient care and stimulation to activate children's biological capacities for attachment, adaptation to the environment, language development and socio-emotional development. These capacities are so biologically 'primed' that adequate (rather than intensive or highly sensitive) stimulation is all that is required to activate them.

What are the features of 'good enough' parenting? A synthesis of recent attempts to identify the key experiences that children need to promote their general development (Brazelton & Greenspan, 2000; Gerhardt, 2004; Goldstein & Brookes, 2002; Greenspan & Lewis, 1999; Guralnick, 1997, 1998; Ramey & Ramey, 1992, 1999; Richter, 2004; Shonkoff & Phillips, 2000; Siegel, 2001) suggests that we can best promote children's development by providing them with:

- Close and ongoing caring relationships with parents or caregivers;
- Adults who recognise and are responsive to the particular child's needs, feelings and interests;
- Adults who are able to help children understand and regulate their emotions;
- Adults who are able to help children understand their own mental states and those of others;
- Adults who are able to help children negotiate temporary breakdowns and ruptures in relationships;
- Protection from harms that children fear and from threats of which they may be unaware;
- Clear behavioural limits and expectations that are consistently and benignly maintained;
- Opportunities and support for children to learn new skills and capabilities that are within their reach;
- Opportunities for children to develop social skills through regular contact with a range of adults and other children;

- Opportunities and support for children to learn how to resolve conflict with others cooperatively; and
- Stable and supportive communities that are accepting of different families and cultures.

If these minimum conditions are met, children will develop well. They will certainly benefit from environments and experiences that are more sensitive, more stimulating, and more diverse than those provided by these conditions, but these are all they need to activate their biological capacities to develop normally.

5.2 Family issues

There are a number of aspects of family background and structure that deserve comment, since their effects on child development are often misunderstood. They include family culture, family structure, and family background.

Family cultural background

There are two questions that are frequently asked about child rearing and child development. The first is whether different cultural child rearing practices affect children's development. The second question, related to the first, is whether there is a single right way to bring up children. The answers to these two questions are linked. It is clear that the effects of culture on child development are pervasive, and that different child rearing practices lead to different developmental outcomes (Shonkoff & Phillips, 2000). In fact, there are as many right ways to bring up children as there are cultures:

> *'The remarkable diversity of infant care practices is all the more remarkable when we consider that, to a substantial degree, these diverse practices largely represent strategies for dealing with similar challenges… Throughout the world, a crucial role undertaken by the vast majority of parents is ensuring the survival, health, and safety of their children. In addition, parents typically assume a major role in encouraging their children to form social relationships, acquire skills, develop certain personal characteristics, and adopt the values and beliefs that will enable them to participate fully in their society.' (DeLoache & Gottlieb, 2000, p. 6).*

Thus, it is 'ethnocentric arrogance' to believe that one's own cultural or preferred way is the only right way (Shonkoff & Phillips, 2000). However, this does not mean that all child rearing practices are equivalent in the extent to which they promote the health and development of young children: some differences are trivial, some are matters of preference or style, and some have important consequences that may be particularly helpful or destructive to individuals or to society (Shonkoff & Phillips, 2000). Some practices can pose significant threats to children's physical or emotional well-being (e.g., using severe physical punishment to enforce obedience to authority, or imposing highly restricted diets that result in malnutrition). Thus, although there may be many different ways of rearing children successfully, there may be certain universal ways of compromising children's development. That is, the experiences that are known to be harmful to children's development are likely to be the same in all cultures – poor nutrition and health care, abuse and neglect, poor attachments, lack of stimulation.

In supporting parents from different cultures, there is a need for the health professional to recognise that their own views of what is appropriate or acceptable are shaped by their own cultural backgrounds. Culture shapes the individual's understanding of what causes particular behaviours, what behaviours and symptoms merit intervention, and what action should be taken:

> *'We know about what behaviour is developmentally appropriate only because we have a wealth of information provided by the surrounding community. Therefore, the culture of our collective communities defines what is disabled, delayed, and non-normative in contrast to what is abled, advanced, and normative.' (García Coll & Magnuson, 2000, p. 102)*

Health professional also needs to guard against making assumptions about members of particular cultural groups. Culture is not a unitary phenomenon*: 'it is as important to recognise the differences between ethnic groups as it is to recognise the diversity within each group'* (García Coll & Magnuson, 2000, p. 99). Individuals and groups differ in the extent to which they maintain their traditional cultures, and even different members of a family may differ in their levels of acculturation.

Family structure

Another frequently asked question is whether there are different outcomes for children from families with differing structures. Families have become increasingly diverse in their forms over the last couple of decades (Gilding, 2001; Golombok, 2000). These changes have raised questions about the potential impact of new family constellations on child development, with many still regarding the traditional family unit as providing the best environment for growing children.

On the basis of an extensive review of the research on the impact of family structure on children's development, Golombok (2000) concluded that there was no evidence that children growing up in non-traditional family forms are at risk of psychological harm:

> *'Just because children are conceived in unusual ways, or live in unusual family circumstances, does not necessarily mean that they are more likely to grow up psychologically disturbed. Family structure, in itself, makes little difference to children's psychological development. Instead, what really matters is the quality of family life.' (p. 99)*

This is also true of children from families with same-sex parents. On the basis of a review of the research on children with lesbian or gay parents, Tasker (2005) concluded that they were comparable with children with heterosexual parents on key psychosocial developmental outcomes.

Family background and circumstances

Another issue that is often raised about parenting and child development is the impact of family background factors and circumstances. This is often couched in terms of family risk factors, and is based on the evidence that families that have certain characteristics (e.g., poorly educated parents, teenage mothers, parents with mental health or substance abuse problems) or are living in certain circumstances (e.g., limited income, insecure housing, social isolation) are known to be more likely to experience a range of problems, including parenting difficulties (Cashmore, 2001; Werner, 2000). However, although there is an increased risk, the majority of families with such backgrounds do not develop problems, and targeting them for special attention is not necessarily the most effective way to help.

The implications of these three family issues of cultural background, structure, parental characteristics and circumstances are the same: be wary of making assumptions about families. Instead, seek to be as sensitive as possible to each individual family, to build a relationship with them that will enable the health professional to understand their circumstances and experiences, and respond to any emerging concerns they might have.

This does not mean that health professionals should ignore those factors that are known to put families at risk, particularly when families are experiencing many at once. There should be an awareness of any factors that may compromise positive parenting and the health professional should be ready to provide help if any problems do emerge. But, as explained earlier, it is not necessary or appropriate to single families out for special attention on the basis of risk factors. Instead, special attention should be provided in response to expressed parental concerns.

5.3 Supporting parents

The ability of GPs to support parents of young children is critically dependent upon the nature of the relationship they develop, not just their medical knowledge (Moore, 2006). Developing positive relationships depends upon two sets of skills:

- Communication and helping skills; and
- Family-centred care and partnerships skills.

Communication and helping skills

There is good evidence that the quality of doctors' interviewing skills in medical consultations influences patient satisfaction and compliance as well as actual health outcomes (Di Blasi, Harkness, Ernst et al., 2001; Nobile & Drotar, 2003; Stewart, Brown, Boon et al.,1999; Stewart, Brown & Weston, 1989). For instance, on the basis of a systematic review of the research, Di Blasi et al. (2001) concluded physicians who adopt a warm, friendly, and reassuring manner are more effective than those who keep consultations formal and do not offer reassurance.

The importance of doctors' communication skills is highlighted in a review by Stewart et al. (1999). They found that complaints and malpractice actions about doctors are usually due to communication problems rather than issues of technical competency. They also found that effective communication promotes patient adherence to recommended treatment plans, and has a generally positive effect on actual patient health outcomes such as pain, recovery from symptom, anxiety, functional status, and physiologic measures of blood pressure and blood glucose.

Nobile and Drotar (2003) also reviewed studies of the correlates of effective parent-provider communication and relevant interventions. They found that effective parent-provider communication is associated with parental satisfaction with care, adherence to treatment recommendations, and enhanced discussion of psychosocial concerns. Moreover, interventions designed to improve parent-provider communication resulted in more discussion of psychosocial concerns, better recall of information from the visit, and improved parent-provider communication.

What are the qualities of effective doctor-parent communication? According to Stewart et al. (1999), the evidence indicates that the key features of effective communication involve:

- Providing the patient with clear information;
- Reaching agreement on goals and expectations;
- Encouraging the patient to play an active role; and
- Providing positive affect, empathy and support.

Family-centred care and partnership skills

The second set of skills essential for positive doctor-parent relationships are skills in establishing partnerships with parents and in delivering family-centred care. The principles of family-centred care (American Academy of Pediatrics Committee on Hospital Care, 2003; Shelton & Stepenek, 1994) and patient-centred care (Little, Everitt, Williamson et al., 2001) are well established. Family-centered care is based upon collaboration among patients, families, physicians, nurses, and other professionals for the planning, delivery, and evaluation of health care as well as in the education of health care professionals (American Academy of Pediatrics Committee on Hospital Care, 2003). These collaborative relationships are guided by core principles, including:

- Respecting each child and his or her family;
- Honouring racial, ethnic, cultural, and socioeconomic diversity;
- Recognising and building on the strengths of each child and family;
- Supporting and facilitating choice for the child and family; and
- Collaborating with families at all levels of health care.

According to Brown, Stewart and Tessier (1995), the main domains of patient-centred care are:

- Exploring the experience of disease and illness - patients' ideas about the problem, feelings, expectations for the visit, and effects on function;
- Understanding the whole person - personal and developmental issues (e.g., feeling emotionally understood) and the context (the family and how life has been affected);
- Finding common ground (partnership) - problems, priorities, goals of treatment, and roles of doctor and patient;
- Focusing on health promotion - health enhancement, risk reduction, early detection of disease; and
- Enhancing the doctor-patient relationship - sharing power, the caring and healing relationship.

Some people may value or benefit more than others from such a patient-centred approach. In a large-scale study, Little et al. (2001) explored patients’ preferences for patient-centred consultation in general practice. They found that, from the patients' perspective, there are at least three important and distinct domains of patient-centredness:

- Communication;
- Partnership; and
- Health promotion.

While most patients wanted such an approach more than they wanted a prescription or an examination, those who were vulnerable - either psychosocially or because they were feeling particularly unwell – expressed a stronger preference for patient-centred care.

Health care based upon such principles have been shown to be beneficial to patients. According to the American Academy of Pediatrics Committee on Hospital Care (2003), there is evidence that family-centered care can:

- Improve patient and family outcomes;
- Increase patient and family satisfaction;
- Build on child and family strengths;
- Increase professional satisfaction;
- Decrease health care costs, and
- Lead to more effective use of health care resources.

GPs can help parents of young children by sharing their expertise with them. Obviously, GPs have expert knowledge of the medical and physical care of children, and parents and children will need to access this expertise at various times. GPs need to recognise that parents possess a complementary expertise: they know their own children and their family circumstances better than the GP ever will. Best results in the care of young children result when these two sets of expertise are pooled through parent-professional partnership.

6. EARLY IDENTIFICATION OF EMOTIONAL AND BEHAVIOURAL PROBLEMS

The evidence reviewed clearly indicates that intervention early in children's lives is much more likely to be effective in preventing or ameliorating emotional and behavioural problems in children. To switch the focus of services to early childhood, we need to consider:

- The issues involved in early identification of emotional and behavioural problems;
- The important role that parents can play in monitoring children's development; and
- What kind of specialist help is available for children and parents.

6.1 Identifying when behaviours/emotions are a concern

Once maladaptive behaviours develop, they tend to be resistant to change or lead to more severe problems (Kauffman, 1999; Loeber & Farrington, 1998; Squires, 2000). Prevention and early intervention are more effective and less expensive than efforts to treat established problems. Both approaches depend upon early identification (Costello, Egger & Angold, 2005; Raver, 2002; Shonkoff & Phillips, 2000).

When should a particular behaviour be considered a problem? This important question can be answered in two ways:

- If a parent expresses concern about a particular behaviour, regardless of the nature or severity of the behaviour, then it should be regarded as a problem requiring appropriate action. The action may take many forms, from reassurance to referral, but the parental concern should always be taken seriously.
- If a particular behaviour meets certain criteria, then it should be regarded as a possible precursor of developmental behavioural problems, and therefore needs specialist intervention.

Distinguishing between transient behavioural problems and social-emotional disturbance can be tricky (Campbell, 2006):

- Most children will show some problematic behaviour at some point in early development, whether it is excessive shyness, finicky eating, clinginess, a high level of activity, or tantrum behaviour. These behaviours are often precipitated by developmental transitions and challenges.
- However, many of these behaviours that are common and relatively transient in most young children also define more serious problems that may merit mental health intervention: oppositional defiant disorder, attention deficit hyperactivity disorder, and separation anxiety disorder.
- Because the line between typical and transient behaviours and serious problems is blurred, it is important not to over-pathologise what are essentially typical transient behaviours in preschool children. However, it is also important wherever possible to identify serious problems as they emerge.

What criteria can be used to distinguish transient behavioural problems from social-emotional disturbance? Parlakian and Seibel (2002) suggest that that children's behaviour should be explored further if the behaviour:

- Is unusual for the child or causes parents and other caregivers to perceive the child as 'difficult';
- Makes satisfying interactions with others difficult;
- Is observed in multiple settings by multiple people; and
- Persists over time.

Campbell (2006) proposes a definition of disorder in young children that includes:

- A *cluster* of symptoms that have been troublesome for some time (to differentiate the behaviour from a normative reaction to a stressful event or change);
- Is evident in more than one situation or setting (e.g., home and childcare) and across relationships (e.g., parents and caregivers);
- Is relatively severe; and
- Is likely to impede the child's ability to negotiate the important developmental tasks necessary for adaptive functioning in the family and peer group.

In addition, serious problems may sometimes be a sign of ongoing difficulties in the caregiving environment.

Thus, it is not the presence of specific problem behaviours that differentiates normal from abnormal, but their *frequency, intensity, quantity, constellation, social context*, and *implications for future development*.

Thus, for example, tantrums would be interpreted as merely a transient developmental phenomenon if they were apparent in the preschool-aged child with few other problems, and especially if they occurred primarily in specific stressful or challenging situations, such as when the child was overtired, or soon after the birth of a sibling or after another life transition. On the other hand, tantrums might be considered symptomatic of a more serious and potentially more persistent problem if they occurred frequently, were intense, the child was difficult to control in other settings, and was showing a general pattern of non-compliance, aggression and poor regulation of negative affect. In this situation, referral to a mental health provider would be appropriate.

6.2 Parents as partners in monitoring children's development

Family involvement in monitoring children's development and identifying emerging social-emotional problems has been identified as an element in early identification (Bricker et al., 2004; Glascoe, 1997, 1998, 1999; Squires, 2000). Drawing upon their unique knowledge of their children, parents are able to accurately screen their children for developmental problems (Squires, Bricker & Twombly, 2002).

Squires (2000) identified the following advantages of using this approach:

- Parents possess a wealth of information about their children that is not accessible to professionals during a brief examination or visit;
- Using parents to screen their children is cost-effective;
- Parent's knowledge about child development in general and their own child's development in particular may be enhanced by completing questionnaires;
- Parental involvement is consistent with family-centred practice; and
- Professionals may benefit by gaining a clearer idea what the parents' concerns are.

Glascoe, Foster and Wolraich (1997) compared the efficiency and cost effectiveness of various approaches to early detection of developmental disabilities. They found that, when the long-term costs and benefits were considered, none of the approaches were markedly superior to another. However, when viewing the short-term costs, the various screening approaches differed markedly: measures using parental concerns were by far, less costly than those using trained psychologists to administer and interpret.

One simple parent-completed questionnaire that has been validated for Australian conditions is the Parent Evaluation of Developmental Status (PEDS) (Glascoe, 1997, 1999; Wake, Gerner & Gallagher, 2005). This is now being adopted by many Australian services as the preferred tool for helping front-line service providers, such as maternal and child health nurses and GPs, to work in partnership with parents in monitoring their children's development.

6.3 Forms of help

If the support that a GP can offer is insufficient to meet the parent's need for help, or if the child's behaviour is clearly problematic, the best course of action is to discuss alternative forms and sources of help with the parent.

Forms of help can be seen as forming a hierarchy of services that vary in intensity according to the severity of the problem. One such hierarchical model (from Powell et al., 2006) depicts a hierarchical framework encompassing four levels of prevention and intervention activities and practices that promote children's healthy social and emotional development within home and early education and care environments (see Figure 1).

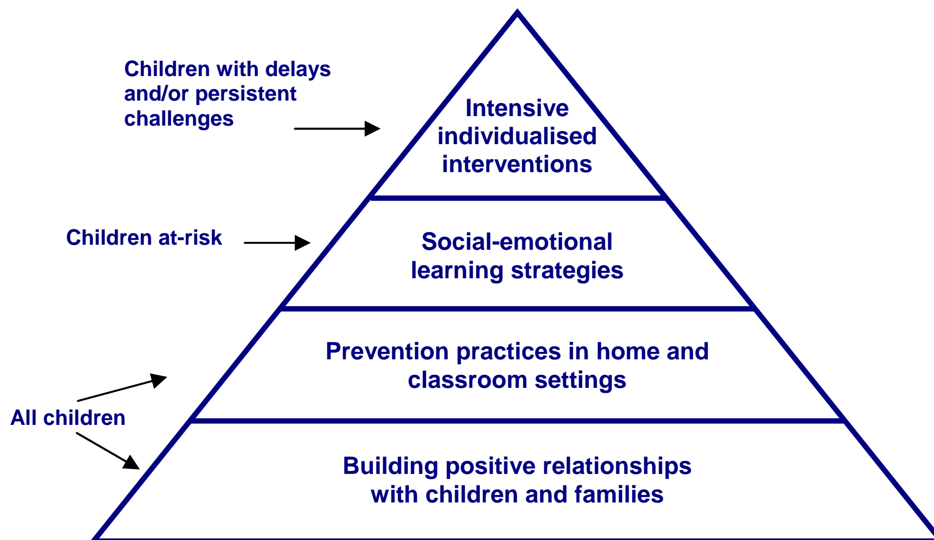

Figure 1. A model for promoting young children's social competence and addressing challenging behaviour

This framework is based upon a public health model for prevention in which universal or primary prevention strategies are applied to the general population in an effort to reduce the incidence of a problem before it occurs. Interventions at the secondary level target the population at risk for disease or harm, and tertiary interventions focus on individuals who have been affected by disease or harm.

- The first two levels represent the supports needed by all young children to promote social and emotional competence and should be available universally, for all young children.
- The third level denotes the broader and more specialised services and strategies targeted to young children who are at risk for challenging behaviour.
- The top portion of the triangle represents the intensive services and supports needed by the small percentage of young children who display severe and persistent behaviour challenges.

Forms of help available to parents include:

Parenting courses. These may address general parenting issues or be more specifically focussed on behavioural management.

Parent-child interaction training. This form of intervention focuses on the interactions between parent and child and aims to build more secure attachments and more positive interactions.

Intervention programs. Proven and promising intervention programs are described in the next section.

GPs need to familiarise themselves with the services that are available to help parents whose children are presenting significant social, emotional and behavioural problems. Sources of help include:

Parenting programs. These may be run by various services and organisations, including community health services, family support agencies, and specialist programs (e.g., sleep or feeding programs).

Family support programs. These provide a range of support services that address the wider factors (e.g., housing, finances, family violence) that may be undermining the parents' care and management of their children.

Child and Mental Health Services. These are specialist mental health services for children with significant social-emotional problems.

7. PROVEN AND PROMISING INTERVENTION PROGRAMS

Research on strategies for dealing with behavioural problems has generally been restricted to programs targeting children with early signs of a behaviour disorder or with an established disorder. Behavioural training programs (with the parent, child or both) have been shown to be effective in reducing children's behavioural problems and improving behaviour over time. The training programs presented in this section have been categorised in the following way:

Universal (offered to all children)

- parent training programs

Children at risk

- parent-only training programs
- parent and child training programs
- child-only training programs

Children with behavioural disorders

- parent-only training programs
- parent and child training programs.

7.1 Summary of the evidence on behavioural training programs

Behavioural training programs for parents only, and for children and parents, have been shown to be successful in addressing behavioural problems for children at risk of developing a behavioural disorder and those who have an established disorder. Effects are sustained over time for some programs. Universal parent training is in its early stages but initial reports suggest positive effects on children over a 12-month period and have resulted in positive feedback from parents and professionals.

Table 2 summarises levels of evidence and effectiveness of behavioural training interventions. Table 3 summarises studies focusing on interventions for behaviour problems in children of various ages. Tables 4 through 7 provide more detailed information about these studies, again presented according to age group and level of individual risk: 8-15 months, universal programs (Table 4); 3 years 'at risk' (Table 5); 3 years and older 'at high risk' (Table 6); and 3 years and older with a behavioural disorder (Table 7).

The information provided here, and in subsequent tables, has been adapted from the *Behaviour Problems Practice Resource* produced by the Centre for Community Child Health (available to download at http://www.rch.org.au/ccch/research/index.cfm?doc_id=9710). The resource also provides a more comprehensive analysis of studies focusing on interventions targeting behaviour problems in children, as well as information about specific programs such as *Toddlers Without Tears* (see also Hiscock, Bayer & Wake, 2005) and *Triple P: Positive Parenting Program* (see also Sanders, 1999; Sanders, Connell & Markie-Dadds, 2004; Sanders & Markie-Dadds, 1996).

Table 2. Summary of the levels of evidence and effectiveness of behavioural training programs

Age group	*Intervention focus*	*Recommended intervention*	*Evidence*	*Effectiveness*
Children 8 to 15 months	Universal	Parent-only program – *Toddlers Without Tears:* training program that educates parents about what they can do to develop a warm, positive relationship with their child, encourage desirable behaviour and discourage undesirable behaviour.	**Requires more study**	**Unknown benefits**
Children three years	At risk	Parent-only programs – *Triple P:* parenting strategies related to behaviour ranging from basic assistance, through self-delivered instruction, to one-on-one involvement with a clinician.	**Strong to good**	**Beneficial**
Children three years and older	At risk	Parent-only programs – parenting strategies focusing on effective discipline through observing children's play, video modelling of good parenting and group discussions.	**Strong to good**	**Beneficial**
		Parent and child programs – designed for children at risk of developing a behavioural disorder; children are offered real-life situations to develop their behavioural skills and parents are taught parenting and interpersonal skills in small groups.	**Strong to good**	**Beneficial**
		Child-only programs – group training on strategies to deal with issues relating to poor social interactions, conflict resolution and increasing use of empathy.	**Requires more study**	**May be beneficial (promising)**
Children three years and older	With established behaviour disorders	Parent-only programs – clinician-delivered parenting training focused on children's behaviour, including guidance on what constitutes age-appropriate responses to misbehaviour.	**Fair**	**May be beneficial (promising)**
		Parent and child programs – parenting strategies relating to children's behaviour delivered in group situation involving coaching of parents to give appropriate instruction while children play.	**Fair**	**May be beneficial (promising)**

Table 3. Summary of intervention studies

Age group	*Intervention focus*	*Focus of study*	*Author*
Children 8 to 15 months	Universal	Parent training program: individual and group	Hiscock, Bayer & Wake (2005) Hiscock, Bayer & Wake (in press)
Children three years	At risk	Parent training program: individual	Williams, Silburn & Zubrick (1996) Sanders, Connell & Markie-Dadds (1994) Sanders & Markie-Dadds (1996)
Children three years and older	At high risk	*3-6 year olds*	
		Parent and child training program: individual	Forehand & McMahon (1981) McMahon & Forehand (1984) McMahon (1994)
		3-8 year olds	
		Parent training program: group	Webster-Stratton (1981, 1982, 1990, 1992) Webster-Stratton, Hollinsworth & Kolpacoff (1989) Webster-Stratton & Hancock (1998)
		4-8 year olds	
		Parent and child training program: group	Webster-Stratton & Hammond (1997)
		6 year olds	
		Parent training program: group and individual	Cunningham, Bremner & Boyle (1995)
Children three years and older	With established behaviour disorders	*3-6 year olds*	
		Parent and child training program: group	Schuhmann, Foote, Eyberg et al. (1998)
		3-6 year olds	
		Parent training program: group and individual	Webster-Stratton (1984)
		3-12 year olds	
		Parent training program: individual	Patterson, Reid & Dishion (1992) Dishion, Patterson & Kavanagh (1992)

7.2 Key findings

Parent-only programs have the strongest empirical support. A number of randomised controlled trials support their effectiveness and demonstrate their long-term benefit. Such programs are effective in treating children at risk, at high risk of developing a behavioural disorder, and those with a behavioural disorder.

Randomised controlled trials support the immediate and sustained effect of parent and child programs, although there are fewer studies.

Empirical evidence for the effectiveness of child only programs is limited; however, initial findings are promising.

For 3 year olds at risk:

- *Triple P* has been effective in lowering levels of aggressive behaviour in children, improving parents' discipline strategies, increasing marital satisfaction and decreasing family stress.
- There is no indication that any one strategy (e.g., informational or intensive one-on-one instruction) is better than another.
- Some support exists for the maintenance of changes in follow-ups after 12 months.

With 3 to 8 year olds at risk:

- Parent-only programs have been effective in reducing behavioural problems, with group programs found to be more effective than individual ones when directly compared in one study (Cunningham, Bremner & Boyle, 1995).
- Parent and child programs have been found to be effective in bringing about a range of positive outcomes including: problem behaviour returning to norms for age; increasing social competence and emotional adjustment; and improvements in interactions with parents, academic performance, problem solving and conflict management. Both group and individual programs (Forehand & McMahon, 1981; McMahon, 1994; McMahon & Forehand, 1984) have been effective.
- The child-only program was effective in improving problem solving and conflict management in one study.

With 3 to 9 year olds with a behavioural disorder:

- Both parent-only programs and parent and child programs have been effective in bringing about more compliant behaviour.
- There is insufficient data on the long-term effects of these programs.

7.3 General research findings on parent training programs

Irrespective of whether parents participated in training alone, in conjunction with their child, in parallel sessions with their child or only their child had training, positive outcomes resulted consistently. This result was achieved with both basic and intensive training, group and individual training, and for children of varying ages and with a range of problems. The clinical significance of the findings has also been established, with effects being maintained over long periods.

When the strength of the evidence is considered in combination with the knowledge that strong links have been established between early behavioural problems and deviance later on in life, for example, substance abuse, antisocial behaviour, and crime (see Nixon, 2002 for a review of parent training programs), the case for intervening in children's behavioural problems is compelling.

Selection of children for intervention should be based on careful consideration of the family and social environment. Research has shown that children with a behaviour disorder are likely to show symptoms of the disorder across a range of settings. Parents of these children are therefore best suited to programs such as Webster-Stratton's that involve children's teachers as well as parents in efforts to encourage more appropriate behaviour (Webster-Stratton & Hammond, 1997).

Some children's problems are deeply entrenched in the typical way their family relates and functions. In such cases, the comprehensive *Triple P Program* would be appropriate as it targets family problems as well as providing parent training (Sanders, 1999).

The content of advice and provision of support appear to be the key determinants of the success of behavioural training programs. All programs included in the overview that have been found to be effective in reducing children's behavioural problems have an underlying behaviour modification basis. In addition, most programs have the element of support from therapists or other parents embedded in their structure.

An early intervention program such as *Toddlers Without Tears* is likely to be most effective when children are between 8 and 15 months. From 8 months of age children become more active and autonomous, and opposition to others' requests begins to occur. Also between 10 and 24 months is when many parents become concerned about helping their children become aware of what is desirable and undesirable behaviour. This suggests that an ideal time for parents to begin training in appropriate and effective strategies of behaviour management is between 8 and 15 months (Hiscock et al., 2005).

In rural areas it may be difficult for parents to attend programs; therefore, information booklets may be the most appropriate intervention. Where more assistance is required to maintain parents' motivation and tailor the information to their child's specific problem, support calls can be made to the families' homes (Sanders et al., 1994).

Table 4. Parent training programs for children 8–15 months: Universal intervention focus

Study	Participants	Intervention	Program description	Results	Comments
Hiscock, Bayer & Wake (2005)	57 mothers of infants attending their 8 month health care visit	Universal program – all children of parents attending primary health care facility at 8 month visit	***Toddlers Without Tears*** A parent training program that educates parents about what they can do to develop a warm positive relationship with their child, encourage desirable behaviour and discourage undesirable behaviour 8 month visit involved individual consultation with health nurse 12 month visit involved group session with parent handouts 15 month visit involved group session with parent handouts	Strategies to encourage positive behaviour in young children were rated as 'quite useful' by 89% of mothers and strategies to manage undesirable behaviour 'extremely useful' by 91% of mothers. Mothers who attended the program were less likely to report continuity of difficult child behaviour from 8 to 18 months of age.	Barriers to implementation included lack of after-hours sessions and child care.
Hiscock, Bayer & Wake (in press)	Parents of children 8–15 month olds 734 families in six local government areas 40 maternal and child health nurses trained	Universal program – all children of parents attending primary health care facility at 8 month visit	***Toddlers Without Tears*** A parent training program that educates parents about what they can do to develop a warm positive relationship with their child, encourage desirable behaviour and discourage undesirable behaviour 8 month visit involved individual consultation with health nurse 12 month visit involved group session with parent handouts 15 month visit involved group session with parent handouts	Results available late 2006	

Table 5. Parent training programs for children three years: At risk intervention focus

Study	Participants	Risk factors	Program description	Results	Comments
Williams, Silburn & Zubrick (1996)	Parents of 3 year olds Intervention group (I) - 900 families Control group (C) - 700 families (Parents in groups of 10)	Preschool behavioural problems Coercive parenting Marital conflict Parental depression Socioeconomic disadvantage	***Triple P*** I: 4 weeks of training with a health professional and 4 weeks of support calls *or* I: 12 weekly sessions in a clinical setting and home visits with a clinical psychologist C: usual care	Improved child behaviour and parenting practices significantly Significant reduction in maternal depression and family stress and increased marital satisfaction Maintained improvement at 12 months follow-up	All intervention families did Intervention 1 but not Intervention 2. Control group families matched for socioeconomic disadvantage.
Sanders, Connell & Markie-Dadds (1994)	Parents of 3 year olds Intervention group - 20 families Wait list control group - 20 families (Wait list control parents went on waiting list for intervention after the study)	Preschool developmental behavioural problems Children at risk of conduct problems	***Triple P*** I: 10 weeks of self- directed information and 10 weekly support calls	Significant reductional problems (parent report) Improved parenting skills and increased wellbeing	
Sanders & Markie-Dadds (1996)	300 parents of 3 year olds assigned to one of three intervention groups and 1 wait-list control group	Preschool developmental behaviour problems Parents with children at risk of conduct problems Marital conflict and depression	***Triple P*** I: Self-directed instruction for 10 weeks I: Intensive behavioural parent training and home visits I: Parent behavioural training and intensive therapist-directed program for family problems	All three interventions lowered: • levels of aggressive behaviours in children • use of coercive and overactive discipline strategies • parental depression and increased : • parenting competence	83% completed the intervention

Table 6. Parent training programs for children 3 years and older: High risk intervention focus

Study	*Participants*	*Risk factors*	*Program description*	*Results*	*Comments*
Forehand & McMahon (1981) McMahon & Forehand (1984) McMahon (1994) *Follow-up:* Baum & Forehand (1981) Long, Forehand, Wierson & Morgan (1994)	47 children 3 to 8 years old (and their parents)	Child non-compliance Poor parenting skills	Intervention: 8 to 10 individual sessions for parents and child with therapist	Intervention children followed up long term (6 months to 14 years later) were within norms for: internalising and externalising behaviours, social competence, emotional adjustment, relating to parents and academic performance	Maintained changes into adolescence and early adulthood
Webster-Stratton (1981, 1982, 1990, 1992) Webster-Stratton, Hollinsworth & Kolpacoff (1989)	Intervention group - 114 parents of children 3 to 8 years Assigned to 3 intervention groups Wait list control group	Conduct problems Poor parenting skills Parent anger, depression, poor communication	10 or 12 two-hour sessions in groups of 10 (5 parents in a clinical setting led by a therapist or parents in a group without a therapist) Group 1: Videotape modelling and discussion Group 2: Parent management training - no videos but therapist-led Group 3: Videotape modelling and self-administered parent sessions	Two thirds of children in all interventions achieved normative levels of behaviour Parent satisfaction higher in video-modelling discussion group	Most cost effective was self-administered program At one year follow-up behaviour improved most in Group 1 although all maintained improvement over time
Webster-Stratton & Hancock (1998)	Parents of children 4 years old enrolling children in 9 community-based Head Start programs N=394 either intervention or control (9 centres randomised to intervention or control group)	Poor parenting Poor child social competence Child behaviour problems Socio-economic disadvantage	8 to 9 weeks of two-hour sessions of groups of 8-16 parents Videotape vignettes of parenting skills, group discussion, problem solving and teaching positive discipline strategies and effective parenting skills	Immediate result was significant reduction in critical remarks by parents and more positive parenting. Children more socially competent and displayed more positive affect and less non-compliance. Parents more involved with child's education	12-18 months post intervention results maintained and less harsh and more consistent discipline evident.

Table 6 (continued)

Study	Participants	Risk factors	Program description	Results	Comments
Webster-Stratton & Hammond (1997)	97 parents and children (4 to 8 years old) assigned to 1 of 3 intervention groups	Early onset of behaviour problems Non-compliance Aggression Oppositional behaviour	1. Child training: 22 weekly two-hour sessions in groups of 5 to 6 2. Parent training: 22-24 weekly two-hour sessions led by a therapist in groups of 10-12 parents 3. Combination parent and child training	Child and combined training produced better problem solving and conflict management skills in children Parent training and combined training produced more positive parent-child interactions.	Findings also revealed that mothers in the intervention group made fewer criticisms and demands than mothers in the control group
Cunningham, Bremner & Boyle (1995)	Intervention group - 3,564 families of children aged 6 years (assigned to 1 of 2 intervention groups) Wait list control group	Disruptive behaviour	12 weekly sessions for parents in clinic setting *or* 12 weekly sessions in groups in community setting	Community-based group programs had greater improvement in behavioural problems at home 6 month follow-up: behaviour improvement in community-based group better maintained	Parents of children with severe problems and culturally and linguistically diverse families more likely to enrol in community-based than clinic-based intervention

Table 7. Parent training programs for children 3 years and older: Behaviour disorder intervention focus

Study	*Participants*	*Behaviour*	*Program description*	*Results*	*Comments*
Schuhmann, Foote, Eyberg et al. (1998)	64 children 3 to 6 years old (and their parents) with clinic-referred behavioural problems Assigned to intervention or wait-list control group	Behavioural problems, oppositional behaviour	Intervention: Weekly one-hour group sessions of child-directed interaction; parents taught non-directive play skills through modelling and instructions using ear-piece coaching; parents learned to give age appropriate instruction	More positive interactions between parent and child Greater compliance Decreased parental stress	41% dropped out from the intervention group and treatment stopped when problems resolved or parents had mastered skills (mean *n* sessions = 13)
Webster-Stratton (1984)	35 mothers of children 3 to 8 years randomly assigned to: individual therapy (n=13) therapist-led group (n=11) or wait list controls (n=11)	Clinically referred Children had oppositional disorder	Individual therapy with live role play. Parent wears 'bug-in-ear' to receive directions from therapist on positive parenting strategies to try with the child Therapist-led group using videotape modelling	Both interventions were more effective than the control group	Post-treatment assessments at one year maintained differences between control and intervention group
Patterson, Reid & Dishion (1992) Dishion, Patterson & Kavanagh (1992)	Intervention group - 46 parents of children 3 to 12 years with socially aggressive behaviour Wait list control group - waiting list	Social aggression (temper tantrums, biting, hitting)	17 hours over weekly sessions with trained therapist	63% reduction in child behavioural problems 75% success with 3-9 year olds, only 25% success rate with older children	Manual provided for therapist

8. RESOURCES

8.1 Resources for professionals

Child development

The Talaris Institute website has an outline of children's developmental timelines: http://www.talaris.org/timeline.htm

This research-based timeline is organised by the child's age. It serves as a general guide to the ways a child grows, from birth to 5 years.

- Social-emotional: how children feel and how they learn to relate to others;
- Cognitive: how children learn and think;
- Language: how children learn sounds, words, and sentences; and
- Sensory: how children hear, see, taste, smell and feel.

Child developmental problems

Kid's Health Info (KHI) on the Royal Children's Hospital website (www.rch.org.au/kidsinfo/) has six sleep fact-sheets for parents:

- Night terrors (night-time wakings)
- Bedtime problems (preschool)
- Night waking (6-18 months)
- Childhood obstructive sleep apnoea (OSA)
- Sleep walking
- Night-time worries (school age children).

For articles on a range of topics relating to early child development see R.E. Tremblay, R.G. Barr, & R. De V. Peters (Eds.). *Encyclopedia on Early Child Development.* Montreal, Quebec: Centre of Excellence for Early Child Development. Available online at http://www.excellence-earlychildhood.ca/home.asp?lang=EN

Child behavioural problems

The Centre for Community Child Health has developed a number of *Practice Resources* for professionals that summarise the research evidence and outline practical strategies on key early childhood topics. Those of particular relevance for the management of child behavioural and other problems are:

Behaviour Problems Practice Resource
http://www.rch.org.au/ccch/research/index.cfm?doc_id=9710

Settling and Sleep Problems Practice Resource
http://www.rch.org.au/ccch/research/index.cfm?doc_id=9705

Eating Behaviour Problems Practice Resource
http://www.rch.org.au/ccch/research/index.cfm?doc_id=9728

The Centre for Community Child Health has also prepared a series of *Policy Briefs* on key early childhood topics. Of particular relevance are:

Early childhood and the life course (CCCH Policy Brief 1, 2006).
http://www.rch.org.au/emplibrary/ccch/PB1_Earlychood_lifecourse.pdf

Services for young children: An integrated approach (CCCH Policy Brief 4, 2006).
http://www.rch.org.au/emplibrary/ccch/PB4_Children-family_services.pdf

Childhood mental health: promotion, prevention and early intervention (CCCH Policy Brief 5, 2006)
http://www.rch.org.au/emplibrary/ccch/PB5_Childhood_mental_health.pdf

8.2 Books for parents

There has been a shift in the tone and focus of parenting books in recent years. Rather than focusing on behavioural problems and how to win battles with children, there has been a much greater focus on building happy and resilient children. Recommended titles that use this positive approach include the following:

Apter, T. (1997). *The Confident Child: Raising Children to Believe in Themselves.* New York: W.W. Norton.

Christopherson, E.R. & Mortweet, S.L. (2002). *Parenting That Works: Building Skills that Last a Lifetime.* Washington, DC: American Psychological Press.

Hallowell, E.M. (2003). *The Childhood Roots of Adult Happiness: Five Steps to Help Kids Create and Sustain Lifelong Joy.* New York: Ballantine Books.

Mamen, M. (2005). *The Pampered Child Syndrome: How to Recognize it, How to Manage it, and How to Avoid it - A Guide for Parents and Professionals.* London: Jessica Kingsley.

Martin, P. (2005). *Making Happy People: The Nature of Happiness and its Origins in Childhood*. London: Fourth Estate.

Nichols, M.P. (2004). *Stop Arguing with Your Kids: How to Win the Battle of Wills by Making Your Children Feel Heard.* New York: Guilford Press.

Sanders, M.R. (2004). *Every Parent: A Positive Approach to Children's Behaviour.* Melbourne, Victoria: Penguin Australia.

Seligman, M.E.P. (1995). *The Optimistic Child: A Revolutionary Approach to Raising Resilient Children.* Sydney, NSW: Random House Australia.

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