# The mental health care needs of children in out-of-home care:

## A report from the expert working committee of the Faculty of Child and Adolescent Psychiatry

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**Royal Australian and New Zealand College of Psychiatrists**

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## PREFACE

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For the purposes of this report, children refers to children and adolescents aged 0-17 years in out-of-home care.

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## INTRODUCTION

The number of children aged 0-17 years in out-of-home care has increased substantially over the past decade in Australia[1] and New Zealand.[2] Studies from the US and Australia show that these children experience high rates of complex developmental and mental health problems.[3,4,5,6]

The United Nations Convention on the Rights of the Child emphasizes that every child has the right to basic services and to equity of opportunity to enable them to achieve their developmental potential.[7] As signatories to the Convention, Australia and New Zealand report regularly to the Committee on the Rights of the Child on measures taken to address children's rights. In response to the last report submitted by Australia, the Committee noted the plight of children in out-of-home care, in particular the inadequate health services provided for them.[8]

The Royal Australian and New Zealand College of Psychiatrists (RANZCP) has a responsibility to advise on and advocate for appropriate mental health care for children in out-of-home care to assist them to achieve their full potential as healthy adults.

The Australian National Reform Agenda argues that investment in child development is essential to establish high quality, competent populations to build and sustain democratic and prosperous communities.[9]

The early years of child development are critical, particularly in brain development, and set trajectories that affect physical and mental health, learning and behaviour throughout the life cycle. Research indicates that for chronically maltreated children who require long-term out-of-home care, permanent placement as early as possible offers them the best prospects for achieving their developmental potential. The challenge is to differentiate accurately these children from other at risk children.[5,10]

The aims of this report are to acknowledge formally the high prevalence of mental health problems amongst children in out-of-home care in Australia and New Zealand, to explore the issue broadly and identify the outcomes that need to be achieved to provide optimal mental health care to these children.

A population health approach is used to discuss the critical components that need to be considered in meeting the mental health needs of children in out-of-home care. These components are based on a framework developed in the US following a review of the provision of comprehensive health services to children in out-of-home care in thirty five states between 1999 and 2001.[11] The report also proposes a research agenda to inform and evaluate strategies to improve care.

To set the context, a description of children in out-of-home care in Australia and New Zealand is provided and, using findings from Australian research, the mental health problems of these children are outlined. To appreciate the origins of these problems, the development of the brain and childhood attachment and resilience are briefly explained and the impact of childhood abuse on this development is discussed.

Child protection and welfare services are over-stretched and are struggling to provide adequate services to children requiring out-of-home care.[12] Similarly, mental health services, in particular child and adolescent mental health services, are under pressure to meet demands.[13] Any discussions in this report that implicate these services are an acknowledgement of the inter-sectoral collaborative effort required to improve the mental well-being of children in out-of-home care and should not be seen as a criticism of the services.

## BACKGROUND

### Out-of-home care

In Australia, responsibility for child protection rests with the states and territories under state and territory based legislation[14]. Consequently, there are eight separate child protection systems. Although there are different legislative frameworks and operational differences, the various jurisdictions provide similar models of care.[14]

In New Zealand, the Ministry for Social Development is responsible for child protection through its Child, Youth and Family Services Unit. The models of care are similar to those in Australia.[2]

Out-of-home care is one of a range of services provided to children who are in need of protection and are unable to live with their parents. It includes residential care, home-based foster care and placement with relatives or kin.[1]

The current emphasis in child protection policy and practice in Australia and New Zealand is on keeping children with the biological family and there is a range of family support programs that seek to prevent separation of children from their families. If it is necessary to remove a child from their family, the policy focus in Australia and New Zealand is on a temporary separation with efforts made to reunite the children with their biological families whenever possible.[15,16] Placement within the extended family (kinship care) is the preferred option followed by non-relative, home-based foster care.[2,15,17.]

There is, however, general agreement in the literature that family-based care may not be suitable for all children in need of out-of-home care.[15] Research suggests that children with severe behavioural or emotional disorders may have better outcomes from placement in group home settings staffed by trained carers.[15] Furthermore, family-based care has been shown to be more successful for young children rather than adolescents with conduct and/or mental health problems.[15]

*Kinship care*

Kinship care is defined as care provided by the child's relatives, members of their clan or tribe, or other adults who have a kinship bond with the child, e.g. step parent, god parent, close family friend.[18] Kinship care is the fastest growing type of out-of-home care in Australia, New Zealand and overseas and has evolved as a result of societal and policy changes.[15,16,17,19] The diminishing availability of home-based foster carers, changes in policies and practices around residential care and the belief that kinship care offers better opportunities for children to maintain connections with family, culture, and their community have driven this paradigm shift in out-of-home care.[16,19]

In Australia, 44% of all children in out-of-home care at 30 June 2007 were in kinship care. This proportion varied by jurisdiction with the highest percentage being 60% in New South Wales and the lowest being 15% in the Northern Territory.[1]

Kinship care, referred to as family/whānau care in New Zealand, has been the preferred practice in that country since 1989. The passing of the *Children, Young Persons and Their Families Act of 1989* pioneered a new model of child care and protection by introducing the statutory process of family-based decision making in relation to children in need of care and protection through Family Group Conferences.[20] This was prompted by the 1986 *Puao-Te-Ata-Tu (Day break)* Report [21] that found the traditional practice of placing Māori children with *Pakeha* (New Zealanders of European origin) foster families alienated these children from their kin and culture and was a factor in the breakdown of Māori families. The Act effectively placed family/whānau care as the highest in a hierarchy of options.[20]

International research comparing the outcomes for children in kinship care with those in other forms of out-of-home care is limited and somewhat inconsistent. It suggests, however, that while children in kinship care have poorer outcomes than children in the general population, they do as well, if not better than children in other types of out-of-home care.[15,18,19] The research also suggests that children in kinship care have higher levels of contact with their biological families during their time in care.[15]

A prospective epidemiological study in New South Wales, the *Children in Care* study found that there were differences in the mental health of children in foster versus kinship care with the latter being protective for attachment and externalising problems.[5] The authors, however, state that the kinship care sample was small and not representative of the wider population of children in kinship care in New South Wales.[5]

A large proportion of kinship carers are grandparents, many of whom face significant financial and personal hardship associated with being the primary carer for their grandchildren.[22] The evidence base to substantiate the benefits of kinship placements to children requiring care needs to be stronger and the socio-economic impacts of providing this type of care on broader community need to be assessed.

## Out-of-home care in Australia

In Australia, 28,441 children aged 0 -17 years (5.8 per 1,000) were living in out-of-home care at 30 June 2007[1], an increase of 12% over the past year. The numbers have been steadily increasing each year over the past decade with the 2007 figures being 102% higher than those for 1997.[1] Of those in care in 2007, 50% lived in home-based foster care, 44% in relative or kinship care and 1% in some other type of home-based care.[1] Four percent were in residential care (including group homes) and the remaining 1% were either in independent living arrangements or the living arrangements were unknown.[1] The rate of Aboriginal and Torres Strait Islander children (36 per 1,000) in care was 8 times that for other children.[1]

Of those in home-based foster or kinship care, 31% were aged 5–9 years, 31% were aged 10–14 years and 26% were aged less than 5 years.[1]*(Table 1).*

**Table 1 Children in out-of-home care by age and type of placement at 30 June2007**

| Age | Percent |
|---|---|
| **Home-based foster or kinship care** | |
| <1 | 3.6 |
| 1-4 | 22.2 |
| 5-9 | 31.0 |
| 10-14 | 30.8 |
| 15-17 | 12.5 |
| **Residential care** | |
| <1 | 1.4 |
| 1-4 | 4.0 |
| 5-9 | 11.5 |
| 10-14 | 41.4 |
| 15-17 | 40.6 |

*Source: Australian Institute of Health and Welfare. Child Protection Australia 2006-2007*[1]

While no national data exist in Australia on the reasons why children are placed in care,[1] a study of children in out-of-home care in four Australian states (South Australia, Queensland, Victoria and Western Australia), conducted between 2003 and 2004,[23] identified the familial and social background factors associated with the children's placements.*(Figure 1)* Domestic violence and physical abuse were factors for almost three quarters of the children; two thirds had parents with substance abuse problems and half had parents with mental health problems.[23] In most cases, there were multiple factors contributing to the need for placement in out-of-home care.[23]

A South Australian review of a hundred children taken into care in March 2007, identified similar factors contributing to them being placed in out-of-home care.[24] While domestic violence was a factor for half of these children, financial difficulties were identified for almost three-quarters.[24] Substance abuse by the parents was a factor in 62% of the cases and 39% had parents with mental health problems.[24]

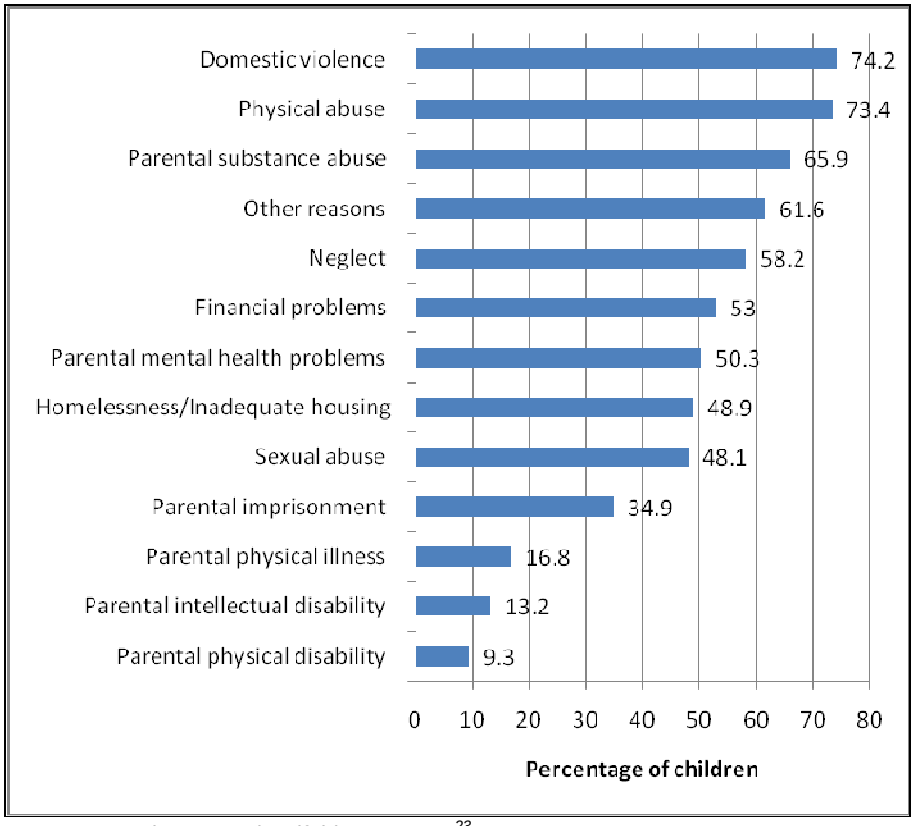
The New South Wales *Children in Care* study found that less than 7% of the children entered care without a known history of maltreatment. Of these, about half were placed in care shortly after birth having been assessed as at risk of harm.[5]

These Australian findings are similar to data from the US that showed parental drug and alcohol abuse and child physical abuse to be the leading reasons why children entered care.[25]

As these factors are similar to the reasons for action under Child Protection legislation in Australia and New Zealand,[14,17] it is highly likely that these reasons are common to the broader population of children in out-of-home care and provide some insight into the complexity of the problem.

*Figure 1*

**Biological family and social background factors associated with children's placements in care in Australia (N=364)**




*Source: Osborn A and Delfabbro P. 2006.*[23]

A longitudinal study which followed 235 children for three years who had been referred for new placements in South Australia during 1998-1999, found that while the majority of children in out-of-home care fared relatively well, 15-20% exhibited emotional and behavioural difficulties that required high levels of support.[26] It is difficult to find placements for such children, often resulting in multiple care arrangements due to placement breakdown.[26] This exacerbates their developmental and behavioural problems resulting in further psychological harm.[26]

The study by Osborne and Delfabbro of children in out-of-home care in four Australian states, found that the high support needs were associated with diagnosed conduct

disorder, personality disorder/mental illness, physical disability or intellectual disability.[23] Of these, diagnosed conduct disorder was most prevalent in all states while intellectual disability was the second most commonly identified factor associated with high support needs in three of the four states.[23] *(Table 2)*

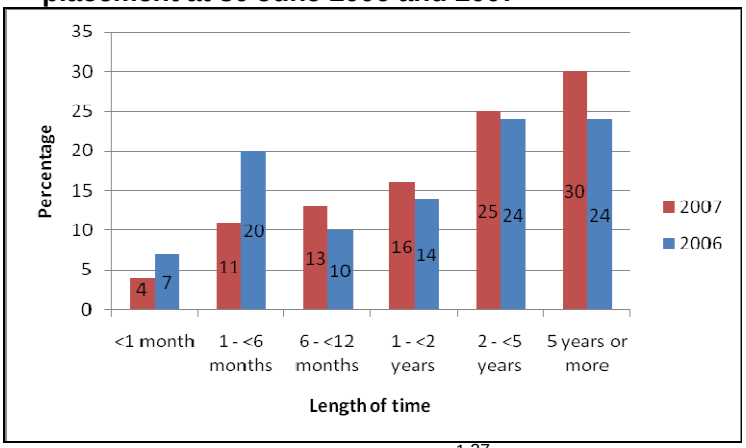
**Table 2 Prevalence of high support needs by State as identified in children's case files *N (%)***

| | South Australia *(N= 109)* | Queensland *(N=79)* | Western Australia *(N=72)* | Victoria *(N=99)* | Total *(N=359)* |
|---|---|---|---|---|---|
| **Diagnosed conduct disorder** | 77(70.6) | 75(94.9) | 15(20.8) | 71(71.7) | 238(66.3) |
| **Personality disorder/mental illness** | 7(6.4) | 17(21.5) | 11(15.3) | 22(22.2) | 57(15.9%) |
| **Physical disability** | 9(8.2) | 2(2.5) | 17(23.6) | 19(19.2) | 47(13.1) |
| **Intellectual disability** | 29(26.4) | 32(40.5) | 11(15.3) | 39(39.4) | 111(30.9) |

*Source: Osborn A and Delfabbro P. 2006.*[23]

At 30 June 2007, in Australia, 15% of children had been in care for less than 6 months, 29% had been in care for between 6 months and less than 2 years. Over half (55%) of children had been in care for more than 2 years, with 30% having been in placements for over 5 years.[1] *(Figure 2)*

*Figure 2* **Children in out-of-home care: length of time in continuous placement at 30 June 2006 and 2007**




*Source: Australian Institute of Health & Welfare*[1,27]

**Out-of-home care in New Zealand**

Child, Youth and Family is the service arm of the Ministry of Social Development with the statutory responsibility for care and protection of children and for dealing with youth offenders.'[28] The legislative framework for care and protection of children in New Zealand is provided by the *The Child, Young Persons, and Their Families Act 1989.*[17,28]

In New Zealand there were 5,110 children in care placements at 30 June 2007, the numbers having increased by 45% since June 2000.[2,28] As in Australia, indigenous children were over-represented with Māori children accounting for 46% of placements.[28]

Kinship care is the preferred placement option in New Zealand and currently about 40% of children in out-of-home care are in family/whānau care. Over 40% have been in family/whānau care for more than two years.[28]

Where family/whānau care is not possible, placement with other people significant to the child is the next preferred option and may include those of the same cultural background or those living in the same location as child in need of care.[28]

Residential care for young offenders and children with care and protection needs is provided through Youth Justice and Care and Protection Residences. Child, Youth and Family also have a number of Family Group Homes and community-based specialist care placements.[28]

An Amendment Bill to the *Children, Young Persons and Their Families Act* was presented to the New Zealand Parliament in early December 2007.[29] The amendments included raising the upper age of a young person to 17 and in relation to care and protection provisions, the Bill identifies the following amendments:

- "make clear when government and non-government organisations can appropriately share information about safety, welfare, and wellbeing of children and young persons, and to protect people who assist inquiries, under the Act, about children or young persons"
- "reinforce the important role of service collaboration and information-sharing amongst agencies, both government and non-government ..."
- "strengthen participation of children and young people in all care and protection processes especially around family group conference planning, orders and reviews"
- "ensure family group conferences are timely, well-informed and managed to achieve the best outcomes for children and young persons"
- "improve support for young persons leaving long-term care ...as they make the transition from care to independence"

**Mental health of children in out-of-home care**

A review by Pilowsky in 1995 of studies published between 1974 and 1994 on the psychopathology amongst children in out-of-home care showed the prevalence of mental health problems amongst these children was higher than the general child population.[3] This disparity applied even when children in care were compared with children from deprived backgrounds.[3] A predominance of externalising behaviour such as disruptive behaviour disorders was seen.[3]

The *Children in Care* study reported by Tarren-Sweeney and Hazell that surveyed carers of 4-9 year old children residing in foster or kinship care in New South Wales in 1999 and 2001, showed 53% of girls and 57% of boys had at least one Child Behaviour Checklist (CBCL) scale score in the clinical range and boys presented with more severe mental health problems than girls.[4] CBCL items that delivered a sample mean 20% higher than the mean for clinic-referred children in the USA were used to characterise problems for the children in the study. Three categories of problems were identified – toileting problems, sexual problems and conduct problems.[4]

Some gender differences were also observed with more age-inappropriate sexual behaviour, and more pseudo-mature interpersonal behaviour being reported for girls than boys. More non-reciprocal interpersonal behaviour and abnormal responses to pain were reported for boys than girls. Most of the children displayed behaviours suggestive of insecure relationships.[4]

A key finding of this study, however, was that children who were placed in care before the age of seven months had fewer attachment problems than children entering care at older ages. The risk for attachment and mental health problems rose to moderate in children who entered care between seven and thirty months of age and increased further for those placed after the age of 30 months.[5]

When the types of care placement were considered in the above survey, the results suggested that kinship care had a protective effect when compared with foster care with children in kinship care demonstrating less attachment and externalising problems which may be of clinical significance[4].

A South Australian study by Sawyer et al of children aged 6-17 years residing in home-based foster care between 2004 and 2006, reported that the prevalence of mental health symptoms on all the CBCL scales for these children was consistently higher than for children in the general community.[6] The proportion of children with scores on the CBCL externalising syndrome scale indicating problems (such as attention problems, aggressive behaviour and delinquent behaviour) was six to seven times that of children in the general community.[6]

Amongst the children in foster care, externalising problems were twice as common as internalising problems (such as anxiety and depression).[6] While no gender difference was observed, there was evidence of younger children (6–12 years) having higher rates of attention and social problems than older children.[6] Adolescents in foster care

scored higher on the depression scale than those in the general community.[6] They also had higher rates of suicide attempts than reported for adolescents in the general community and many had not received professional help.[6]

The Australian national comparative study by Osborn and Delfabbro of children who had experienced placement breakdown, showed that within this population, children were typically 12–13 years of age and had experienced ten or more previous placements in their lifetime.[23] First contact with the child protection system was at around 3 years for most of these children but they did not enter care until four years later.[23] There was an over-representation of boys and an under-representation of Indigenous children in comparison with the Australian population of children in out-of-home care.[23]

Almost 60% of these children were in the abnormal clinical range on the Total Difficulties Score for the Strengths and Difficulties Questionnaire (SDQ) for emotional and behavioural functioning.[23] All the children showed poor social functioning and a high level of attachment-related problem behaviours was reported for the total sample.[23] Almost half of these children suffered from clinical depression and anxiety.[23] The psychopathology of children in out-of-home care is complex and is currently not well understood, however, disturbances in attachment behaviour appear to be at its core.[4]

Studies in the UK and Australia have shown that psychopathology is 3-4 times more prevalent in children with intellectual disabilities compared to normative children.[30,31] It has also been suggested that social deprivation increases the risk of intellectual disabilities.[30] While no data could be found on the proportion of children in out-of-home care with intellectual disabilities for Australia and New Zealand, it is likely to be significant given the prevalence amongst the study sample reported by Osborn and Delfabbro.[23] Co morbid intellectual disabilities add a further layer of complexity to the psychopathology seen in children in out-of-home care.

### Early brain development

While genetics predispose children to develop in certain ways, the environments they grow up in will shape the people they will become.[32]

The human brain is a complex organ of systems composed of networks of neurons (nerve cells) which develop sequentially and in an hierarchical manner, from the primitive (brainstem) to the more complex (limbic and cortical systems).[33] Optimal development of the more complex systems requires healthy development of the less complex systems.[33]

At birth the basic structure of the brain is in place with the systems developed to support the bodily functions necessary for life.[33] The different systems develop and become functionally mature at different times during childhood, with the limbic system (involved in attachment and regulating emotions) and the cortex (involved in abstract thought and complex language) being the last to develop.[33] *(Table 3)*

To fulfil its assigned functions, each system is involved in a complex process whereby chemical messengers (neurotransmitters and hormones) are produced and used to transmit information to other parts of the brain and body.[33]

At birth the brain contains more than 100 billion neurons.[33] As the systems develop during childhood, a process of creating, strengthening and discarding connections (synapses) between the neurons, forms neuronal pathways that connect the various parts of the brain.[33] During the first two years of life, there is a proliferation of synapses so that by the age of 3 years, there are approximately 1,000 trillion synapses.[34] Some of the synapses remain intact and are strengthened while many are discarded. By adolescence, about half of the synapses have been discarded.[34]

**Table 3 Shifting developmental activity across brain systems**

| Brain region | Age of greatest developmental activity | Age of functional maturity | Key functions |
|---|---|---|---|
| **Neocortex** | Childhood | Adult | Reasoning, problem solving, abstraction, secondary sensory integration |
| **Limbic** | Early childhood | Puberty | Memory, emotional regulation, attachment, affect regulation, primary sensory integration |
| **Diencephalon** | Infancy | Childhood | Motor control, secondary sensory processing |
| **Brainstem** | In utero | Infancy | Core physiological state regulation, primary sensory processing |

*Source: Perry 2000* [33]

Plasticity is the term used to describe the process of creating, strengthening and discarding synapses which occur in response to signals from other parts of the brain, the body and the environment such as touch, light, sound, taste or smell.[32] This process builds the neuronal pathways that make up the functional organisation of the brain, controlling all functions be they motor, cognitive or emotional. It enables the different systems to store information and develop 'memories' for its assigned functions.[32] Different types of memories enable the developing child to adapt to and navigate their world, prompting learned actions in response to certain signals – for example, smiling in response to kindness or fear in the face of hostility.[32]

Information is stored in the brain in a use-dependent fashion.[32] The more a neuronal pathway is activated by the same signal or experience the stronger it becomes, developing memories that invoke interactions with the world that promote survival and

growth.[32] The developing brain must be exposed to repeated signals within a certain period of time to activate and strengthen the pathways. When this does not happen, the pathway becomes weak, is eventually discarded and its related functions will not occur.[32] Put simply, the developing brain is organised on a "use it or lose it" basis.

When the brain stores information in response to a repeated experience, the memories that develop are affected by the state of arousal (calm, fear, sleep) associated with the experience.[32] Different neuronal pathways are activated for the different states of arousal and their activation becomes part of the stored memory.[32] An important survival mechanism is the ability of the brain to store memories associated with the fear arousal state that prompt a rapid response to a perceived threat.[35]

Most of the brain development and organisation takes place in first three years of life. Once a system in the brain is organised, it is less sensitive to experience and less amenable to change, that is it is less plastic.[35] The more complex systems such as the cortex, however, remain plastic throughout life.[35]

During childhood there are critical periods of vulnerability when the developing systems are sensitive to particular environmental experiences and these influence the development of certain capabilities.[32] The first few years of life, when synapse proliferation is highest, are a sensitive period, as it is then that many of the neuronal pathways that are associated with developing trusting interpersonal relationships are strengthened. It is also a time of prime learning given the appropriate stimulation.[34] As the process of discarding synapses increases these opportunities decrease, particularly after the age of 3.[34]

**Attachment and resilience**

All infants have an innate need and predisposition to form an attachment to a protective caregiver who will provide consistent, sensitive nurturing in response to the child's need for comfort and security in times of emotional distress, physical injury or illness. When the child receives such nurturing, a secure attachment develops with the caregiver. When the caregiver is unavailable either physically, psychologically or emotionally or tends to be insensitive or unpredictable in their response to the child's distress, an insecure attachment develops.[36,37]

A secure attachment is associated with better developmental outcomes in areas that include self-reliance, self-efficacy, empathy, and social competence. It has been shown that infants with non-secure attachment are prone to later problems in adaptation that include conduct disorder, aggression, depression and antisocial behaviour. Attachment relationships continue to influence thoughts, feelings, motives and close relationships throughout life.[36,37]

A disorganised attachment can develop when the primary caregiver displays unusual and ultimately frightening behaviours in the presence of the child. These children are more vulnerable to stress, have problems with regulation and control of negative

emotions, display oppositional, hostile/aggressive behaviours and unusual or bizarre behaviours in the classroom.

Childhood resilience refers to the capacity to overcome, adapt to or minimize the effects of adversity.[38] Research by Werner and Johnson into why some children overcome adversity while others do not, found that there were three major features present in the lives of the resilient that acted as "protective buffers".[39] Firstly, at the individual level, resilient children were found to have easy-going temperaments making them more appealing to others. Secondly, they experienced close nurturing relationships with at least one family member, not necessarily the birth parent but someone who was committed to their welfare, resulting in feelings of self-worth. Thirdly, their social environment provided opportunities to develop supportive relationships with people outside the family – friends, teachers or adult mentors who could provide support and advice.[39] Developing interests or hobbies or being a member of a school or community-based group such as the school choir or orchestra, Scouts or church youth groups provided opportunities to build competencies which in turn enhanced their self-esteem and self-efficacy.[39]

**The effects of child abuse and neglect on the developing brain**

As children interact with their environment their brains develop capabilities that enable them to function within that environment in such a way as to promote their survival. [40]. Perry and Pollard propose that if, in early childhood, during the development of the neuronal pathways associated with building trusting interpersonal relationships, the child's interaction with their environment frequently brings a hostile response, their brain will be sensitised to respond accordingly. Also, their ability to react positively to nurturing and kindness may be impaired.[41] The more a neuronal pathway is activated the stronger it becomes creating a template through which all future inputs are filtered.

Human survival depends on the ability to initiate a protective response to any threats to physical or psychological well-being.[40] Such a response, known as the stress response, is a physiological mechanism which prepares the body for survival strategies ranging from fight or flight to 'giving up' or surrendering in the face of danger.[32] Brief periods of stress are not problematic and are necessary for the child to develop appropriate strategies to cope with their environment. Frequent or prolonged periods of stress, however, can result in over-development of the neuronal pathways involved in the fear-stress response and under-development of other systems.[41] Perry hypothesises that these altered developments may lead to functional changes in emotional, behavioural, and cognitive performance.[42]

When a child is in a state of persistent fear, the chronic activation of the neuronal pathways involved in the fear-stress response leads to permanent "memories" being stored that influence the child's perception of and reaction to the environment. This state of persistent fear becomes a trait and the response almost automatic.[41]

There are two primary adaptive response patterns that individuals use when faced with a perceived threat. They are the hyper-arousal continuum (fight/flight) and the

dissociative continuum (freeze and surrender).[32] Individuals may respond to the same threat differently, however most use a combination of these two patterns.[42] The dissociative continuum tends to be the more predominant pattern in younger children and females and the hyper-arousal continuum the more predominant pattern in older children and males.[42]

In the hyper-arousal continuum, the pathways involved in this response pattern are always switched 'on' creating a hyper-vigilant state. The brain is hyper-sensitive to environmental signals and is in a persistent stress-response state, ready to deal with any threats.[32]

Perry and Pollard suggest that this hyper-arousal state can continue to have an impact long after the threats which prompted its development have passed. The parts of the brain involved in the hyper-arousal state can become re-activated when the child is exposed to certain cues in their environment that are reminders of the previous threats or trauma, such as a particular noise, the smell of alcohol or the presence of a perpetrator.[41] This re-activation can be prompted by the child thinking or dreaming about the traumatic experience.[41] Over time the nature of the memory prompting cue may become more generalised, for example, a particular noise may become any loud noise or a specific perpetrator any strange male.[41]

Other critical physiological, cognitive, emotional and behavioural functions are dependent on the same parts of the brain that are involved in the fear-stress response. Perry and Pollard propose that these functions become de-regulated as the brain systems are sensitised to the repetitive re-experience of the traumatic events.[41] Over time this can lead to the child exhibiting hyperactivity, anxiety, impulsive behaviours, sleep problems, tachycardia, hypertension and a variety of neuro-endocrine abnormalities.[41]

Young children, who are not capable of fleeing or fighting when under threat, will cry out for a protective caregiver to take the necessary action. This is an appropriate response for the young threatened child if the caregiver offers protection. When such a response from the caregiver is not forthcoming, however, the child will eventually adapt to the environment by abandoning the cry for help and surrendering to the perceived threat.[41]

The neurobiology of the hyper-arousal and dissociative responses are different. Both originate in the brainstem and involve increases in circulating stress related hormones. However, whereas in hyper-arousal there is an increase in heart rate and blood pressure, in dissociation the opposite happens – blood pressure drops and heart rate decreases. Also, in dissociation, other chemicals in the brain that have opiate-like effects are secreted. These have the effect of altering the perception of pain and sense of time, place and reality.[32]

The initial reaction to 'freeze', when faced with a threat, provides an opportunity to assess the environment and to work out how to respond. Traumatised children with sensitised hyper-arousal or sensitised dissociative patterns of response will often use

'freezing' when they are anxious and the anxiety has been provoked by a suggestive stimulus to which their neuronal pathway is reacting.[32] The anxiety they experience is intense even though they may not be aware of the evocative nature of the stimulus. This freezing cognitively (and frequently physically) is often misinterpreted by adults as ignoring or refusing to comply with instructions. This initiates another set of directives which may involve an element of threat, increasing the anxiety experienced by the child, moving them along the continuum of hyper-arousal or dissociation.[32]

In reviewing works published between 1990 and 2000, examining impairments of the developing brain attributable to maltreatment, Glaser concluded that there is considerable evidence that child abuse and neglect are associated with changes in brain function and that many of these changes are related to aspects of the stress response.[43]

A child's psychological development is strongly influenced by the nature of their relationship or attachment with the primary caregiver during infancy. A nurturing relationship between the child and primary caregiver promotes a secure attachment and not only provides the foundation for developing future relationships throughout life, but also provides a base for learning. To learn effectively, the child needs to feel calm, safe and protected.[44]

When the attachment process is disrupted through abuse and neglect, the child's brain focuses on developing the neuronal pathways associated with survival rather than building the pathways that are fundamental to future learning and growth.[44]

Children may be genetically predisposed to aggressive, submissive and frustration behaviours, however, where the infant-caregiver relationship is a positive one, the child learns to regulate these emotions and behaviours. In the absence of such a relationship, the primitive brain responses become dominant and the cognitive ability to control these behaviours and emotions may not develop.[44]

Impaired social cognition is also a potential result of poor early attachments. Social cognition entails an awareness of oneself in relation to others and an appreciation of other's emotions. The child with poor social cognition abilities may experience many types of social interactions as stressful because they have not developed a strong 'memory' against which to process what is happening and how to respond. Abused children often show a lack of empathy and understanding of the effects that their hurtful actions may have on others' feelings.[44]

Neglect, in terms of failing to provide appropriate stimulation to meet a child's cognitive, emotional and social needs may have lifelong developmental consequences. Without the appropriate stimulation in the first three years of life, the rudimentary neuronal pathways that have developed in expectation of the experiences associated with building cognitive, emotional and social functioning may atrophy resulting in these children not achieving the usual developmental milestones.[44]

Children who experience severe deprivation affecting more than one developmental domain, i.e. language, touch and social interaction are at risk of permanent intellectual disadvantage. A study of severely deprived children adopted from Romanian orphanages showed that these children had significantly smaller brains than the norm.[45] Other studies of these children found that recovery was greater amongst children adopted as young infants than those adopted as toddlers.[10]

The majority of changes that have taken place in the brain by adolescence that are associated with language, values, cultural practices and complex cognitive and emotional functioning have been determined primarily by experience not genetics.[33]

The experiences during infancy and early childhood determine the functional organisation of the brain. Brain imaging surveys and other experiments have shown that the neural structure and functioning of the developing brain can be permanently damaged when these early experiences involve chronic abuse and/or neglect.[46]

> "...children reflect the world in which they are raised. If that world is characterized by threat, chaos, unpredictability, fear and trauma, the brain will reflect that by altering the development of the neural systems involved in the stress and fear response." *Perry 2000* [47]

## Section 1 Prevention

From a population health perspective, prevention is considered on three levels: primary prevention strategies to reduce the incidence of a disease by eliminating or controlling the contributing risk factors; secondary prevention aims to reduce the morbidity of the disease through early detection and treatment. It often involves screening populations at high risk of developing the disease, and identifying and treating early cases; and tertiary prevention aims to halt the progression of the disease and reduce complications of established disease.[48]

*Primary prevention*

The evidence indicates that a high proportion of children in need of protection are requiring out-of-home care because of maltreatment (neglect, physical, sexual and emotional abuse).

There is a significant body of literature that suggests early childhood maltreatment may lead to impaired brain development which manifests as mental health problems in the older child or adolescent.[3] The research findings relating to children in out-of-home care in Australia propose that a high proportion of the psychopathology amongst these children has its origins in insecure attachments and the cumulative effects of maltreatment.[4,5]

It follows, then, that the primary prevention of mental health problems amongst children in out-of-home care starts with preventing the occurrence and recurrence of childhood maltreatment. Given that being a victim of childhood maltreatment is thought to be a risk factor for becoming a perpetrator of abuse as an adult, breaking the inter-generational transmission of abuse is crucial to the mental wellbeing of future generations and the health and prosperity of the nation.[49]

Evidence from long-term studies of early childhood development programs with disadvantaged children in the US demonstrate that there are lasting positive effects extending into early and middle adulthood with improved educational achievement, economic performance and reduced criminal convictions.[50,51] In addition, program participants were less likely to become teenage parents, alcohol and drug abusers and were less likely to maltreat or neglect their children.[52] A commitment to investing in the development and implementation of early childhood development programs for children likely to be placed or already in out-of-home care is needed now if future generations of children are to be protected from maltreatment.

The current child protection systems in Australia are unsustainable socially and economically.[12,19] There is a widening gap between the increasing numbers of children requiring out-of-home care and the availability of suitable carers. As is the case worldwide, Australia and New Zealand are facing difficulties in retaining carers and recruiting new carers.[2,19,] This has been attributed to the increasing number of women returning to the workforce, the inadequacy of remuneration for carers, the increasing expectations of the caring role and attrition due to ageing of current carers.[19]

In Australia, the national recurrent expenditure on child protection and out-of-home care in 2006-07 was at least $1.7 billion, an increase of 13.7% on that in the preceding year. Out-of-home care services accounted for 63.7% (or $1.1 billion) of this expenditure. The average annual increase over the four year period from 2002/03 to 2006/07 was 11.8%.[53]

These issues further underscore the need to adopt an 'upstream' approach to the problem, which is, reducing the number of children 'falling in' as opposed to rescuing them once they have 'fallen in'.

The social, economic and environmental determinants of childhood maltreatment necessitate a cross-sectoral, multi-disciplinary approach to tackling the contributing factors. Psychiatrists have a role to play in advocating for the development and implementation of policies that are matched with adequate resources to address these determinants.

The College's Position Statement on *Children of parents with a mental illness* acknowledges that these children are at increased risk of adverse developmental outcomes and mental health problems. It states that all assessments of adults with a mental health problem should include identifying any children whose mental health and/or safety may be in jeopardy because of the parent's illness and referral to appropriate child and adolescent services be arranged.[54]

Where they do not already exist, evidence-based parent education and home visiting programs aimed at providing family support, enhancing parenting skills to prevent child maltreatment need to be established and resourced adequately. Their implementation needs to include rigorous evaluation to ensure program efficacy and cost-efficiency.[55]

There is convincing evidence that chronically maltreated children can be protected from developing mental health problems if they enter care at a younger age.[5] Primary prevention in this context involves identifying children at risk of chronic maltreatment and placing them in care early. The challenges, however, are correctly identifying this group so that children are not wrongly separated from their biological families and predicting which parents are capable of making sustainable improvements in their care-giving.[4,5]

While child protection legislation and practice in Australia has an emphasis on reuniting children in out-of-home care with their biological families as soon as possible, this must be balanced with the reality that there are situations where reunification is unlikely to be possible due to the parent's (parents') incapacity to change. In such cases, the mental health and developmental welfare of the child, particularly those aged less than two years, should take precedence and a permanent care arrangement planned.

**Outcomes required to address these issues:**

- Development, implementation and evaluation of local and national policies aimed at addressing the social, economic and environmental determinants of child maltreatment e.g. Alcohol and substance abuse, domestic violence and problems associated with adult mental ill-health.
- Introduction of evidence-based early development interventions for all pre-school children who are in out-of-home care or from disadvantaged backgrounds.
- Maternal ante-natal assessments include a review of the mother's psychological, emotional and physical capacity to establish a quality child-parent relationship and remedial action offered where this is viewed as lacking.
- Ante-natal education includes a focus on parenting skills to promote the development of positive child-parent relationships.
- Post-natal maternal and child assessments include an evaluation of the child-parent relationship and remedial action offered as necessary.
- Implementation of adequately resourced, evidence-based parent education and home visiting programs aimed at providing family support, enhancing parenting skills and preventing child maltreatment. Integral to implementation is rigorous evaluation to ensure program efficacy and cost-efficiency.
- Early identification of any child in the general community at risk of neglect due to parental mental illness.
- Early identification of and permanent placement of children at risk of chronic maltreatment.
- The Australian and New Zealand public are provided with accurate, evidence-based information on child mental and social development.

*Secondary prevention*

It is clear from the information provided that children in out-of-home care constitute a population at high risk of psychopathology. Secondary prevention of mental health problems in this population involves detecting problems, preferably at a pre-clinical stage and providing early intervention.

Child protection organizations in each jurisdiction were contacted to gain an overview of current practice with respect of routine health assessments and how children in out-of-home care access mental health services. Information was received from the following jurisdictions: Australian Capital Territory (ACT), New South Wales (NSW), Queensland (QLD), South Australia (SA) and Western Australia (WA) and New Zealand. The information from WA was limited to culturally and linguistically diverse and refugee children in out-of-home care.

In Australia, a few jurisdictions offer some health assessments routinely on entry to care while in others they occur on an ad hoc basis or if the child welfare caseworker

identifies a need.[56,57] The assessments are conducted by a range of health professionals including General Practitioners (GPs), paediatricians, emergency departments and nurses.[56] This is often dependent on where the assessments occur geographically.[56] While the health assessments usually include a developmental appraisal, they do not routinely include a mental health evaluation.[56]

In New Zealand, a general health assessment is conducted, usually by a GP, as soon as practicable after the child enters care. Where a child is placed in residential care, this must be done within seven days.[28] Mental health assessments are not routine.[28]

Adequate assessment of children entering out-of-home care for potential mental health problems is an essential precursor to early diagnosis and treatment to reduce morbidity and disability. A cost-effective process for assessing these children that does not rely solely on specialist clinicians needs to be developed. This process needs to be readily available, produce valid and reliable results and cause minimal distress to the child. It needs to incorporate a procedure that ensures any child identified as having potential mental health problems is comprehensively assessed by a child and adolescent psychiatrist.

A review of the current assessment tools used by child welfare professionals as part of the admission to care process and other assessment tools used by primary health and mental health professionals may identify opportunities to incorporate a multidisciplinary approach to mental health assessments.

The assessment process should also be applied retrospectively to any child already in out-of-home care who does not already have a diagnosis of mental illness.

Particular attention needs to be paid to children with intellectual disabilities to ensure that potential mental health problems are not dismissed as being manifestations of the intellectual disability.

**Outcomes required to address these issues:**

- Every child entering out-of-home care has a multi-modal mental health assessment as part of the admissions to care process.
- Any child already in care who does not already have a diagnosis of mental illness has a multi-modal mental health assessment as soon as possible.

*Tertiary prevention*

Tertiary prevention involves treatment aimed at reducing impairments and disabilities and to minimize suffering. It also covers rehabilitation to enable those afflicted to achieve an acceptable quality of life.[48]

The tertiary prevention of mental health problems of children in out-of-home care will be discussed in the next section under *Management of Care.*

## Section 2 Diagnoses and management of mental health problems

### Assessment and diagnosis

Children entering or already in out-of-home care are likely to display complex psychopathology as a consequence of their attachment disturbance and there is a high probability that their problems will be compounded by experiences of maltreatment.

A comprehensive mental health assessment, when necessary, needs to be conducted by clinicians with specialist knowledge and the ability to interpret clinical information in the context of the individual child's developmental and bio-social history. A team approach is often required for comprehensive assessment of complex conditions with input from psychologists, nurses, social workers and others as well as the psychiatrist.[13]

All children with intellectual disabilities entering or already in out-of-home care should have a comprehensive mental health assessment routinely, to ensure that any potential psychopathology is not masked by their disability.

An essential component of the comprehensive mental health assessment is the construction of an understanding of the individual child using a developmental framework of psychopathology to optimize the dynamic of resilience and promote flexible adaptation.

The primary caregiver and other key people from the child's social network, e.g. teacher, can provide reliable information to assist with the assessment of externalising and social-attention-thought problems.[58]

Assessment of internalising behaviours, such as anxiety and depression, cannot rely solely on information gathered from the child's primary caregiver, teachers, or case-worker but also needs to consider the views of the individual child under review.

The value of a comprehensive mental health assessment goes beyond determining optimal treatment for the child as it can be the basis of valuable information for other professionals and caregivers involved in meeting the needs of the child, e.g. schools, judges and child welfare workers, and the primary caregiver. A better understanding of the child's problems will help these people better meet the child's needs and contribute to addressing the child's mental well-being.

### Ongoing management of mental health problems

Management in this context includes the full spectrum of disease control following assessment, which is:

- therapeutic interventions, where indicated, to address symptoms,
- monitoring of progress and outcomes of therapeutic interventions,
- identification of any complications associated with treatment and remedial action,
- maintenance strategies for control of chronic problems.

The complex psychopathology associated with the mental health problems of children in out-of-home care requires a multi-disciplinary approach to their treatment and monitoring of their problems. Any treatment plans for these children need to reflect an integrated approach and include education and support of the child's social network.[13]

Psychiatrists are key members of the multi-disciplinary mental health team and, by virtue of their specialist training and experience, provide clinical authority to the collaborative efforts of psychiatrists, psychologists, nurses, social workers and others.[59]

If children in out-of-home care, diagnosed with mental health problems, are to achieve their developmental potential, they need to be recognized as a particularly vulnerable group who require special attention and priority access to mental health services.

Effective mental health care for these children requires a coordinated approach. The absence of such an approach increases the risk of these children being referred to multiple clinical services. This has the potential to result in multiple diagnoses of distinct disorders and the prescription of various treatment regimes to address a number of discrete sets of symptoms.[4]

**Coordination of care**

An effective integrated approach to the provision of physical, mental and developmental care requires liaison between medical specialties and other health professionals involved in the provision of health care to these children. Coordination of care is not only important in providing optimal health care to children in out-of-home care, but helps ensure access to and efficient use of services.

In Australia, as part of the Federal Government's *Better Access to Psychiatrists, Psychologists and General Practitioners through the Medicare Benefits Schedule,* new Medicare items were introduced in November 2006 that reimburse GPs for the provision of mental health care.[60] While GPs may be considered well placed to take a leadership role in the coordination of the health care for children in out-of-home care, the increasing demand for GP services, and an overall shortage in the GP workforce suggest this is unlikely to be the best option.[61] Furthermore the itinerancy of some children in out-of-home care, particularly those with severe mental health problems, would make coordination of care by a GP difficult.

In the US, public health nurses play an essential role in health care coordination and are often co-located at child welfare offices.[11] In Australia the shortage of nurses generally and particularly nurses with training in this area, make this an unrealistic option.[62]

A 2005 report on Australia's health workforce by the Productivity Commission stated, "Australia is experiencing workforce shortages across a number of health professions ...The shortages are even more acute in rural and remote areas and in certain special needs sectors."[62]

Although the demands on child protection caseworkers are already excessive, it would appear that, at this time, they may be in the best position to lead the coordination of health care. This appears to be the current practice in those jurisdictions that provided information on current arrangements for health care for children in out-of-home care.[28,56] This role, however, could be supported by the establishment of service pathways that facilitate easy, equitable and timely access to services. Creative solutions to the future role of care coordinator may need to be considered in view of the workforce issues identified.

Good communication between disciplines and services is at the core of effective coordination of care. Strategies to ensure this happens need to be established.

**Access to mental health care services**

In some Australian jurisdictions special clinics for children in out-of-home care have been established or are currently being piloted. In others, children in out-of-home care use generic health services.[56, 57]

In New Zealand mental health services are funded nationally through the Ministry of Health. As these services are commissioned locally to respond to local needs, they are not uniform.[28] Most children in out-of-home care use the local mental health services.[28]

Intensive clinical support services were established in 2001 in New Zealand to meet the needs of children in out-of-home care requiring specialist mental health services.[28] These are community-based services provided in the child's usual home/school environment. Clinicians have low caseloads (between 7 and 10 at any one time) to enable greater frequency of contact and more intensive treatment.[28] Children are referred to these services by either special education services, Child Youth and Family or local mental health services.[28]

In 2001 in New Zealand, the Ministries of Health, Education and Social Development, established *The High and Complex Needs Strategy,* a framework to support access to the right mix and type of service by children with high and complex needs.[28] At the national level, the strategy involves funding individual care packages to enable local multidisciplinary support for children with high and complex needs that cannot be met effectively through the usual services.[63]

Given the complexity of the mental health problems in children in out-of-home care, specialist, multidisciplinary mental health services dedicated to meeting the needs of these children need to be established in all jurisdictions. Child and adolescent psychiatrists are best placed to provide the clinical authority to such services.[59] Evaluations of the special clinics already established and those being piloted should provide the evidence base for cost-effective delivery of such services.

Access to competent, comprehensive mental health care needs to be a priority for children in out-of-home care.

**Outcomes required to address these issues:**

- Children entering or already in out-of-home care, identified through the initial multi-modal mental health assessments as exhibiting potential psychopathology undergo a comprehensive mental health assessment within 30 days.
- All children with intellectual disabilities entering out-of-home care have a comprehensive mental health assessment routinely.
- As part of the comprehensive mental health assessment, a profile is documented for each child, based on a developmental framework of psychopathology that identifies the risks and protective factors that contribute to the dynamic of resilience.
- Treatment plans are developed that organize and prioritize interventions in the major areas of the child's life i.e. home, peers, school, with the emphasis on enhancing strengths through therapy or activities to promote the child's development. These plans may include medication to reduce symptoms and facilitate functioning.
- Children in out-of-home care with diagnosed mental health problems are recognized as a group that warrants special attention and priority access to mental health services.
- Children in out-of-home care have timely access to multi-disciplinary mental health services that are competent, relevant and sensitive to meeting their complex needs.
- Effective and efficient use of health care services is ensured through coordination of the individual child's mental health care.
- Establishment of service pathways that facilitate easy, equitable and timely access to services.

## Section 3 Multidisciplinary and inter-agency collaborations

The World Health Organization defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity".[64] Mental health is integral to this broader concept of health. It is more than the absence of psychopathology but is a state of well-being that enables the individual to achieve their full potential, enables them to cope with the normal stresses of life and to make a contribution to their community.[64]

Children are placed in out-of-home care to protect their safety and to enhance their chances of developing their full potential physically, mentally and socially. For this to occur they need to be provided with physical, psychosocial, educational and economic environments conducive to such development.

Optimising the mental health care of children in out-of-home care, then is more than the provision of child and adolescent psychiatric services for these children. It requires collaboration within and between all health and other disciplines involved in the protection of the child. There needs to be alliances and cooperation between all agencies involved in meeting the needs of the child, i.e. health, the courts, child protection, welfare and educational agencies.

Systems need to be developed or enhanced that facilitate good communication between disciplines and agencies to enable:

- Multi-disciplinary teams to be involved conducting child and family assessments, developing mental health plans and monitoring the progress,
- The provision of information to courts so judges can make informed decisions based on knowledge of the individual child's situation.

Child and adolescent psychiatrists are essential contributors to such a multidisciplinary team with much to offer, providing knowledge about the aetiology and manifestation of mental disorders associated with child maltreatment and or disrupted attachment to enable these problems to be addressed more appropriately.

**Outcomes required to address these issues:**

- Provision of optimal mental health care to meet the complex psychopathology of children in out-of-home care through competent multidisciplinary teams dedicated to meeting the needs these children.
- Judges are provided with information to make informed decisions based on knowledge of the individual child's situation.
- Interview and assessment tools used to appraise parent-child relationships and behaviour of children in out-of-home care are based on current best practice.

- Increase the knowledge of all professionals working with children in out-of-home care about the aetiology and manifestation of mental disorders associated with child maltreatment and or disrupted attachment to enable them to address these problems more appropriately.

## Section 4 Family participation

Effective management of any child's health problems depends on the involvement of their current primary caregiver as a partner in the provision of health care. Their role is critical to ensuring that treatment regimes are followed, follow-up appointments are attended and they are sources of information vital to the child's assessments and monitoring treatment outcomes. In normal circumstances, children have their parent(s) as advocates in the management of their health care. For children in out-of-home care this role may be delegated to the foster or kinship carer.

Given the complex nature of mental health problems experienced by children in out-of-home care, it is crucial that their current primary caregivers are fully informed of their disorders and are provided with appropriate education, training and support to enhance their capacity to provide optimal care for these children. Any treatment plans need to accommodate this. Where children are aged 15 years or older, informing their primary caregivers of their mental health problems may require the child's consent.

Involving the biological parents in the development of mental health care plans may be appropriate and beneficial, particularly where reunification of the child with their birth family is likely to occur. Assessing the biological parents' ability to provide suitable care for their child and where appropriate, building their capacity to do so through education, training and support need to be part of plan.

Where consent is required for the child to undergo medical treatment, the delegations identified in the various state and territory based child protection legislation must be followed. Consent provisions vary depending on the type of protection order the child is under.[56] Carers may in some jurisdictions provide consent for minor day-to-day medical treatments only.[56]

**Outcomes required to address these issues:**

- The child's primary caregiver (foster, kin or biological) is fully informed, (with the child's consent, if necessary) of the child's developmental history and mental health symptoms and appropriate education, training and support is available to the carer to enhance their capacity to participate in the provision of optimal care.
- Where appropriate, the biological parents are involved in the development of mental health treatment plans.
- Child and adolescent psychiatrists involved in treating children in out-of-home care are familiar with the state or territory legislation regarding who has authority to provide consent to medical treatment.

## Section 5 Indigenous children in out-of-home care

The Geneva Declaration on the Health and Survival of Indigenous Peoples as reported by Durie [65] states,

> "Indigenous Peoples' concept of health and survival is both a collective and individual inter-generational continuum encompassing a holistic perspective incorporating four distinct shared dimensions of life. These dimensions are the spiritual, the intellectual, physical, and emotional. Linking these four fundamental dimensions, health and survival manifests itself on multiple levels where the past, present and future co-exist simultaneously."

*Aboriginal and Torres Strait Islander Children*

In Australia, at 30 June 2007, the national rate of Aboriginal and Torres Strait Islander children in out-of-home care was 36.1 per 1,000 compared with that for non-indigenous children (4.4 per 1,000).[1]

In referring to the Australian indigenous population it is important to acknowledge that it is not a single entity. The Aboriginal population consists of many different kinship and language groups that have adapted to diverse living conditions over many years[66]. Torres Strait Islanders are a separate population with a distinct identity and culture.[66] These cultures are dynamic and still evolving and their social and cultural integrity are being challenged by the cumulative effects of poor health, alcohol, drug abuse, gambling, pornography, unemployment, poor education and housing and general disempowerment leading to the breakdown of traditional values and customary law. [66,67]

Aboriginal and Torres Strait Islander people have complex systems of family and community relationships and inherent in these are specific roles and responsibilities, including child rearing.[68] The responsibility for child rearing extends beyond the biological parents to members of the extended family and community depending on the stage of child's physical, social and spiritual development. [68,69] Wadjularbinna Doomadgee, a Gungalidda leader from the Gulf of Carpentaria states:

> *"All people with the same skin grouping as my mother are my mothers... They have the right, the same as my mother, to watch over me, to control what I'm doing, to make sure that I do the right thing. It's an extended family thing... It's a wonderful secure system."* [69]

From a western perspective, these child rearing practices may be seen to promote poor child-parent attachments.[70] Assessment tools based on Anglo-European living standards and parenting values may be inappropriate when used in the cross-cultural context.[70]

Aboriginal and Torres Strait Islander cultural and spiritual factors can impact on how mental health problems develop. These factors are likely to influence how problems

manifest and the appropriateness and acceptability of treatment.[71] Diagnoses based on culturally specific assessment processes may lead to mistaken diagnoses with long term consequences.

Child Protection legislation in each of the Australian jurisdictions takes account of the child rearing practices of Aboriginal and Torres Strait Islander people and includes specific clauses to deal with their children in need of care to ensure that they remain in contact with their community and their cultural identity.

Australia's indigenous population is spread throughout the country with 31% living in the major cities (excluding Hobart and Darwin), 22% live in inner regional Australia (includes Hobart) and 23% live in outer regional Australia (includes Darwin). The remaining 24% live in remote (8%) or very remote areas (16%).[72] Child and Adolescent Psychiatrists working anywhere in Australia are therefore likely to be faced with treating Indigenous children in out-of-home care at some time and need to be cognizant of Aboriginal and Torres Strait Islander child rearing practices.

*Māori children (tamariki and rangatahi)*

Almost a quarter of the New Zealand population aged 0-17 years are Māori, however, of children in care or under protection, 46% are Māori.[2]

Traditionally the Māori kinship system was structured into three groups, whānau, hapū and iwi. The whānau was the basic social unit consisting of three generations. The hapū consists of a number of whānau and the iwi is a collection of hapū descended from a common ancestor.[20] Today, Māori are a diverse population who differ between age groups, gender, iwi, hapū and geographic areas.[73] Colonization and urbanization have influenced the traditional relationship of individual Māori to whānau, hapū, and tribal lore.[73,74] Over the past two decades, however, there has been a revival of the Māori language and culture and a renewed commitment to their traditional values and knowledge.[75]

In traditional Māori culture, children were valued and nurtured and responsibility for child rearing extended beyond the biological parents to other members of the whānau.[73,74] Respect for this practice was demonstrated by the child welfare reforms that led to the mandate for Family Group Conferences in New Zealand's child protection legislation.[20]

There are four elements to the Māori concept of health: mental (hinengaro), physical (tinana), family/social (whānau), and spiritual (wairua). Good health is achieved when all four elements are in balance.[75]

Two well known Māori concepts that impact on health are Mate Māori and whakamā.[73] Mate Māori is associated with spiritual causes, based on the belief that a curse has been placed on the individual. The manifestations can be physical or mental and may be considered by the family to be the reason for emotional and behavioural problems. In such circumstances, involvement of traditional Māori healers may be necessary.[73]

Whakamā is a psychological and behavioural concept that has no direct equivalent in Western societies.[76] It relates to feelings of shame, self-abasement, shyness or reticence.[76] In the presence of whakamā, Māori may appear defiant or arrogant and avoiding eye contact and not responding to questions. For Māori, however, it is not the intention to be uncooperative. It is a normal Māori response to circumstances perceived as being beyond their control.[73]

Any mental health assessments and treatment plans for Māori children in out-of-home care need to address the cultural perspective of health. There has been significant effort in New Zealand to develop culturally appropriate Māori assessment tools and outcome measures. Mental health assessments of Māori children in out-of-home care need to consider the cultural concept of health and address the four elements – wairua (spirituality), hinengaro (mental/behavioural domain), tinana (physical health), and whanau (family/social health).[75]

Many mental health assessments rely on eliciting pertinent information from children and/or their carers which depends on effective communication between the assessor and the client. Ensuring the integrity of information exchanges is a challenge in the cross-cultural context. Even where the client may have reasonable English language, their competency may decrease when under stress.[77]

The services of professional interpreters, where available, may be necessary to ensure effective communication with Aboriginal, Torres Strait Islander or Māori clients. Using non-professional interpreters, particularly people close to the clients, is fraught as there may be cultural influences that impact on how the information is interpreted.[73] Professional interpreters are bound by a code of ethics that ensures confidentiality and have received training in interpreting cross-cultural concepts.[77]

**Outcomes required to address these issues:**

- Increased knowledge about healthy child development in the Aboriginal and Torres Strait Islander and Māori populations.
- Increased understanding of the aetiology and manifestation of mental health problems in Aboriginal and Torres Strait Islander and Māori children.
- Development of culturally appropriate child development assessment tools for use with Indigenous children in out-of-home care.
- Development of culturally appropriate mental health assessment tools for use with Indigenous children.
- Development of culturally appropriate indicators for measuring and monitoring mental health in Indigenous children.
- Child and adolescent psychiatrists use professional interpreters when assessing Aboriginal, Torres Strait Islander and Māori children, if there is any doubt about the client and/or their carer's competency in English language.

- Child and adolescent psychiatrists ensure that interpreters understand any terminology or concepts which may be unfamiliar in the client's culture, prior to the consultation.

## Section 6 Culturally and linguistically diverse children in out-of-home care

Australia and New Zealand are culturally diverse countries. The Australian 2006 Census showed that 10% of the population was born in a non-English speaking country and around 15% had both parents born in a non-English speaking country.[78] Almost half of the new settlers to Australia in 2005-2006 were from countries affected by war or political unrest.[79]

Currently there are no Australian published national data on the proportion of children in out-of-home care who are from culturally and linguistically diverse (CALD) backgrounds. An estimate based on information from state-based records would suggest that around 2% to 4% are from CALD backgrounds. A very small percentage of these would be refugee children who have arrived in Australia unaccompanied and have spent some time in detention.[80]

In New Zealand, 11% of the population are Pacific Islanders and 7% of are from Asian backgrounds.[81] The Pacific Islander population in New Zealand is diverse in itself consisting of six main ethnic groups. Of children under Care and Protection Services in New Zealand, 8% are from Pacific Islander backgrounds and 3% are of Asian decent.[2]

The Pacific Islanders have a holistic perspective of health and view mental health problems within traditional and contemporary social and spiritual settings.[72] The strong family-based value system amongst Pacific Islanders challenges the delivery of mental health services based on Western models of health care where the individual's needs are paramount.[73]

Recruiting culturally appropriate foster carers for CALD children in need of care is difficult.[82] Many of the people in these communities are struggling emotionally and financially to establish new lives in Australia and do not have the capacity to become foster carers. The concept of providing foster care may also be culturally unacceptable to some communities.[83] Migration for many CALD people is associated with separation from extended family and friends, so that kinship care is not an option. For many cultures mental illness is stigmatized which can also be a barrier to providing care for someone else's child who may have psychological problems.[84]

Child rearing practices are strongly influenced by culture. Whereas Anglo-Western cultures value individual independence, many other cultures uphold familial interdependence.[85] Such values impact on the mother-child relationship prompting responses to child behaviour patterns that ensure consistency with the culturally valued behaviours. The child's developing social competence and acceptance within their broader community are dependent on their behaviour patterns matching the culturally valued behaviours.[85]

Maternal responses that are at odds with those considered appropriate for developing secure attachments in children in Anglo-Western cultures, may be wrongly maligned when child-parent relationships are assessed using ethnocentric measures. Likewise

child behaviour patterns may be interpreted as symptomatic of mental health problems when judged against child behaviour considered normal in the Anglo-Western cultures.

Migrant children acculturate more rapidly than their parents and this can be a source of tension within the family and a source of stress for the child who is attempting to be socially competent within two cultures.[86]

How people from CALD backgrounds label and communicate distress and perceive mental health problems are influenced by their culture.[84] Given that the majority of mental health professionals are of Anglo-Western backgrounds, providing culturally competent mental health services is a challenge. The traditional assessments used in Anglo-Western child mental health care may not accurately identify psychopathology in children from CALD backgrounds.

Communicating effectively with children and carers from CALD backgrounds may require the assistance of professional interpreters to ensure the integrity of the information exchanges and that cross-cultural concepts are interpreted accurately.

**Outcomes required to address these issues:**

- Child and adolescent psychiatrists recognize the impact of culture when assessing CALD children for mental health problems.
- Child and adolescent psychiatrists use professional interpreters when assessing CALD children if there is any doubt about the client and/or their carer's competency in English language.
- Child and adolescent psychiatrists ensure that interpreters understand any terminology or concepts which may be unfamiliar in the client's culture, prior to the consultation.

## Section 7 Training and education

In Australia and New Zealand, the Royal Australian and New Zealand College of Psychiatrists (RANZCP) is responsible for specialist training and credentialing doctors as psychiatrists. The training in psychiatry takes a minimum of five years, and includes work under supervision in hospitals and community clinics, gaining wide experience in dealing with the full range of psychiatric problems, including those of children and families, adults and the elderly.[87]

Within the College, specialist aspects of psychiatry are represented by two Faculties and five Sections.[87] Of particular relevance to this report are the Faculty of Child and Adolescent Psychiatry, Section of Addiction Psychiatry, Section of Social and Cultural Psychiatry.

"The aim of CPD [Continuing Professional Development] is to ensure that practitioners skills and knowledge (including psychosocial aspects) remain current, therefore optimising the safety and quality of those services, and to assure the community in this regard. CPD is designed to ensure that practitioners maintain their professional skills in an environment where there are rapid changes that practitioners must keep abreast of". (Adapted from the Australian Council on Safety and Quality in Health Care discussion paper)[88]

Given the increasing numbers of children in out-of-home care and their high prevalence of mental health problems, a particular focus in psychiatric training (initial and on-going), particularly that of child and adolescent psychiatrists, on the issues and needs of this population is warranted.

An understanding of the complex nature of the psychopathology experienced by these children and the compounding effect that the broader social, psychological and biological factors have is important to the provision of good mental health care.[4]

Cross-cultural training that promotes an awareness of the child-rearing practices of Indigenous and other culturally and linguistically diverse (CALD) groups is central to meeting the needs of the children from these backgrounds. Training in the use of professional interpreters may also be necessary in some jurisdictions where critical information about a child is provided by a non-English speaking carer.

Increased awareness by psychiatrists of all specialties, of the role and functions of the child protection systems and the challenges faced therein would help to foster good interdisciplinary collaboration.

**Outcomes required to address these issues:**

- The mental health needs of children in out-of-home care in Australia and New Zealand is included in the curriculum for specialist training of child and adolescent psychiatrists.

- Initial and on-going training of psychiatrists includes:
  - The complex psychopathology of children in out-of-home care
  - Indigenous and CALD child rearing practices
  - Healthy child development in the Indigenous and CALD context
  - Impact of culture on the aetiology and manifestation of mental health problems
  - Use of interpreters
  - Child protection systems

- Increased understanding of the mental health needs of children in out-of-home care by other health professionals, e.g. through rotations by medical students, psychologists, nurses, etc in specialized clinics for children in out-of-home care.

## Section 8 Monitoring and evaluation

Monitoring, evaluation and research are the foundations of evidence-based practice. Monitoring and evaluation differ from research in that they are on-going, whereas research is designed to answer specific questions.

Monitoring relates to continuous follow-up activities that assess progress and evaluation is the process of determining the relevance, effectiveness, efficiency and impact of activities in achieving their goals. Together they inform the planning and delivery of services and measure the impact on the burden of disease.[48]

Epidemiological data can be used to monitor progress and identify protective factors and areas of greater need. Such data allow analysis of trends in the prevalence of psychopathology amongst the population of children in out-of-home care in comparison to normative children. They identify factors that are associated with differences in prevalence within the out-of-home care population e.g. between age cohorts, ethnic groups, geographic location and type of care placement.[12]

Monitoring improvements in the mental health of Indigenous children in out-of-home care requires indicators that are consistent with Indigenous perspectives of mental wellbeing.[75] Furthermore, there may be more value in comparing the mental health outcomes of Indigenous children in out-of-home care with Indigenous children not in care rather than making comparisons with non-Indigenous populations.[75]

On-going evaluation needs to be integrated into the planning and delivery of mental health care to ensure that services are being delivered as planned and to the benefit of children in out-of-home care. Client satisfaction with mental health care also needs to be assessed and in respect of Indigenous or CALD communities that such care is provided with cultural sensitivity.

Information gathered through monitoring and evaluation needs to be reviewed routinely to ensure that the provision of mental health care to this group of children remains accessible, relevant and cost-effective.

**Outcomes required to address these issues:**

- Routine collection and review of epidemiological data on the mental health amongst children in out-of-home care and the general population.
- Data collected allows for comparisons of Indigenous children in care with Indigenous children in the general population.
- Methodological sound evaluation to assess the access, relevance, cultural sensitivity and cost-effectiveness of mental health care for children in out-of-home care. The planning and delivery of mental health care services are based on the evaluation findings.

- Information gathered through monitoring and evaluation is reviewed routinely to ensure that the provision of mental health care remains accessible, relevant, culturally appropriate and cost-effective.

## Section 9 Research

A critique of Australian research relating to children in out-of-home care by Bromfield and Osborn states, "In order to protect the most vulnerable children in our community, a reliable and methodologically rigorous body of research is needed to inform practice."[19] They argue that while policy-makers and practitioners draw on knowledge from international research, many of these sources have not been assessed for their applicability in the Australian context.[19]

In spite of Aboriginal and Torres Strait Islander children being over-represented in the Australian out-of-home care population, there is a poor evidence base on issues specific to this group.[19]

No published research relating to children in out-of-home care in New Zealand could be found.

There are also significant gaps in the evidence to inform decisions about the best type of placements for children in need of care. Kinship care is the fastest growing type of out-of-home care in Australia and New Zealand, however there is limited research on child-wellbeing outcomes associated with this care.[15,18,19]

The imbalance between the numbers of children requiring out-of-home care and the availability of suitable carers in both countries underscores the need to investigate alternative care arrangements that provide the best developmental opportunities for these children.

Studies from Australia and UK propose that chronically maltreated children were protected against developing mental health problems if they enter care at an early age.[5,10] Implicit in this is that child welfare agencies need be able to identify reliably those chronically maltreated children who need long-term care and for whom family reunification will not be possible. Research is needed on how these children can be differentiated from other at-risk children in infancy and the barriers that exist that impedes early entry into care.[5]

Ensuring timely access to professional help for those children most in need is paramount to reducing the burden of disease in the out-of-home care population. Given the mental health workforce shortage, particularly in relation to psychiatrists, there is a need to investigate the most effective and cost-efficient ways of providing accessible and timely professional mental health care to this vulnerable group of children.

The influence of culture on the aetiology and manifestation of mental health problems in Indigenous and CALD children in out-of-home care needs to be well understood and translated into the policies and practices associated with caring for these populations.

The effectiveness of psychological and pharmacological treatments for the complex psychopathology that children in out-of-home care manifest is largely unknown and

findings from studies of children in the general population may not generalize to children in out-of-home care.[89] Research to inform the development of clinical guidelines for the psychiatric treatment of these children is required.

In the critique of Australian out-of-home care research, Bromfield and Osborn found that many children and young people were excluded from studies, their participation being blocked or disallowed by the agency social workers and/or carers. Preventing children and young people in out-of-home care from having the opportunity to provide their views on their experiences is a violation of the United Nations Convention on the Rights of Children.[7,19] Caseworkers and carers may be well intentioned in their actions, believing it to be in the best interests of the child, but perhaps fail to recognize the empowering effect that comes with an opportunity to have a voice. Such experiences may also assist with building resilience.

The increasing numbers of children requiring out-of-home care constitutes a major public health problem for Australia and New Zealand and warrants significant research investment so that the associated issues are well understood and effective control measures are identified.

**Outcomes required to address these issues:**

- Clinical research into the psychological and pharmacological treatment of the complex psychopathology of children in out-of-home care.
- Increased understanding of the barriers to timely access to professional help for children in out-of-home care with severe psychiatric problems.
- Investigation of the most effective and cost-efficient ways of providing accessible and timely professional mental health care to children in out-of-home care with severe psychiatric problems.
- Conclusive evidence on the advantages and disadvantages of kinship care on the mental health of children in need of care compared with other forms of care.
- Investigation of the optimal out-of-home care arrangements for children with special needs.
- Research into how chronically maltreated infants in need of long term care can be accurately distinguished from other at risk infants.
- Increased knowledge of issues specific to Aboriginal and Torres Strait Islander children in out-of-home care.
- Increased knowledge of issues specific to Māori children in out-of-home care.
- Increased understanding of the impact of culture on the aetiology and manifestation of mental health problems in Indigenous and CALD children in out-of-home care.
- Research related to children in out-of-home care needs to be recognized as a priority for funding grants.

## Section 10. Funding issues

The sustainability and economic futures of the Australian and New Zealander communities depend on healthy, socially competent and skilled populations who are productive participants in a workforce that can be globally competitive.

School achievements and adult economic productivity are dependent on the cognitive, social and emotional capacities developed in childhood.[40] Early childhood development programs with disadvantaged children have been shown to have positive socio-economic benefits that extend into middle adulthood. The returns on investment are enormous to society as a whole. Cost-benefit analysis of one intervention program estimated savings to the public of more than 12 times the initial investment per child with a return of $12.90 per dollar spent.[50]

The literature on human capital formation indicates that remedying disadvantaged environments at a later stage in the life cycle is both difficult and costly with diminished returns on investments.[52,90] This is demonstrated by the high costs of providing child protection and out-of-home care. In Australia, in 2006-07 this amounted to at approximately $1.7 billion nationally, an increase of 13.7% on that in the preceding year and an average annual increase of 11.8% over the four year period since 2002/03. Out-of-home care services accounted for almost two thirds of this expenditure.[53]

The increasing numbers of children requiring out-of-home care represents an approaching catastrophe for the Australian and New Zealand economies unless long term funding is committed for:

- research related to children in out-of-home care to inform policies and practices,
- early childhood development interventions,
- the provision of mental health services to address the complex psychopathology of children in out-of-home care,
- expanded opportunities for professional training in providing mental health care to children in out-of-home care,
- incentives for individuals with pertinent expertise to work with children in out-of-home care.

In Australia, the subsidies paid to carers vary by jurisdiction and the type of carer, with kinship carers often receiving least. It has been estimated that the costs associated with raising a foster child is, on average, 52% higher than for children not in care.[91] This disparity is explained by the higher maintenance costs associated with children with complex needs.[91]

One of the largest groups of kinship carers are grandparents and research has shown that raising grandchildren places significant financial, social and legal burdens on them.[19, 22]

**Outcomes required to meet these issues:**

- Increased funding for research related to children in out-of-home care to inform policies and practices.
- Increased funding for early development interventions for all pre-school children who are in out-of-home care or from disadvantaged backgrounds.
- Increased funding to provide appropriate mental health services to address the complex psychopathology of children in out-of-home care.
- Increased funding to expand opportunities for professional training in providing mental health care to children in out-of-home care
- Appropriate financial incentives for individuals with pertinent expertise to work with children in out-of-home care.
- Increased funding to provide adequate remuneration and support to foster and kinship carers.

## References


[1] Australian Institute of Health and Welfare (AIHW) Child protection Australia 2006–07. Child welfare series no. 43. Cat. no. CWS 31. Canberra: AIHW, 2008.

[2] Department of Child, Youth and Family Services. New Zealand. The True Measure of Our Success. Annual Report for year ended June 2006. http://www.cyf.govt.nz/documents/annual_report_06.pdf (accessed 06/09/07)

[3] Pilowsky, D. Psychopathology Among Children Placed in Foster Care, *Psychiatric Services*, 1995; 46 (9), 906-10.

[4] Tarren-Sweeney M and Hazell P. Mental health of children in foster and kinship care in New South Wales, *Australia. J Paediatri Child Health* 2006; 42: 89-97.

[5]Tarren-Sweeney, M. Retrospective and concurrent predictors of the mental health of children in care. *Children & Youth Services Review* 2008, 30: 1-25.

[6] Sawyer MG, Carbone JA, Searle AK and Robinson P. The mental health and well-being of children and adolescents in home-based foster care. *Med J Aust* 2007; 186: 181-184.

[7] United Nations, Office of the High Commissioner for Human Rights. Convention on the Rights of the Child. http://www.unhchr.ch/html/menu3/b/k2crc.htm (Accessed 11/09/07)

[8] United Nations, Consideration of Reports Submitted by States Parties Under Article 44 Of The Convention Concluding observations: Australia. Committee on the Rights of the Child, Fortieth Session. Geneva: United Nations 2005. http://www.unhchr.ch/tbs/doc.nsf/898586b1dc7b4043c1256a450044f331/6f6879be758d0e8ec12570d9003340ba/$FILE/G0544374.pdf (Accessed 05/09/07)

[9] Productivity Commission, Potential Benefits of the National Reform Agenda, Report to the Council of Australian Governments, Canberra. 2006. http://www.coag.gov.au/meetings/100206/human_capital_reform_report_COAG_100206.rtf (Accessed 1/12/07)

[10] O'Connor, T., Bredenkamp, D., Rutter, M., and the English and Romanian Adoptees Study Team. (1999). Attachment disturbances and disorders in children exposed to early severe deprivation. *Infant Mental Health Journal;* 20(1):10−29.

[11] McCarthy J. Meeting The Health Care Needs Of Children In The Foster Care System. Summary of State and Community Efforts. Key Findings. Georgetown University Child Development Center. September 2002. http://gucchd.georgetown.edu/files/products_publications/fcsummary.pdf (Accessed 07/09/07)

[12] Scott D. Towards a public health model of child protection in Australia. *Communities, Families and Children Australia* 2006;1(1) 9-16.

[13] Royal Australian & New Zealand College of Psychiatrists. Submission to the Productivity Commission on Health Workforce. July 2005. http://www.ranzcp.org/pdffiles/submissions/health%20workforce.pdf (Accessed 29/08/07)

[14] Bromfield L and Higgins D. National comparison of child protection systems, Child Abuse Prevention Issues No 22. Melbourne: National Child Protection Clearinghouse, Australian Institute of Family Studies. 2005. www.aifs.gov.au/nch/pubs/issues/issues22/issues26.pdf (Accessed 10/07/07).

[15] Barber J G and Delfabbro PH. Children in Foster Care. Routledge. London and New York. 2004.

[16] Worrall J. Kinship Care in New Zealand – Cultural Sensitivity or Economic Expediency? In Greeff R (Edit) Fostering Kinship, An international perspective on kinship foster care. Ashgate Publishing Company. USA 2001.

[17] Children, Young Persons and Their families Act 1989. Care of Children Act 2004. http://www.legislation.govt.nz/browse_vw.asp?content-set=pal_statutes&clientid=749837574&viewtype=contents (accessed 06/09/07)

[18] Scannapieco M Hegar RL. (Editors) Kinship Foster Care Policy, Practice and Research. Oxford University Press. New York. 1999.

[19] Bromfield L and Osborn A. 'Getting the big picture': A synopsis and critique of Australian Out-of-home care research. Child Abuse Prevention Issues No 26. Melbourne: National Child Protection Clearinghouse, Australian Institute of Family Studies. 2007. www.aifs.gov.au/nch/pubs/issues/issues26/issues26.pdf (Accessed 16/10/07)

[20] Swanson Ernst J. Whanau Knows Best - Kinship Care in New Zealand in Hegar RL Scannapieco M (Edits) Kinship Foster Care: policy, practice and research. 1999. Oxford University Press, New York.

[21] Ministerial Advisory Committee on a Maori Perspective for Department of Social Welfare Puao-Te-Ata-Tu. (day break): The Report Of The. Ministerial. Advisory Committee On A Maori Perspective For The Department of Social Welfare. Wellington, New Zealand. http://www.msd.govt.nz/documents/publications/msd/puaoteatatu.pdf (Accessed 07/12/07)

[22] Council on the Ageing National Seniors. (2003). *Grandparents raising grandchildren*. Canberra: Department of Families, Community Services and Indigenous Affairs. http://www.facsia.gov.au/internet/facsinternet.nsf/family/parenting-grandparents_raising_grandchildren.htm (Accessed 4/12/07)

[23] Osborn A and Delfabbro P. National Comparative Study of Children and Young people with High Support Needs in Australian Out-of-home care. A report prepared for the South Australian Government. School of Psychology, The University of Adelaide. 2006.

[24] Penna N. Keeping them safe – in out of home care. Alternative Care Reform. Presentation at Grand Rounds, Adelaide Women's and Children's Hospital. July 2007.

[25] Oregon Department of Human Services. The Status of Children in Oregon's Child Protection System 2006. http://www.oregon.gov/DHS/abuse/publications/children/abusestats2006.pdf (Accessed 24/09/07)

[26] Delfabbro P and Barber J. Placement disruption and psychological outcomes: Findings from the 3-year South Australian longitudinal study. Paper presented at 8th Australian Institute of Family Studies Conference, February 2003. www.aifs.gov.au/institute/afrc8/**delfabbro**.pdf (Accessed 27/08/2007)

[27] Australian Institute of Health and Welfare (AIHW) Child protection Australia 2005–06. Child welfare series no. 40. Cat. no. CWS 28. Canberra: AIHW.2007.

[28] Personal communication - Ministry of Social Development, New Zealand. Child, Youth and Family data, 30 June 2007, February 2008.

[29] Children, Young Persons, and Their Families Amendment Bill (No 6), New Zealand Parliament. http://www.parliament.nz/NR/rdonlyres/E2C08487-A64F-4EEB-9805-06F0E285BAB3/69943/DBHOH_BILL_8364_5622.pdf (accessed 07/12/07).

[30] Emerson E, Hatton C. Mental health of children with and without intellectual disabilities in Britain. *British J Psychiatry,* 2007 Dec;191:493-9.

[31] Tonge B, Einfield S. The trajectory of psychiatric disorders in young people with intellectual disabilities. *Aust. NZ. Journal Psychiatry;* 2000 34(1): 80-84.

[32] Perry BD, Pollard R, Blakely T, Baker W and Vigilante D. Childhood trauma, the neurobiology of adaption and "use-dependent" development of the brain: How "states" become "traits". *Infant Mental Health Journal*; 1995 16(4) 271-291.

[33] Perry B D The Neuroarcheology of Childhood Maltreatment: The neurodevelopmental costs of adverse childhood events
http://www.childtrauma.org/CTAMATERIALS/Neuroarcheology.asp (Accessed 02/10/2007)

Also in Geffner B (Ed.), For the cost of child maltreatment: Who pays? We all do (pp. 15-37). San Diego, CA: Family Violence and Sexual Assault Institute. 2001.

[34]Shore R (1997) cited in Child Information Gateway. Understanding The Effects Of Maltreatment On Early Brain Development. A bulletin for professionals. US Department of Health and Human Services. 2001 http://www.childwelfare.gov/pubs/focus/earlybrain/earlybrain.pdf (Accessed 01/10/07)

[35] Perry B D Memories of Fear How the Brain Stores and Retrieves Physiologic States, Feelings, Behaviors and Thoughts from Traumatic Events.
http://www.childtrauma.org/CTAMATERIALS/memories.asp (Accessed 09/10/2007)
Also available in Goodwin J and Attias R (Edits)Splintered Reflections: Images of the Body in Trauma Basic Books 1999.

[36] Goldberg S. Attachment and Development. Hillsdale, NJ: The Analytic Press; 2000.

[37] Benoit D. Attachment and parent-infant relationships...A review of attachment theory and research. *Ontario Association of Children's Aid Societies Journal* 2000;44(1):13-23.

[38] Mutimer A. Reece J. Matthews J. Child Resilience: Relationship between Stress, Adaptation and family Functioning. *Electronic Journal of applied Psychology: Child Resilience*. 3(1): 16-25. 2007 (accessed 24/8/07)

[39] Werner E E.; Johnson J L.. The Role of Caring Adults in the Lives of Children of Alcoholics *Substance Use & Misuse*, 2004; 39(5):699-720.

[40] Shronkoff JP Phillips DA.(Editors) From Neurons to neighborhoods: The Science of Early Childhood Development. Committee on Integrating the Science of Early Childhood Development, Board on Children, Youth, and Families, National Research Council and Institute of Medicine, National Academy Press. Washington, D.C. 2000.
http://www.nap.edu/openbook.php?record_id=9824&page=R1 (Accessed 02/10/07)

[41] Perry B D, Pollard R. Homeostasis, Stress, Trauma and Adaptation- A Neurodevelopmental View of Childhood Trauma. *Child and Adolescent Psychiatric Clinics of North America*, 1998; 7(1):33-51.

[42] Perry B D The neurodevelopmental impact of violence in childhood. In Schetky D & Benedek, E. (Eds.) Textbook of child and adolescent forensic psychiatry. Washington, D.C.: American Psychiatric Press, Inc. (221-238) 2001.

[43] Glaser D. Child Abuse and Neglect and the Brain – A Review. *J. Child Psychol. Psychiat* 2000; 41(1): 97-116.

[44] Child Information Gateway. Understanding The Effects Of Maltreatment On Early Brain Development. A bulletin for professionals. US Department of Health and Human Services. 2001.
http://www.childwelfare.gov/pubs/focus/earlybrain/earlybrain.pdf (Accessed 01/10/07)

[45] Perry B D Pollard R Altered brain development following global neglect in early childhood. Proceedings from the Annual Meeting of the Society for Neuroscience, New Orleans.1997.

[46] Teicher MH Scars that won't heal: The Neurobiology of Child Abuse. *Scientific American* March 2002.

[47] Perry, B.D. Traumatized children: How childhood trauma influences brain development. *The Journal of the California Alliance for the Mentally Ill* 11:1, 48-51, 2000.

[48] Beaglehole R. Bonita R. Kjellstrom T. Basic epidemiology. World Health Organisation. Geneva.1993.

[49] Tomison AM. Intergenerational transmission of maltreatment. *Issues in Child Abuse Prevention* No 6 1996. National Child Protection Clearing House. Australian Institute of Family Studies. http://www.aifs.gov.au/nch/pubs/issues/issues6/issues6.html (Accessed 21/10/07)

[50] Schweinhart, L. The High/Scope Perry Pre-School Program through age 40.Summary, Conclusions and Frequently Asked Questions. June 2007. http://www.highscope.org/file/Research/PerryProject/3_specialsummary%20col%2006%2007.pdf (Accessed 04/12/07)

[51] Parks G. The High/Scope Perry Preschool Project. Justice bulletin, October 2000. http://www.ncjrs.gov/html/ojjdp/2000_10_1/contents.html

[52] Lynch RG. Early Childhood Investment Yields Big Pay-Offs. Policy Perspectives. June 2005. http://www.wested.org/online_pubs/pp-05-02.pdf

[53] Steering Committee for the Review of Government Service Provision (SCRGSP), Report on Government Services 2008, Protection and Support Services, Volume 2. Chapter 15. Productivity Commission. January 2008. http://www.pc.gov.au/__data/assets/pdf_file/0008/74879/chapter15.pdf (Accessed 08/02/08)

[54] Royal Australian New Zealand College of Psychiatrists. Children of parents with a mental health illness. Position Statement No. 56. http://www.ranzcp.org/pdffiles/posstate/ps56.pdf (accessed 21/08/07)

[55] Holzer PJ, Higgins JR, Bromfield LM, Richardson N & Higgins DJ. The Effectiveness of parent education and home visiting child maltreatment prevention programs. *Child Abuse Prevention Issues* No 24 2006. National Child Protection Clearing House. Australian Institute of Family Studies. http://www.aifs.gov.au/nch/pubs/issues/issues24/issues24.pdf (Accessed 23/09/07)

[56] Personal communication (November 2007) with:
Guardianship and Alternative Care Directorate, Families SA, South Australian Government, Office of the Children's Guardian, New South Wales Government, Human Rights Commission Australian Capital Territory, Department of Child Safety, Queensland Government, Department for Child Protection, Government of Western Australia.

[57] Nathanson D & Tziomi D. Health needs of Australian children living in out-of-home care. *Journal of Paediatrics and Child Health*. 2007;43:695-699.

[58] Tarren Sweeney MJ, Hazell PL and Carr VJ. Are foster parents reliable informants of children's behaviour problems? *Child: Care, Health & Development 2004;*30(2):167–175.

[59] Royal Australian & New Zealand College of Psychiatrists. Psychiatrists as team members. Position Statement No 47. April 2002. http://www.ranzcp.org/pdffiles/posstate/ps47.PDF (Accessed 23/10/07)

[60] Parliament House Canberra. Media Release *Better access to mental Health care Initiative* The Hon Christopher Pyne MP Parliamentary Secretary to the Minister for Health and Ageing ACT 2006. http://www.health.gov.au/internet/ministers/publishing.nsf/Content/FF1145DD4341E945CA2572010081C80E/$File/pyn060.pdf

[61] Australian Medical Workforce Advisory Committee, The General Practice Workforce in Australia: Supply and Requirements to 2013, AMWAC Report 2005.2, Sydney. http://www.health.nsw.gov.au/amwac/pdf/gp_2005.pdf (Accessed 30/10/07)

[62] Productivity Commission, Australia's Health Workforce, Research Report, Canberra. 2005.

[63] High and Complex Needs (HCN). Intersectoral Strategy for Children and Young people with High and Complex Needs. *Te Kahu Tauahi Whānau.* 2005. http://www.hcn.govt.nz/documents/IntersectoralStrategy.pdf (Accessed 20/02/08)

[64] World Health Organization. Strengthening Mental Health Promotion, WHO Fact Sheet No. 220. Geneva: World Health Organization, 2007.

[65] Committee on Indigenous Health. The Geneva Declaration on the Health and Survival of Indigenous Peoples. New York: United Nations Permanent Forum on Indigenous Issues, 2002, cited in Durie M. Understanding health and illness: research at the interface between science and indigenous knowledge. *International Journal of Epidemiology* 2004;**33**:1138–1143.

[66] National Strategic Framework for Aboriginal and Torres Strait Islander Health: Context, NATSIHC, Canberra. July 2003. http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-oatsih-pubs-healthstrategy.htm (Accessed 03/09/07)

[67] Ampe Akelyernemane Meke Mekarle "Little Children are Sacred" Report of the Northern Territory Board of Inquiry into the Protection of Aboriginal Children from Sexual Abuse 2007. www.nt.gov.au/dcm/inquirysaac/pdf/bipacsa_final_report.pdf (Accessed 03/09/07)

[68] NSW Office of the Children's Guardian. Accreditation Benchmark Policy Statement Standard 1.5b Kinship placements. http://www.kidsguardian.nsw.gov.au/accreditation/acc_policies.php

[69] Indigenous Australia: Family. http://www.dreamtime.net.au/indigenous/family.cfm (Accessed 03/09/07)

[70] Bromfield LM, Higgins JR, Richardson N & Higgins DJ. Why standard assessment processes are culturally inappropriate. Perspectives of professionals from Aboriginal and Torres Strait Islander organisations, non-government agencies and government departments. Promising Practices in Out-of-Home Care for Aboriginal and Torres Strait Islander Carers and Young People: Strengths and Barriers Paper 3. Australian Institute of family Studies. Commonwealth of Australia 2007. http://www.aifs.gov.au/nch/pubs/reports/promisingpractices/summarypapers/paper3.pdf (Accessed 23/09/07)

[71] National Aboriginal and Torres Strait Islander Health Council and National Mental Health Working Group. Social and Emotional Wellbeing Framework. A National Strategic Framework For Aboriginal And Torres Strait Islander People's Mental Health And Social And Emotional Wellbeing 2004-2009.

[72] Australian Bureau of Statistics. Population Distribution, Aboriginal and Torres Strait Islander Australians, 2006. http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4705.02006.pdf (Accessed 03/09/07)

[73] Child Youth and Families. Working With Children And Young People With Mental Health Problems And Their Families And Whänau. A guide for Child, Youth and Family staff. http://www.cyf.govt.nz/documents/mentalHealthGuidelines2002.pdf (Accessed 06/12/07)

[74] Rickard S. Koi Patu Koi Manae: Disciplining Māori Children. *Social Work Now.*1998;11: 4-9.

[75] Durie M. Understanding health and illness: research at the interface between science and indigenous knowledge. *International Journal of Epidemiology* 2004;**33**:1138–1143.

[76] Sachdev PS. Whakama: culturally determined behaviour in the New Zealand Maori. *Psychol Med.* 1990; 20(2):433-44.

[77] National Accreditation Authority for Translators and Interpreters Ltd.(NATTI). Concise Guide for Working with Translators and Interpreters in Australia, 2003. http://www.naati.com.au/pdf/publications/concise_guide_for_working_with_ti_in_australia.pdf (Accessed 27/11/07)

[78] Australian Bureau of Statistics. 2006 Census Community Profile Series. Catalogue No. 2001.0. Commonwealth of Australia 2007. http://www.censusdata.abs.gov.au/AUSSTATS/2006Census1.nsf/log?openagent&20010%2DBCP%2DAustralia%2Ezip&20030&Main%20Features&CE16BD759FF10C54CA257321001B33D8&0&2006&25%2E10%2E2007&Latest (Accessed 26/11/07)

[79] Australian Government, Department of Immigration and Citizenship. Total Arrivals by Country of Birth 2005-06. http://www.immi.gov.au/media/statistics/statistical-info/oad/totalmovs/totmova.htm (Accessed 26/11/07)

[80] Human Rights and Equal Opportunity Commission. A last resort? National Inquiry into Children in Immigration detention 2004. http://www.hreoc.gov.au/human_rights/children_detention_report/report/chap03.htm

[81] Smeith G & Dunstan K. Ethnic Population Projections: Issues and Trends. Key Statistics June 2004.Statistics New Zealand.

[82] Chuan C and Flynn C. Children and young people of culturally and linguistically diverse (CALD) backgrounds in out-of-home care in NSW: Support strategies, challenges and issues. Association of Children's Welfare Agencies, Centre for Community Welfare Training. August 2006. http://www.acwa.asn.au/Downloads/Publications/060825_CALD_report.doc (Accessed 24 /11/07)

[83] Department of Child Safety. Practice Paper - Working with people from culturally and linguistically diverse backgrounds. August 2006. http://www.childsafety.qld.gov.au/practice-manual/documents/prac-paper-working-cald.pdf (Accessed 15/11/07)

[84] Multicultural Mental Health Australia. Mental Health in a Changing World: The impact of culture and diversity, 2007. http://www.mmha.org.au/mmha-products/fact-sheets/mental-health-in-a-changing-world-the-impact-of-culture-and-diversity-1/mental-health-in-a-changing-world-the-impact-of-culture-and-diversity-english/file (Accessed 20/11/07)

[85] Carlson VJ & Harwood RL**.** Attachment, Culture, And The Caregiving System: The Cultural Patterning Of Everyday Experiences Among Anglo And Puerto Rican Mother–Infant Pairs. Infant Mental Health Journal**,** 2003 Vol. 24(1), 53–73.

[86] Department of Child Safety. Working with people from culturally and linguistically diverse backgrounds. Practice Paper. August 2006. http://www.childsafety.qld.gov.au/practice-manual/documents/prac-paper-working-cald.pdf (Accessed 15/11/07)

[87] Royal Australian & New Zealand College of Psychiatrists Website: How Psychiatrists Train. http://www.ranzcp.org/publicarea/aboutpsy.asp#howtopsy (Accessed 29 August 2007)

[88] Royal Australian & New Zealand College of Psychiatrists Website: Continuing Professional Development Program. http://www.ranzcp.org/publicarea/mops.asp (Accessed 29 August 2007)

[89] Racusin R, Maerlender A, Sengupta A, Isquith P, Straus M. Psychosocial treatment of children in foster care: A review. *Community Ment. Health J.* 2005; 41 (2): 199–221 cited in Tarren-Sweeney M and Hazell P. Mental health of children in foster and kinship care in New South Wales, *Australia. J Paediatri Child Health* 2006;42: 89-97.

[90] Cunha, F., Heckman, J., Lochner, L. and Masterov, D. (2005), Interpreting the evidence on life cycle skill formation, National Bureau of Economic Research, Discussion Paper No. 1675 July 2005.

[91] McHugh, M. (2002). The costs of caring: A study of appropriate foster care payments for stable and adequate out-of-home care in Australia. Haymarket, NSW: Association of Childrens Welfare Agencies. http://www.acwa.asn.au/Downloads/Publications/060825_CALD_report.doc (Accessed 26/11/07)