Examination of the Relationship between Maternal Depression and ADHD

by

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I certify that the thesis entitled

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is the result of my own work and that where reference is made to the work of others, due acknowledgment is given.

I also certify that any material in the thesis which has been accepted for a degree or diploma by any university or institution is identified in the text.

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I
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TABLE OF CONTENTS

CANDIDATE DECLARATION ........................................... I

ACKNOWLEDGEMENTS ............................................. II

TABLE OF CONTENTS ............................................. III

CHAPTER ONE: OVERVIEW .......................................... 1
Overview ..................................................................... 1

CHAPTER TWO: PARENT-CHILD INTERACTIONS .................. 4
Maternal depression and disruptive behaviour disorders in childhood ............................................. 4
Postnatal depression and early attachment experiences ................................................................. 5
Development of attention ........................................... 8
Development of hyperactivity ..................................... 9
Development of self-regulation .................................. 10
Summary and conclusions ......................................... 12

CHAPTER THREE: THE DIFFERENTIAL DIAGNOSIS ............... 14
OF ADHD .................................................................. 14
Diagnostic criteria .................................................. 15
Assessment ........................................................................................................ 15

Investigating the effects of maternal depression during the assessment phase ......................................................... 18

Treating children with ADHD ........................................................................... 19

CHAPTER FOUR: DAN: A YOUNG MAN WITH ADHD AND DYSLEXIA ......................................................... 21

Referral ............................................................................................................. 21

Presenting Problems ......................................................................................... 21

Family system .................................................................................................. 22

Parents history ................................................................................................ 22

Developmental history ..................................................................................... 24

Admission ........................................................................................................ 28

Psychometric assessment ................................................................................ 29

Formulation ...................................................................................................... 30

Treatment ........................................................................................................ 32

Medication ........................................................................................................ 32

School intervention .......................................................................................... 33

Parenting training ............................................................................................. 33

Counselling ...................................................................................................... 34

Summary and conclusions .............................................................................. 34

CHAPTER FIVE: DAMIEN: A YOUNG BOY WITH ADHD AND ODD ................................................................. 36

IV
Referral ................................................................. 36
Family assessment session .................................................. 36
  Presenting problems ...................................................... 37
Parent assessment session .................................................. 38
  Family system ............................................................. 38
  Parent’s history ........................................................... 39
  Developmental history ................................................... 40
Individual assessment sessions .............................................. 42
  Psychometric assessment ............................................... 43
Kindergarten observation .................................................... 44
Formulation .................................................................. 45
Treatment ...................................................................... 47
  Parenting training .......................................................... 47
  Group program ............................................................... 48
Summary and conclusions ..................................................... 48

CHAPTER SIX: BEAU: A YOUNG BOY PRESENTING WITH
HYPERACTIVITY AND POOR ATTENTION ................................ 51
Referral ...................................................................... 51
Family assessment session .................................................. 51
  Presenting problems ...................................................... 52
Parent assessment session .................................................. 53
  Family system ............................................................. 53
CHAPTER SEVEN: DANIELLE: A YOUNG GIRL
WITH ADHD .................................................. 66
Referral ......................................................... 66
Family assessment session ............................. 66
   Presenting problems .................................... 67
Parent assessment session .............................. 68
   Family system ........................................... 68
   Parent's history ......................................... 68
   Developmental history ................................. 69
Individual assessment sessions ....................... 71
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychometric assessment</td>
<td>72</td>
</tr>
<tr>
<td>Formulation</td>
<td>73</td>
</tr>
<tr>
<td>Treatment</td>
<td>75</td>
</tr>
<tr>
<td>Medication</td>
<td>75</td>
</tr>
<tr>
<td>School intervention</td>
<td>75</td>
</tr>
<tr>
<td>Behaviour management plan</td>
<td>75</td>
</tr>
<tr>
<td>Counselling</td>
<td>76</td>
</tr>
<tr>
<td>Summary and conclusions</td>
<td>76</td>
</tr>
</tbody>
</table>

CHAPTER EIGHT: CONCLUSIONS AND IMPLICATIONS

FOR CLINICAL PRACTICE .................................................. 78

REFERENCES ........................................................................... 84
CHAPTER ONE: OVERVIEW

The management of children presenting with externalising or disruptive behaviour disorders can present a significant challenge for parents and teachers (Goldstein & Goldstein, 1992). While the presentation of symptoms may vary between children and in accordance with their specific diagnosis, children diagnosed with an externalising disorder tend to be aggressive, impulsive, oppositional and/or hyperactive (Goldstein, 1998). One externalising behaviour disorder that has been the focus of extensive media coverage is Attention Deficit Hyperactivity Disorder or ADHD (Neven, Anderson & Godber, 2002). This portfolio will focus specifically on ADHD, discussing theories regarding the aetiology of this disorder, its assessment and treatment options in more depth.

Diagnostically, the label ADHD is applied to children presenting with significant problems related to their attentional capacity, impulse control and hyperactivity (Barkley, 1990). To better understand the nature of ADHD it is important to consider the distinct facets of ADHD separately - inattention and hyperactivity-impulsivity. In this context, inattention refers to errors either in selecting what to attend to or in keeping attention focused for as long as necessary to perform a task (Wodrich, 2000). One of the myths associated with ADHD is that children with this range of symptoms are incapable of sustaining their attention in any setting or capacity. This is rarely the case, as most children with ADHD tend to be quite variable in exhibiting their attention problems. Thus, the key to deciding whether a child is genuinely inattentive is by assessing the pervasiveness of the child’s attention related difficulties across situations and the degree to which these difficulties impair the child’s functioning (Wodrich, 2000).

Children diagnosed with ADHD must also exhibit some symptoms from the hyperactivity-impulsivity domain. The term hyperactivity refers to excesses in physical movement, especially excesses that have a purposeless, poorly directed or driven quality (Wodrich, 2000). Children with ADHD are more restless, fidgety and on the go than same aged peers (Carr, 1999; Wodrich, 2000). Given this tendency, situations that require quiet, focused, controlled behaviour, such as a classroom environment, present special problems for children with ADHD (Wodrich, 2000).
Finally, children with ADHD often demonstrate poor impulse control or impulsivity. Specifically, children with ADHD tend to have difficulty controlling and regulating their impulses, in thinking before they act (Sandberg, 1996; Wodrich, 2000).

The prevalence of ADHD has been estimated at 3-7% in school-aged children (American Psychiatric Association, 2000). Prevalence rates tend to vary however, depending on the location of the population sampled and the sampling techniques used. ADHD is a particularly severe problem because children with the core difficulties of inattention, overactivity and impulsivity often develop a wide range of secondary academic and relationship problems. These include poor school performance, difficulties in making and keeping friends, conflictual parent-child relationships and low self-esteem (Carr, 1999). In its severe form, the disorder is markedly impairing, affecting all aspects of social, familial and scholastic adjustment (American Psychiatric Association, 2000). While these difficulties tend to occur secondary to ADHD, there are also a number of disorders that occur co-morbidly. These include, but do not preclude, learning difficulties such as Dyslexia, other more pronounced disruptive behaviour disorders such as Oppositional Defiant Disorder and anxious or internalising disorders such as Dysthymia (Barkley, 1990).

Many theories have been developed to account for ADHD. These theories tend to fall into three main categories. First, there are those that focus predominantly on the role of genetic or biological factors in the aetiology of ADHD (Carr, 1999; Tannock, 1998). Second, there are those, which attempt to explain ADHD by referring to a central underlying deficit. As an illustration, the inattention hypothesis asserts that attentional difficulties are the foundation of all of the features of ADHD, including overactivity and impulsivity (Carr, 1999). Finally, there are psychological theories, which examine the role of psychosocial factors in the development and maintenance of ADHD (Carr, 1999). It is beyond the scope of this portfolio to discuss each theory extensively. While each has its merits, this portfolio will focus on the psychological basis of ADHD. In particular, this portfolio will emphasise the important role that mother-child interactions play in developing and regulating children’s attentional and regulatory capabilities. This discussion will be centred around common theories of attachment and the impact of maternal depression and separation on children’s development.
In order to do so, Chapter Two will examine the importance of early attachment and bonding experiences to normative development. This chapter will go on to discuss the impact that early attachment and bonding experiences have on the development of attention and self-regulation in children, evaluating theories that link these early experiences to the presentation of ADHD symptoms in later childhood. The impact that maternal depression has on these important developmental processes will also be discussed, with parallels drawn between the presentation of ADHD symptoms and maternal depression during early infancy and childhood. In doing so, this chapter will focus specifically on the theories of Neven, Anderson and Godber (2002).

Chapter Three will briefly review the differential diagnosis of ADHD, highlighting some related difficulties encountered in clinical practice. This chapter will also discuss the myth of the ‘one size fits all’ diagnostic label, highlighting the importance of multidisciplinary assessment when diagnosing ADHD, as children diagnosed with ADHD tend to present with different areas of strength and weakness. It will be argued that clinicians need to thoroughly assess the capabilities of children presenting with ADHD, creating tailored interventions based on the results.

In order to understand the impact that these issues have on clinical practice, four case studies will be presented in Chapters Four to Seven. The children and adolescents presented in these case studies were referred either with a previous diagnosis of ADHD or suspected ADHD. Each of these cases was selected as they highlight, in a different manner, the importance of accurate diagnosis and the effects that maternal depression may have on children and adolescents presenting with inattention, hyperactivity and poor impulse control. In order to protect the privacy of the children and adolescents presented in these case studies, names and other identifying details have been changed.

Finally, Chapter Eight will review the literature with reference to the specific case studies presented, making recommendations for clinicians diagnosing and treating ADHD. This chapter will also review the limitations associated with this review, making suggestions for future research in the area.
CHAPTER TWO: PARENT-CHILD INTERACTIONS

The aim of the present chapter is to discuss the relationship between ADHD and maternal depression. Specifically, this chapter will explore the role that maternal depression may play in the aetiology and maintenance of the core symptoms of ADHD. In order to do so, this chapter will briefly discuss research evaluating the correlation between maternal depression and disruptive behaviour disorders in childhood. The discussion will then turn to common theories which attempt to explain the basis of this relationship. Specifically, this chapter will review attachment theory, the impact that postnatal depression has on early attachment experiences and the association between suboptimal attachment and the presentation of behavioural difficulties in later childhood. The development of attention, self-regulation and hyperactivity in children will also be discussed using neuropsychological and psychodynamic theories to explain how these processes might be disrupted by maternal depression and suboptimal attachment. Finally, this chapter will discuss the implications of this review for clinicians involved in the assessment and treatment of children with ADHD.

Maternal depression and disruptive behaviour disorders in childhood

The link between psychiatric illness in parents and disturbances in their infants has been known for many years (Buist, 1996). Observations of depressed mothers and their children indicate that these relationships are often characterised by rejection, anxiety, over-protection and guilt (Uddenberg, 1974). Depressed mothers have also been shown to be more critical, disapproving, aversive and less positive in their interactions with their children than mothers who are not depressed (Hops et al., 1987; Webster-Stratton, 1988). Once established, these negative patterns of interaction are often resistant to change without intervention (Neven, Anderson & Godber, 2002). Moreover, it appears that the negative interactional patterns established in some mother-child pairs during periods of maternal depression continue to varying degrees, well after the mother’s depression has lifted (Murray, 1992).
The impairment of relationships between depressed mothers and their children has been largely substantiated in long-term studies on children up to 4½ years, which have linked both Post Natal Depression and current depressive symptomatology, to childhood behavioural problems such as hyperactivity and impulsivity, and to cognitive impairment (Buist, 1996). Studies examining the relationship between maternal depression and school-aged children also report adverse effects, with reports of cognitive impairment, poor attention and problem solving abilities and low self esteem compared with peers whose mothers are not depressed (Grunebaum, Cohler, Kauffman & Gallant, 1978; Weissman, Paykel & Klerman, 1972; Weissman et al., 1984).

The increased interest in ADHD in the past two decades had lead to a spate of research investigating the relationship between maternal depression and ADHD symptoms, with most studies indicating that a strong positive correlation exists between the two disorders (Brockington & Kumar, 1982; Hinshaw, 1994; Kumar & Brockington, 1988; Taylor, 1994). It is important to note however, that this link is not definitive. There are a number of children diagnosed with ADHD whose mothers have not suffered from depression. Similarly, there are a number of children whose mothers suffer from depression, who do not present with any of the symptoms of ADHD (Sandberg & Garralda, 1996). The focus of this portfolio however, is on the cases in which a strong relationship between ADHD symptoms and maternal depression is evident.

There are a number of ways in which maternal depression, be it postnatal depression during infancy, or ongoing depression during later childhood, may influence the presentation of inattention, hyperactivity and poor regulation in children. The remainder of this chapter will discuss some theories that attempt to explain this interaction.

Postnatal depression and early attachment experiences

In considering the impact of postnatal depression on the development of ADHD symptoms in early childhood, deviation to a discussion of attachment theory is necessary. The term attachment refers to the nature of the relationship between
mother and child, which is thought to become a firmly established pattern of interaction by the first year of life (Neven, Anderson & Godber, 2002). The early attachment experiences between mother and child serve to construct a psychological map of the world for the developing child, consisting of objective (cognitive) as well as emotional (affective) knowledge of the world (Neven, Anderson & Godber, 2002). Bowlby (1969) highlighted the importance of a secure attachment to a caregiver, such as the mother, during the first year of life for later development.

Ainsworth and colleagues (1978), in looking at infant-mother attachment, found that not all mothers and infants appeared to form this secure attachment. Ainsworth described three patterns of mother-infant interaction following a brief episode of experimentally contrived separation. Securely attached children sought proximity during reunions and explored actively in their mother’s presence while the mother conversed with the interviewer. Ainsworth noted that these infants treated their mothers as a secure base from which to explore the environment. By contrast, anxiously attached infants alternated in an unpredictable manner between seeking and maintaining proximity with their mothers on the one hand and resisting or avoiding proximity on the other. Ainsworth noted that these mothers were unresponsive to their child’s cues and so were unable to provide their child with a secure base experience. The final pattern of attachment, anxious-avoidant attachment, was characterised by a pattern of interaction whereby infants avoided their mothers upon reunion. These infants did not return to their mothers following the stress of separation and did not appear to be distressed when separated (Carr, 1999).

Subsequent research has shown that secure attachment to a parental figure is a protective factor (Bretherton & Waters, 1985; Belsky & NezwarSKI, 1988). Secure attachment has been associated with the development of self-esteem, positive affect, good peer relationships, good relationships with adults and a strong sense of personal autonomy (Carr, 1999). Anxiously attached or avoidant children however, have been found to be at risk for developing psychological difficulties such as low self-esteem, conflictual parent-child relationships, poor peer relationships, oppositional or aggressive behaviours and a number of externalising behaviour disorders (Carr, 1999; Erickson, Sroufe & Egeland, 1985; Shaw & Vondra, 1995). The effects of
these early attachment experiences have been found to continue on through childhood (Murray, 1992).

While a number of factors may influence attachment, one of the factors found to have a highly detrimental impact on this process is postnatal depression. Research indicates that the infants of mothers with a psychiatric illness, such as postnatal depression, are at an increased risk of forming an anxious or avoidant style of attachment (Buist, 1996; Murray, 1992). It is important to note however, that there is not a direct causal relationship between these attachment styles and the development of childhood psychiatric disorders. Rather, anxious or avoidant attachment styles act as a predisposing factor that may eventually contribute to the development of difficulties in cases where other predisposing factors exist (Carr, 1999).

In summary, research indicates that early attachment experiences set the tone for future mother-child interactions. In cases where attachment is suboptimal, the child becomes vulnerable to later difficulties. Postnatal depression has been found to have a detrimental impact on attachment, increasing the likelihood of difficulties occurring in later childhood. Suboptimal attachment is not in itself however, capable of ‘producing’ ADHD in children, acting solely as a predisposing factor. This research highlights the importance of taking a thorough developmental history when assessing children presenting with ADHD, in order to ascertain the type and quality of the child’s attachment experiences, as this assessment will have important implications both in terms of the formulation of the case and the treatment recommendations made. Before moving on, it is important to note that paternal depression has also been found to have a significant impact on childhood behavioural difficulties (Buist, 1996; Neven, Anderson & Godber, 2002; Sandberg & Garralda, 1996). It is however, beyond the scope of this portfolio to comprehensively review the litany of factors that may predispose children to later behaviour and attention-based difficulties. As such, this portfolio has focused predominantly on the impact of maternal depression on children presenting with ADHD symptoms.
Development of attention

As the field of infant psychiatry has developed, the notion that children are born with a predetermined attention span, which requires little to no environmental mediation, has become outdated (Neven, Anderson & Godber, 2002). While there are powerful maturational and biological processes involved in the rapidly increasing attentional abilities of children as they develop, many infant researchers now agree that the parent-child relationship is essential for the development of attention and the capacity for thought - a capacity that includes emotional as well as intellectual competence (Neven, Anderson & Godber, 2002). Thus, biological and environmental factors shape children's attentional capacity.

One way in which children's attentional capacity develops is via direct parent-child interactions. Research indicates that during early infancy children mimic the actions of their primary caregivers, developing their attentional capacity, emotional regulation and activity level in accordance with information supplied by their primary caregivers (Neven, Anderson & Godber, 2002; Sameroff & Emde, 1989). If we believe that the establishment of attention in the infant is dependent on a mutually absorbing and sensitive interaction with their parents as Neven and colleagues suggest, it stands to reason that the parent's state of mind and their own capacity for attention is a crucial part of this process.

Research in the field of infant development has provided some support for this hypothesis, using eye gaze studies. An infants' ability to hold their parents eye gaze has been described as a useful way of initiating the process of attention (Neven, Anderson & Godber, 2002). Babies who are securely attached, are able to hold their mothers gaze, selectively focusing their attention on one task. Infants of depressed mothers however, are generally unable to hold their mothers gaze, becoming easily distracted by other external stimuli. Interestingly, these mothers also report difficulty with the task, highlighting the commonality of poor attention and concentration during episodes of depression (Neven, Anderson & Godber, 2002).

Thus, one way in which maternal depression may influence children's attentional capacity is via early parent-infant interactions. In the studies reviewed, the children
of non-depressed mothers were generally able to model their parent's behaviour, demonstrating the ability to focus their attention on one task. Children of mother's suffering from postnatal depression however, tended to emulate their mother's attention based difficulties, resulting in an impairment in their attentional capacity (Neven, Anderson & Godber, 2002). In this way, postnatal depression may be directly related to one of the core manifestations of ADHD -- inattention.

Another way in which postnatal depression may influence children's attentional capacity is by impairing necessary developmental tasks. Winnicott (1965) asserts that one of the tasks of the young child is to develop the capacity to be alone. While many assume that the ability to be alone is one that comes naturally, it is in fact dependent on finely tuned interactive processes that take place at a very early stage in the child's development. It is also a significant milestone in the development of attention (Neven, Anderson & Godber, 2002). Winnicott notes that it is through being alone with their own thoughts that children learn, as they are able to focus their attention solely on the task at hand, without being distracted by other external stimuli.

Children that are securely attached are able to engage in solitary play and focus their attention, as they are reassured by the knowledge that their mother will be there to comfort them if they become distressed, providing a 'secure base'. These children are able to develop their attentional capacity by focusing selectively on a desired task, as they are not distracted by seeking out their mother or attempting to engage her (Neven, Anderson & Godber, 2002). Those with an ambivalent-anxious style of attachment however, tend to be so preoccupied with their mother and their separation fears that their capacity for focused, sustained attention becomes impaired (Neven, Anderson & Godber, 2002). Essentially, these children become so focused on their fears of separation that they fail to optimise experiences which might otherwise enhance their attentional capacity.

**Development of hyperactivity**

Accounts of the hyperactivity component of ADHD have varied widely, with explanations ranging from poor dietary intake to lead exposure to epilepsy (Goldstein
& Goldstein, 1992; Wodrich, 2000). From a psychological perspective hyperactivity has been seen as environmentally specific, driven behaviour design to fulfil some purpose, even if that purpose is not readily apparent to the child or to others (Neven, Anderson & Godber, 2002).

One possible objective of hyperactive behaviour identified within previous research is ‘attention seeking’. More specifically, it has been suggested that hyperactive behaviour arises in children who are attempting to seek out an interaction with an unresponsive parent (Sandberg & Garralda, 1996). This assertion has received some empirical support. One study conducted by Cox et al. (1987) demonstrated that depressed mothers tend to respond to child interactions in an inconsistent manner, only reacting to an escalation in the child’s negative behaviours, while ignoring any preceding positive bids from the child. The implications of these observations are that, with depressed mothers, the child has to get attention by high intensity of demand (Sandberg & Garralda, 1996).

When considering these results, it may be hypothesised that escalating hyperactive behaviour serves two primary functions. First, it may elicit a response from the depressed mother who may otherwise ignore or avoid the child. Thus, hyperactive or disruptive behaviour may be viewed as a bid from the child to gain attention from the mother. Secondly, the child may become hyperactive in the presence of the depressed mother in an attempt to ‘liven the mother up’, providing the mother with some external stimulation. In this way childhood hyperactivity in response to maternal depression may be seen as a form of homeostasis, with the child compensating for the mother’s flat affect and lack of activity.

**Development of self-regulation**

The final cluster of symptoms identified in children with ADHD is the impulsive type behaviours, which are generally caused by insufficient emotional regulation. When discussing the concept of affect regulation, the fields of psychology and neurobiology overlap. Siegel (2001) asserts that the functioning of the orbitofrontal region of the brain, which is central to processes such as emotional regulation and empathy, depends on the quality and nature of interpersonal emotional
communication during the child’s early months and years of life. Neven and colleagues (2002) identify two ways in which mother-infant interactions may influence the development of the orbitofrontal region and subsequently, the child’s capacity for self-regulation.

The first avenue identified by Neven and colleagues (2002) is via the growth of neurons in the orbitofrontal region of the brain and the development of neural pathways between this and other regions of the brain. In normal infant development, positive and negative interactions between the mother and infant aid in the growth of numerous neural pathways, which eventually dictate the capacity of the child to self-regulate (Schore, 1994). When communication between the pair is varied and appropriate to the child’s needs, a large number of pathways are forged. Delays in development occur however, when the parent is poorly attuned to the needs of the child, resulting in disproportionately high levels of negative emotional experience (Neven, Anderson & Godber, 2002; Schore, 1994). In these cases neural development is inhibited, resulting in fewer neural pathways, which invariably limits the child’s capacity for self-regulation (Schore, 1994). Poor self-regulation has been associated with many of the symptoms seen in ADHD, such as impulsivity (Neven, Anderson & Godber, 2002). Thus, poorly attuned emotional interactions between mothers and their infants may impact the child’s subsequent neural development, which has a direct impact on the child’s ability to regulate emotions (Neven, Anderson & Godber, 2002).

As noted previously, research indicates that mothers suffering from postnatal depression, tend to experience fewer positive interactions with their infants, often misinterpreting their infant’s emotional communications, resulting in poorly attuned interactions (Hops et al., 1987; Uddenberg, 1974; Webster-Stratton, 1998). As these communications have been linked to neural cell growth and the child’s burgeoning capacity for self-regulation, it is reasonable to hypothesise that postnatal depression may play a role in the aetiology of the impulsivity component of ADHD.

Another way in which mother-infant interactions may influence the child’s ability to regulate his emotions is via the process of modelling and negative reinforcement. Clinicians in the field of infant mental health now believe that early infant-caregiver
relationships create feedback systems or loops that are essential to the establishment of autonomy and self-regulation within the infant (Neven, Anderson & Godber, 2002). While biologically primed for attachment and for initiating specific communication and response patterns, the child’s environment plays a significant role in determining how these innate behaviours are received and what information is learned as a result (Sameroff & Emde, 1989). Thus, the information attained through early mother-infant communication provides the infant with a model on which to base subsequent behaviour.

Parents that are reactive and responsive to their infants needs and demonstrate adequate regulation of their own emotions, provide an appropriate model on which the infant may base his/her own behaviour. This interaction also initiates a positive feedback loop in which positive and apt responses from caregivers result in positive responses from the infant, and so forth (Neven, Anderson & Godber, 2002). Parents who have difficulty responding to their infants needs or are poorly regulated however, as may be the case with mothers suffering from postnatal depression, provide an inappropriate model of behaviour. Miscued communications have also been found to initiate a negative feedback loop in which the mother responds negatively or inconsistently to the child who then becomes confused, responding negatively as a result, and so forth (Neven, Anderson & Godber, 2002). Thus, the capacity for the mother to model an appropriate form of emotional regulation may have a direct impact on the child’s ability to regulate his/her own emotions and behaviours.

Summary and conclusions

Clinicians and researchers working with ADHD generally agree that no single factor currently identified can account for the range of experiences associated with ADHD. In reality, ADHD and all its related behaviours are likely to be the result of a complex interaction of a myriad of factors from the biological, psychological and psychosocial realms. This chapter however, has isolated one precipitating factor for further discussion.
Research indicates that there is a strong association between various forms of maternal depression and ADHD. While many studies have identified that a relationship exists between these variables, few have accounted for the reasons underlying this relationship. Thus the question was posed – how does maternal depression impact on childhood development and specifically, the development of the inattentive, hyperactive and impulsive components of ADHD? This question was addressed with reference to theories of attachment, modelling, neural growth and external reinforcement. Identifying that a correlation exists between maternal depression and ADHD is irrelevant however, unless we attempt to understand the specific ways in which maternal depression may influence the presentation of ADHD symptoms. As such, this chapter reviewed some of the causal hypotheses available within the literature. The following chapter will elaborate on this discussion by identifying how information relating to the aetiology of a child’s symptom presentation may influence the assessment and diagnosis of that child and further, how these factors combine to direct treatment recommendations for the child future.
CHAPTER THREE: THE DIFFERENTIAL DIAGNOSIS OF ADHD

The past decade has seen significant changes in the way in which children's behavioural problems have been conceptualised and diagnosed (Neven, Anderson & Godber, 2002). For many clinicians, symptom identification and diagnosis remains the primary emphasis of clinical work. Goldstein (1998) for example, asserts that the system used to define childhood behaviours should be based upon measurable, observable phenomenon and not upon hypothesised cause or other factors. Within this system, clinicians first examine how the child’s behaviour impacts caretakers, teachers and other adults and second, how those factors impact the child within the environment. The difficulty with this approach is that it may lead to false positives during diagnosis, whereby children whose hyperactive behaviour occurs in direct response to environmental stressors are diagnosed with ADHD. Recently however, some clinicians have contested this viewpoint, asserting that information related to the aetiology of a childhood disorder is just as important during the assessment phase as symptom identification (Carr, 1999; Shelton & Barkley, 1992).

The present chapter will discuss issues related to the assessment and diagnosis of ADHD, taking into account research which suggests that environmental factors such as maternal depression play a significant role in the aetiology and maintenance of ADHD. As mentioned previously, children with ADHD often suffer from a number of co-morbid disorders, which affect the child’s ability to function effectively in his/her environment (Carr, 1999). As such, this chapter will argue that clinicians need to take a multimodal approach when diagnosing ADHD, assessing the full extent of the child’s difficulties and any related strengths or weaknesses. This chapter also aims to integrate some of the theory presented in preceding chapter, highlighting the importance of thorough assessment in order to ascertain the role that the child's developmental history played in the aetiology and maintenance of the child’s symptoms. Finally, this chapter will explore how background information relates to the future treatment and management of children with ADHD. In order to do so, this chapter will first review the diagnostic criteria for ADHD.
Diagnostic criteria

To reiterate, the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR), identified the three core manifestations of ADHD as inattention, hyperactivity and impulsiveness (American Psychiatric Association, 2000). In order to meet the requisite criteria for a diagnosis of ADHD, a child must exhibit six or more symptoms in each of the inattention and hyperactivity-impulsivity domains for at least 6 months prior to assessment. Symptoms included in the attentional domain include difficulty-maintaining attention, difficulty in organising tasks, inability to listen or carry out instructions, distractibility and forgetfulness. Symptoms included in the hyperactivity-impulsivity domain include fidgetiness, excessive activity and difficulty in sustaining play. Recent provisions set out in the DSM-IV-TR also require the presence of some symptoms before the age of seven, with symptoms occurring in two or more settings (e.g. home and school). This last criterion is indicative of the recent shift towards systemic approaches to childhood difficulties, with the recognition that children’s behaviour is often reflective of their current environment.

Assessment

One of the most important goals of clinical assessment is reaching a proper diagnosis in view of the presenting problems (Barkley, 1990). The importance of arriving at an accurate diagnosis is particularly salient, considering that the diagnosis of specific disorders in children and adolescents generally informs the subsequent management and treatment of that child (Carr, 1999). A diagnosis may also be required in order for the child in question to gain legitimate access to certain types of treatment, such as stimulant medication, or educational resources, such as special educational placement (Barkley, 1990). As stimulant medication is routinely advised in the treatment of ADHD, the process of assessment and diagnosis becomes more important, particularly as these medications have been associated with a number of side effects such as poor weight retention and tics (Carr, 1999). Taking the financial and medical burden of stimulant medications into account, it is essential that children are not prescribed these medications without adequate assessment.
The process of diagnosis is accomplished mainly through the differentiation of a condition from other potentially applicable disorders. It is not enough to simply know the criteria for the diagnosis of ADHD, clinicians must also be able to distinguish its symptoms from other psychiatric conditions that bear a superficial resemblance to ADHD (Goldstein, 1998). Many children with a formal diagnosis of ADHD often have multiple coexisting disorders, which also complicates diagnosis (Carr, 1999). Neven and colleagues (2002) advise that the diagnosis of ADHD should not be based solely on the fulfillment of the impulsivity, poor attention, hyperactivity triad but rather, on the careful examination of the etiology of these behaviors and the context in which they occur. In order to do so it may be necessary to extend the field of enquiry beyond the immediate behavior or symptom that is presented to investigate the unconscious processes that play a role in how the child constructs and sustains his attention. Neven and colleagues raise three arguments in support of this contention.

First, Neven and colleagues (2002) assert that clinicians cannot hope to understand a child’s presentation without gaining a thorough understanding of that child’s environment. As illustrated in the preceding chapter, environmental variables such as maternal depression have the potential to shape children’s behavior, influencing the specific symptoms the child presents with, the severity of the symptoms and the timing of the presentation. Take for example, an 8-year-old child exhibiting poor impulse control, overactivity and an inability to focus his attention. While this child may initially meet the criteria for ADHD based on his symptom presentation, another diagnosis may prove to be more appropriate, particularly if these behaviors had emerged in response to changes in his environment, such as the loss of a family member. While it may not occur to the family to divulge this information during a brief assessment, a thorough assessment designed to gain an understanding of the child’s environment should provide the information necessary for an alternate diagnosis.

Second, the same complaints of inattention, poor impulse control, hyperactivity and difficulty responding consistently to consequences can be caused by a variety of other childhood disorders (Barkley, 1990). ADHD is distinct from other disorders of childhood however, due to differences related to the intensity, persistence and
clustering of the symptoms, rather than the presence or absence of symptoms (Carr, 1999). Distinguishing ADHD from other similar disorders is very difficult without a thorough assessment of the child and the child’s environment. As such, the diagnosis of ADHD should involve the careful collection of information from a variety of sources (parents, teachers, direct observation), by a variety of means (questionnaires, interviews, testing) in a variety of ways (Wodrich, 2000).

Finally, unlike many other childhood disorders, children with ADHD do not represent a homogenous group. ADHD has many diverse clinical manifestations (Barkley, 1990; Wodrich, 2000). As such, each case should be considered on an individual basis, with each child’s relative strengths and weaknesses thoroughly assessed (Neven, Anderson & Godber, 2002). This information is particularly pertinent when devising a treatment and management plan for the child. Carr (1999) recommends that the psychological assessment of children with ADHD should be conducted as one element of a multimodal assessment. Ideally, the assessment team should include a child psychiatrist, a speech therapist, a psychologist and an occupational therapist, as children with ADHD often demonstrate difficulties in the domains relevant to each of these fields. Due to the budget restrictions often associated with the field of mental health however, the assessment regimen outlined within this portfolio will be presented from the perspective of a sole practitioner. This model can also be easily adapted for use within multidisciplinary teams.

The final issue to be raised in discussion of the assessment of ADHD, is the time frame of the assessment. Carr (1999) asserts that the assessment and management of children with ADHD should be offered within a chronic-care rather than an acute model. ADHD is seen as being a lifelong disorder for which children and families may require ongoing assistance (Carr, 1999). This issue is particularly relevant when discussing the psychological assessment of children, as the cognitive differences between children with ADHD and same aged peers generally become more pronounced as the child grows older and the classroom setting becomes the primary learning environment (Barkley, 1990). Further assessment during critical periods of development may also be important to work through any self-esteem problems that may develop or to assist parents in dealing with any behavioural difficulties that they encounter as the child grows older (Carr, 1999).
Investigating the effects of maternal depression during the assessment phase

Psychologists have a diverse role in the assessment and treatment of childhood disorders, particularly ADHD. Most texts tend to highlight the role of psychologists in the cognitive and attentional assessment of children presenting with ADHD (Barkley, 1990; Carr, 1999; Wodrich, 2000). This is generally because children with ADHD tend to present with an uneven cognitive profile, demonstrating a range of strengths and weaknesses. It is important to take these into account when outlining a treatment plan for the child, particularly in terms of school-based recommendations. As such, the children in the following case studies completed the Wechsler Intelligence Scale for Children – Third Edition (WISC-III). In cases where other tests were administered, the rationale underlying their use will be discussed within the case presentation.

Psychologists also have an important role to play when considering the psychological aetiology of the child’s symptom presentation. While some clinicians work within a medical or biological model, psychologists have been trained to understand the psychological aetiology of children’s behaviours (Neven, Anderson & Godber, 2002). This skill is particularly relevant when considering the literature reviewed in the preceding chapter, which indicated that maternal depression may influence the psychological development of children, resulting in symptoms of inattention, hyperactivity and impulsivity in later childhood.

An assessment of the effects of postnatal depression on childhood development can be made when taking a developmental history. While not reliable enough to provide the clinician with any ‘hard evidence’ regarding a cause and effect relationship, a thorough developmental history may provide clues which shape the clinician’s formulation of the case. It is also important to assess for current depressive symptomatology, as maternal depression has been found to impact on ratings of children’s behaviour. Specifically, depressed mothers have been found to report a greater incidence of negative behaviour and deviance in children than their non-depressed counterparts (Baumann, Pelham, Lang, Jacob, & Blumenthal, 2004). Thus, current depressive symptomatology may influence information provided during the
assessment period. These factors are important to consider when developing a treatment plan, making it possible to tailor interventions to meet the needs of the child and the parents in light of the child's current environment. Failure to do so may result in a further exacerbation of the difficulties identified, as problems between the mother-child dyad persist.

**Treating children with ADHD**

There are many interventions available for the treatment of ADHD. In the United States, stimulant medication is the most popular treatment for ADHD (Schachar, Tannock, & Cunningham, 1996). While prescription rates in Australia still fall well below that of the United States, there appears to have been a shift towards medical approaches to treatment in the past decade, with a twentyfold increase in prescription rates since 1990 (Mackey & Kopers, 2001). Perhaps more worrying is that stimulant use has become so pervasive, in many cases medication is the sole treatment received (Sandoval, Lambert, & Yandell, 1979; Copeland, Wolraich, Lindgren, Milich & Woolson, 1987; Wolraich et al., 1990). There are however, a number of limitations associated with the prescription of stimulant medications. One limitations noted within the literature is the 'rebound' effects, which refers to an increase in the severity of ADHD symptoms noted in some children as their medication wears off (Johnston, Pelham, Hoza & Sturges, 1988; Porrino et al., 1983). From a psychological perspective, clinicians have proposed that medication may undermine the child’s sense of personal responsibility for their successes and failures (Henker & Whalen, 1989; Schachar, Tannock & Cunningham, 1996; Whalen & Henker, 1991). Thus, while medication has been found to have immediate benefits in the treatment of the core symptoms of ADHD, it also has significant limitations as a complete treatment for such a multifaceted disorder as ADHD (Schachar, Tannock & Cunningham, 1996).

As an alternate to medication, behavioural treatments have been recommended and applied less frequently (Barkley, McMurray, Edelbrock & Robbins, 1990; Copeland, Wolraich, Lindgren, Milich & Woolson, 1987; Wolraich et al., 1990). This may well be due to the medicalisation of ADHD, as this disorder tends to be diagnosed by paediatricians, who routinely advise medication use. When administered, typical
psychosocial treatments tend to include a combination of the paediatricians advice about the child's management, diet and school placement (Schachar, Tannock & Cunningham, 1996).

In 1998 the National Health and Medical Research Council released a report, which advised the use of a multimodal approach when treating ADHD (National Institute of Health, 1998). As mentioned earlier, ADHD is not a "one size fits all" diagnosis. Children presenting with the symptoms of inattention, hyperactivity and impulsivity present with various symptoms and with differing degrees of severity. As such, the treatment of ADHD needs to be as flexible, to meet the needs of the child at the time of assessment.

While few controlled studies have been conducted to assess the efficacy of multimodal approaches compared with medication, uncontrolled cohort studies suggest that multimodal treatments, which are individually tailored to suit the needs of the child, might enhance outcome (Satterfield, Satterfield & Cantwell, 1981). Most multisystemic treatment programs include components of psycho education, medication, family intervention, school intervention, individual work and dietary assessment (Carr, 1999). It will be argued throughout the remainder of this portfolio that while the multisystemic treatment program recommended by Carr (1999) is acceptable in itself, the key to treating children with ADHD is to understand the child's background and his/her environment. This includes gaining some understanding of the possible aetiology of the child's behaviours, examining the child's current environment and the way in which the child interacts within that environment. It is also important to investigate the impact that the child's behaviours have on the child, from the child's own point of view. In considering the literature presented in the preceding chapter, it will be argued that the role of the psychologist in the assessment of ADHD is not to simply focus on the child's cognitive capacity but also to investigate the psychological aetiology of his/her presenting problems and the ways in which this information can be used in establishing an individualised treatment plan for the child.
CHAPTER FOUR: DAN: A YOUNG MAN WITH ADHD AND DYSLEXIA

The present chapter examines the relationship between maternal depression and ADHD through a discussion of Dan, an adolescent male with a previous diagnosis of ADHD. Through a discussion of Dan’s history, parallels will be drawn between periods of separation and transition within the family and the exacerbation of his hyperactive, inattentive and impulsive behaviours. The role of maternal depression in the aetiology of these behaviours will be highlighted, along with the long-standing effects of suboptimal attachment experiences during early infancy. This discussion is used to increase our understanding of the factors influencing Dan’s presentation, as well as being incorporated into his treatment plan. This case also highlights the utility of the chronic-care model discussed in previous chapters, emphasising the importance of conducting thorough, multidisciplinary assessments of children with ADHD.

Referral

Dan was referred to an adolescent inpatient unit for a three-week assessment admission. The aims of the admission were to provide some clarification regarding Dan’s diagnosis, provide some family based education and intervention, conduct psychological testing and observe Dan’s interactions with peers in a contained, structured environment.

Presenting problems

Dan, a 13-year-old boy, presented to the inpatient unit with a previous diagnosis of ADHD and longstanding behavioural difficulties, which had escalated in the past year. Dan’s mother Jill reported that he had difficulty controlling his temper, “losing it” over relatively minor incidents such as missing his favourite television program. During these periods Jill reported that Dan had a tendency to hit out at other people, including his younger sister and peers at school. As a direct result, Jill reported that Dan was now facing expulsion from his current high school.
Jill also reported that Dan had demonstrated some “odd” behaviours in the past 6 months, including stealing girls clothes, stalking a girl from his high school and wandering away from his family at the beach, only to report that he had spent the afternoon with his “twin”, a young man from the U.S. who was like him in every way.

**Family system**

Dan is the only child of Jill and Bruce. As the couple separated when Dan was two years old, they currently share custody of Dan. Dan resides primarily in his mother’s home, going to his fathers every second weekend. According to Dan, the transition between households is difficult, as Jill and Bruce both maintain different rules.

Residing in Jill’s home is her husband of 9 years, David, and their young daughter Emma. Jill reported that, while Dan and Emma love one another, they also “push each others buttons”, getting into aggressive conflicts for which Dan is typically punished. David’s son from a previous relationship, Michael, also resided in the family home until recently. Jill described Michael as a “straight arrow”, reporting that he and Dan shared a very close bond. While the two had a falling out when Michael returned to live with his mother, they have since mended their relationship.

Residing in Bruce’s home is his de facto partner of 3 years, Belinda, and her young daughter Cassie. Dan reported that he likes Belinda and Cassie, but can be made to feel like an outsider at times.

**Parent’s history**

Jill is an only child whose early family life was described as being “abnormal and difficult”. She was the result of an unplanned teenage pregnancy, her mother falling pregnant at 15 years of age. It was during this pregnancy that her mother realised that she was a lesbian, subsequently breaking off her relationship with Jill’s father. While Jill and her mother initially lived with relatives, an escalation in familial conflict
associated with her mother’s sexual orientation resulted in the pair moving from Melbourne to Adelaide when Jill was five years old.

Jill and her mother were quite transient during Jill’s early years, with Jill enrolling in 20 different schools. Jill was reportedly very similar to Dan during her school years, avoiding school, losing her temper easily and acting aggressively towards her peers. She reported that she “copped a lot of crap” at school, with her peers mocking her because she didn’t have a father. According to Jill it was these experiences, along with a familial history of depression, which contributed to her first depressive episode at 15 years of age.

Bruce is the eldest of two children whose early childhood was, according to Jill, unremarkable. While Jill was unsure of many of the details of Bruce’s early history, she did report that Bruce’s parents were quite strict and “authoritarian” at times.

Jill reported that she and Bruce met at a friend’s party when they were 15 and 18 years old respectively. Following what Jill described as a “brief, conflictual, passionate” courtship, the couple parted ways. Jill found out that she was pregnant with Dan 6 weeks after the couple had broken up, almost 15 weeks into the pregnancy. Jill was reportedly shocked by the news as she had been taking the contraceptive pill throughout their relationship. According to Jill, Bruce was angered by the news, accusing her of falling pregnant on purpose.

Due to financial constraints Jill resided in her mother’s house throughout her pregnancy and for the first 6 months of Dan’s life, moving into a one-bedroom unit with Bruce thereafter. While the couple resided together for over a year Jill reported that they fought often, generally in Dans’ presence. Following the dissolution of the relationship, Jill reported that Bruce “went AWOL”, not returning to see his son for over 7 years. During this period the only contact Dan had with his father was via sporadic phone calls and birthday cards.
Developmental History

Dan was the result of an unplanned teenage pregnancy. Jill was reportedly very ill throughout the pregnancy, suffering from several kidney and bladder infections. Jill also suffered from high blood pressure and morning sickness. Due to complications associated with pre eclampsia, she was induced at 38 weeks. After three days of labour, Dan was delivered via an emergency caesarean section.

Aside from some jaundice, Dan was reportedly in good health following his complicated delivery. Jill however, experienced severe haemorrhaging following the delivery, staying in hospital for weeks after the birth. As a result, Jill reported that she was not able to see Dan immediately after the birth, their contact with one another limited for the first month of Dan’s life. While Jill was released from hospital one month after Dan’s birth, she was readmitted 6 weeks later, this time due to suicidal behaviour associated with severe postpartum depression.

Jill and Dan’s early attachment and bonding experiences appear to be marked by similar episodes of illness and separation, with Jill being hospitalised on a number of occasions for the treatment of depression, kidney infections and high blood pressure. As a direct result of these experiences Jill reported that she found it difficult to bond with Dan, resenting the damage he had caused her health.

Jill reported that Dan was a demanding, colicky baby who rarely slept. While Jill attempted to breastfeed Dan, she was forced to switch to formula as he suffered from severe gastric reflux. Bottle-feeding Dan also proved to be difficult, with Jill trying several different formulas before finding that Dan was lactose intolerant. Dan also suffered from a number of severe ear infections which required several hospital admissions and minor surgery at the age of 5. Although unsure of the severity and duration of his hearing related difficulties, Jill reported that Dan suffered from fluctuating hearing loss throughout his early childhood as a result of the ear infections.
According to Jill’s reports, Dan achieved most of his early developmental milestones within expected age limits. Dan’s speech was delayed however, with Dan preferring to point rather than talk. He began to speak intermittently at 3 years, albeit with a slight stutter. On the recommendations of Dan’s kindergarten teacher, he saw a speech therapist from 3-4 years of age, with good effect. Dan experienced some delays toilet training, suffering from intermittent nocturnal enuresis until 8 years of age. Jill also reported that he had some early co-ordination difficulties, unable to catch a ball or ride a bike until he was well into middle childhood.

According to Jill, Dan’s behavioural difficulties began when he was 20 months old, shortly after she and Bruce separated. Following Bruce’s departure Jill returned to work as a part-time waitress. Due to her irregular working hours Jill found it difficult to find permanent care for Dan, relying on friends, neighbours and occasional favours from her mother. While Dan generally behaved well when under the supervision of other adults, he became angry and sullen when his mother came to collect him, refusing to engage with her or follow her instructions. Dan also began to throw tantrums on a regular basis, hitting out at his mother when he became angry.

During this time, Jill sought assistance from Dan’s Paediatrician, who offered strategies to help Jill manage his tantrums. While Jill attempted to use the strategies given to her, she reported that her irregular work hours made it very difficult for her to follow through with consequences. Jill also acknowledged that she found it very difficult to respond to Dan when he was angry, generally crying in response to his tantrums.

When Dan was 3 years old, he and Jill moved from Adelaide to a rural area outside of Melbourne. Following the move Dan began 3 year-old kindergarten. While there were some reports from his teachers of oppositional behaviour and tantrums, Jill reported that he generally enjoyed kindergarten, making a few close friends.

Jill withdrew Dan from kindergarten after seven months, moving him to a nearby suburb to live with Jill’s new boyfriend David. While Dan and David got along well, Jill reported that Dan found the transition difficult, crying, hitting and throwing tantrums on a regular basis. Jill also noted a significant decline in Dan’s attentional
capacity and an increase in his activity levels around this time. While Dan had always been a “busy” boy, preferring to run around the house than sit and watch television, Jill reported that he became more active following the move, switching constantly from toy to toy, rarely satisfied with one thing for long. According to Jill, Dan often left a trail of destruction in his path, a behaviour that frustrated her, leading to frequent disputes.

While many of Dan’s aggressive and oppositional behaviours subsided after he was enrolled in four-year-old kindergarten, Jill reported that the hyperactivity and inattention continued. While interacting well during free playtime, Dan experienced difficulties during structured times, finding it impossible to sit in his seat for even a short period of time. Around this time, Dan was seen by a Child Psychologist, who diagnosed him with ADHD. While medication was discussed, Jill reported that she and David were reluctant to put him onto stimulant medication until absolutely necessary.

Dan’s primary school years were marked by frequent transitions and behavioural difficulties. Dan initially attended a local primary school, but was removed by Jill after 12 months. Dans teachers reported that Dan was extremely aggressive at school, hitting and kicking other children. Dan also found it difficult to concentrate during structured classes, fidgeting in his seat, looking around the room and drawing on his notebooks until he was eventually removed from the class.

Dan was unable to read or write when he was enrolled in Grade One. According to Jill, Dan’s teachers claimed that his poor literacy skills were the direct result of his limited attention span and behavioural difficulties, claiming that he would fair much better in a school specialising in developmental disabilities. Jill followed these recommendations and enrolled Dan in a special education school. Dan’s enrolment was withdrawn after only 8 months however, as his behavioural difficulties escalated substantially. Jill felt that this was due to the influence of peers at Dans new school, as they were all “much worse than Dan”.

Dan continued his Grade Two education at another mainstream school in close proximity to his house, enrolling for the start of the second semester. Dan was
suspended during his first week however, for throwing his books at a teacher. Jill consulted a paediatrician at this time, who diagnosed Dan with Oppositional Defiant Disorder (ODD). Based on information obtained during his previous ADHD assessment, Dan’s paediatrician also prescribed Ritalin, in hopes that it would improve Dan’s concentration and reduce his impulsive and aggressive behaviours. According to Jill the medication had an excellent effect, changing Dan’s behaviour both at home and at school. Jill described him as a “different child” during this period, his concentration improving and his aggressive and oppositional behaviours decreasing significantly. Dans school reports during this period support this observation.

At the beginning of Grade Four the family moved to another rural area, Dan again changing schools. Jill reported that the transition was difficult for Dan and his aggressive and oppositional behaviours began to remerge. Due to the efforts of his homeroom teacher however, Dan was generally well contained at school until Grade Five, when his behaviour deteriorated substantially.

According to Jill, Dan’s behavioural deterioration coincided with custody proceedings taking place at the time. While Bruce had maintained occasional contact with Dan over the years, he relocated to be closer to Dan at the beginning of Grade Five. At this time Bruce contested for shared custody of Dan, which was awarded to him in time for Dan’s mid-semester holidays. While Jill admitted that Dan was excited to have his father in the area, he found the transition between the two houses difficult, as Jill and Bruce maintained different rules for bedtimes, household duties and consequences for oppositional and aggressive behaviour.

At the beginning of Grade Six Jill again sought assistance from Dan’s Paediatrician as she felt that the effects of the Ritalin had worn off. Jill reported that Dan was finding it difficult to concentrate in class, distracting other children and screaming at the teacher when reprimanded. Dan was commenced on Dexamphetamine, with some minor improvements noted in his concentration. Dan’s aggressive behaviours continued to escalate however, with Dan eventually being suspended from school and threatened with expulsion.
Despite difficulties in primary school Dan was reportedly excited about attending high school. Socially, Dan appeared to fit in well, quickly becoming part of the "popular group". Dan's behavioural difficulties continued however, with Dan being suspended several times for aggressive behaviour directed at peers and teachers. Jill reported that she received daily phone calls from the schools administration, advising her of her son's difficulties. While Dan struggled to contain himself in most classes, Jill reported that his behaviour was generally at its worst towards the end of the day and in English classes.

Admission

Dan settled onto the unit well, quickly establishing himself in the dominant peer group. While Dan had some difficulty complying with the rules of the unit, he was able to comply once nursing staff set firm limits on his behaviour. A mental state examination conducted at the time of Dan's admission highlighted some of Dan's ADHD symptomatology but failed to identify any formal thought disorder which might account for his "odd" behaviours. When questioned about his clothes stealing behaviour directly, Dan appeared to be appropriately embarrassed, noting that at times, he had difficulty thinking things through before he acted.

Observations of Dan's behaviour during the first week of his admission also failed to identify any odd or unusual behaviours or evidence of psychotic phenomenon. To the contrary, Dan was generally polite and responsive during groups, making an effort to join in discussions. Dan was observed to be extremely restless however, fidgeting when required to sit still for prolonged periods of time. Dan also demonstrated evidence of poor attention and concentration and some impulsivity.

During Dan's second week on the unit his teachers noted that he had some difficulty during an issues group, in which he was asked to read aloud from a newspaper article. Dan became extremely oppositional, refusing to read the article or sit when directed. Dan stormed out of the group, spending the remainder of the session in his room. When asked what had precipitated his behaviour Dan simply responded, "I don't know".
Dan’s treatment team held a family session with Dan’s parents towards the end of the second week of his admission to provide some psycho education, discuss Dan’s progress in groups and his parent’s expectations for future treatment. As Bruce and Jill refused to meet at the same time, separate sessions were held, with Bruce meeting the team on Wednesday and Jill meeting the team on Thursday. While a number of issues were discussed, Dan’s treatment team felt it was pertinent that they discuss the inconsistencies in parenting between the two households, as the transition between the homes appeared to be exacerbating Dan’s behaviour.

The day after her family session, Jill called the unit manager to ask for a new case manager. Jill reported that she felt blamed by Dan’s case manager, insinuating that Dan’s case manager was taking sides with Bruce. While encouraged to discuss her grievances with the case manager Jill refused to engage in further discussion, later formalising her complaint. As a result Dan’s case manager was changed 12 days into his admission.

During the third week of his admission Dan’s parents both attended the same information evening with their respective partners, unaware that the other couple would be attending. While both couples remained at the meeting, an altercation arose between them in the car park at the end of the session. At the conclusion of the incident Jill, David, Bruce and Belinda all required treatment in the emergency department for the treatment of various wounds sustained during the altercation.

Following this incident Dan’s behaviour on the unit deteriorated rapidly. Dan began to argue with group leaders, swearing at peers and clinicians when limits were set. Dan also became extremely aggressive, kicking in a window and hitting out at nurses, requiring restraint on two occasions. Dan’s mood and affect also changed prior to his discharge. He became moody and irritable, refusing to engage with staff and only interacting with peers on a superficial basis.

**Psychometric assessment**

Dan completed the WISC-IV and the Wechsler Individual Achievement Test – Second Edition (WIAT-II) in three consecutive sessions. The WIAT-II was used as
Dan was referred for an educational assessment, with a particular focus on his reading comprehension and spelling.

Dan was generally motivated and compliant with all testing instructions during administration of the WISC-IV, however his poor attention and restlessness were more evident during verbal subtests. Dan became extremely non-compliant during the administration of the WIAT-II, reporting that the items too difficult for him.

The pattern of Dan’s cognitive profile indicated that he possesses strengths in the performance domain, obtaining a score in the ‘superior’ range on the Perceptual Organization Index. By contrast, Dan’s verbal skills were a relative weakness for him, obtaining a score in the ‘average’ range on the Verbal Comprehension Index. Dan’s literacy and reading comprehension skills were assessed further, the results consistent with a diagnosis of Phonological Dyslexia. Qualitative information gathered during the assessment sessions supported this diagnosis. Dan appeared to be relieved after discussing the results of his assessment, indicating that many of his behavioural problems at school occurred during classes that relied predominantly on reading and writing. In order to avoid these tasks Dan reported that he became disruptive and oppositional, his teachers eventually asking him to leave.

Formulation

Dan was referred to an adolescent inpatient unit for an assessment admission following six months of “odd” behaviour, including stealing girls clothing and stalking peers. Dan presented with a previous diagnosis of ADHD and ODD and a longstanding history of aggressive and oppositional behaviour, which had also escalated substantially in the 6 months prior to his admission.

Observations of Dan during the period of his admission failed to detect the presence of any formal thought disorder or psychotic phenomena that might account for his behaviour. Rather, Dan’s behavioural problems appear to be the result of difficulty associated with periods of transition in his life, such as his recent transition into secondary school. These difficulties are further compounded by Dan’s ADHD related symptoms, a co-morbid learning disorder, chaotic family structure, inconsistent
parenting and a difficult temperament. Due to Dan’s poor impulse control and quick temper, Dan has difficulty dealing effectively with frustration, acting in an aggressive manner as a result.

When examining Dan’s developmental history, there are a number of factors evident in his history that may have predisposed him to his current difficulties. These include a history of maternal depression, suboptimal attachment and bonding experiences exacerbated by periods of separation and a difficult temperament. Jill described an anxious-ambivalent pattern of attachment between herself and Dan which is likely to have impaired Dan’s capacity for emotional regulation as he lacked the ability to be alone, constantly preoccupied with ambivalent thoughts towards his mother. In Bruce’s absence, Dan lacked an alternate attachment figure, exacerbating his difficulties and increasing the likelihood of later psychological disturbance. The anxious-ambivalent attachment between Jill and Dan appears to have contributed to the establishment of ineffective communication patterns between the pair, whereby Dan feels that he has to misbehave in order to gain his mothers attention and Jill feels that Dan is constantly demanding of her attention.

Dan was also exposed to a great deal of conflict between Bruce and Jill during his formative years, which may have influenced his subsequent emotional regulation. Research indicates that children who are exposed to intensely aggressive or violent stimuli in their infancy, have a greater probability of developing attentional difficulties in later childhood, as they learn to divert their attention away from distressing stimuli at an early age (Neven, Anderson & Godber, 2002). As such, conflict between the couple may have acted as a precipitant in the development of Dan’s attentional difficulties.

Other factors that may have predisposed Dan to his current difficulties include the recent transition to secondary school and a change in peer groups. According to Jill, Dan has always found change difficult, taking a long time to adjust to new environments.

Inconsistent parenting practices appear to be maintaining Dans current difficulties as both parents maintain different rules of conduct in their homes. While Jill tends to
respond to Dan’s behaviour in a permissive manner, Bruce is reportedly quite authoritarian in his approach to parenting. Dan tends to be very black and white in the way in which he understands the world around him. As such, he is likely to be highly sensitive to inconsistent parenting, finding it difficult to understand. Poor communication and frequent conflict between Dan’s parents appears to exacerbate these difficulties, effecting Dan’s emotional and behavioural regulation.

Another factor likely to have played a significant role in the aetiology and maintenance of Dan’s school based difficulties is his previously undiagnosed learning disorder. Despite early language based difficulties and delayed literacy skills, Dan was not referred for an educational assessment prior to his inpatient admission. As such, at the time of the assessment, Dan’s reading and writing were significantly below age expectation, a factor that is likely to have contributed to his poor school performance and oppositional attitude in class. These difficulties appear to have been exacerbated by Dan’s ADHD symptoms, particularly his low frustration tolerance and impulsivity, increasing the likelihood of him acting out during class times.

Important protective factors in this case include Dan’s close relationship with his stepbrother, the commitment of both parents to resolving Dan’s difficulties and supporting Dan and his considerable cognitive strengths in the visual and performance domains.

Treatment

While much of Dan’s treatment was conducted on an outpatient basis, a number of specific interventions were recommended prior to his discharge.

Medication

At the time of his admission, Dan’s symptoms were being managed with Dexamphetamine, which was taken in the morning and at lunchtime. While it was reported that medication had good effect initially, his behaviour has become
extremely unmanageable in the 6 months prior to his admission. This medication was reviewed and increased prior to his discharge.

School intervention

Due to Dan’s school based difficulties and recently diagnosed learning disorder, the teacher assigned to Dan’s case on the unit collaborated with his school to formulate a structured management plan for his behaviour with clear and obvious consequences. Dan was encouraged to take an active role in the formulation of this plan, which he later co-signed with his school co-ordinator, encouraging him to take responsibility for his own behavioural management. Dan was also granted funding for an integration aid prior to his discharge, with an aim to providing one-on-one support in the classroom environment.

Upon discharge Dan’s teachers noted a significant improvement in his behaviour in the classroom. Dan still appeared to be struggling socially however, getting into a physical altercation with a peer shortly after his return to school. As such, Dan’s behavioural program was reviewed and modified to provide him with a clear management plan he was encouraged to apply when frustrated or angry. A gradual improvement was also noted in Dan’s reading and writing, with the one-on-one support provided by his integration aid.

Parenting training

Prior to his discharge, Dan’s inpatient team worked extensively with his parents in an effort to minimise differences between the households, making the transition easier for Dan. While Dan’s parents refused to speak to one another, they were encouraged to keep a diary so that the parents could communicate information to one another. Dan’s parents were also given some psycho education and tips for managing his behavioural difficulties at home. While further work with the parents was planned, both couples were reluctant to engage with staff following the altercation in the car park. As such, much of this work was referred to Dan’s outpatient team.
Counselling

Dan’s inpatient team also recommended family therapy, as there were many unresolved issues within the family that appeared to be exacerbating Dan’s difficulties. These issues include frequent negative interactions between Jill and Dan, inconsistent parental practices, Dan’s feelings of isolation from the family and self-esteem issues, which appeared to be related to his ADHD diagnosis.

Summary and conclusions

Dan, a male adolescent, was referred to an inpatient unit for an assessment admission. Dan presented with a previous diagnosis of ADHD and ODD and a longstanding history of disruptive, oppositional and aggressive behaviours.

While Dan’s outpatient psychiatrist had queried if Dan was prodromal, there was no evidence of any psychotic phenomena during Dan’s three-week admission. Psychological testing did indicate however, that Dan suffers from Phonological Dyslexia, a longstanding difficulty that is likely to have affected his performance in schoolwork and his behaviours at school for a substantial period of time. As Dan’s learning abilities had never been formally assessed, Dan always felt that he was dumb, failing to understand that he had a specific learning disability that affected his ability to complete his work, as opposed to having a limited intellectual capacity. This situation caused considerable feelings of frustration and anxiety in Dan as he felt he had to cover up his “dumbness”, preferring to behave poorly than let people know that he couldn’t cope with his workload.

The complicated nature of Dan’s presentation and his longstanding behavioural and learning difficulties highlight the importance of conducting a thorough, formal assessment of children like Dan, who present with ADHD-like symptoms. There are several reasons underlying this assertion. Firstly, it is important for clinicians to differentiate which behaviours are associated with intrinsic factors and are thus symptoms of ADHD and which variables are related to external factors. In this case, observation of Dan’s interactions with his family provided essential information necessary to the formulation of the case. After thorough assessment it appeared that
one of Dan’s primary areas of difficulty was not his ADHD, but his parent’s management of his behavioural difficulties and the inconsistencies between the two households. The absence of a stable, structured environment had a significant impact on Dan, his behaviour deteriorating as a result. Observation of Dan’s behaviours on the unit however, suggests that he is indeed capable of conforming to a routine, structured environment when given the opportunity. Thus, Dan’s environment may account for many of his behavioural difficulties, which had previously been attributed to ADHD. Based on this information Dan’s outpatient team made a referral for a family support worker who worked with both parents extensively on parenting strategies and behavioural management techniques.

Secondly, this case highlights the utility of the chronic-care model of assessment proposed earlier, in which children with ADHD are assessed during periods of transition in their lifecycle (Carr, 1999). This approach allows for interventions to be tailored to the needs of the child during that transitional period. In Dan’s case, prominent symptoms of aggression and oppositionality had served to cover up an underlying learning disorder, which had a significant impact on his daily functioning at school. Without the additional assessments conducted during his admission, Dan’s difficulties may have remained undiagnosed, giving him a very poor prognosis. In sum, this case highlights the importance of conducting a thorough assessment of children presenting with ADHD. In Dan’s case this issue was particularly salient, as he suffered from significant learning difficulties which, if assessed and treated earlier, may have improved his outcome. In cases such as Dan’s, assessment should be based on a chronic-care model in order to address any potential difficulties that may arise during periods of transitions in the child’s life.
CHAPTER FIVE: DAMIEN: A YOUNG BOY WITH ADHD AND ODD

The present chapter includes an exploration of the assessment and treatment of Damien, a 4½-year-old boy with a diagnosis of ADHD and Oppositional Defiant Disorder (ODD). ODD is characterised by a recurrent pattern of negativistic, defiant, disobedient and hostile behaviour toward authority figures (American Psychiatric Association, 2000). Throughout the case presentation parallels will be drawn between periods of maternal depression and an exacerbation of Damien’s symptoms of inattention, hyperactivity, impulsivity and oppositionality. The possible aetiology of these behaviours will be discussed, and the implications of the findings for Damien’s treatment reviewed.

Referral

Damien, a 4½-year-old boy, was referred to an outpatient mental health service by his Paediatrician, due to concerns associated with aggressive and oppositional behaviour.

Family assessment sessions

Damien, his mother Terry and his younger sister attended the family assessment session. Damien’s father David did not attend the session due to work commitments. Damien presented to the session in jeans and a jumper that were covered from top to bottom in chalk from the chalkboard in the waiting room. When invited into the office Damien told the writer to “shut-up”, refusing to go into the office. Damien did follow reluctantly however, after his mother and sister walked into the office.

Damien initially sat with his back to the writer, refusing to engage and swearing when a question was directed towards him. Damien and his sister played well in the corner, although Damien tended to lose his temper easily, yelling at her when she took two pencils from the jar instead of one.
After 10 minutes Damien got out of his seat and paced the room restlessly, appearing bored. As he paced around looking at the toys Damien became more vocal, interrupting his mother constantly to show her toys or correct her version of events. While Terry initially attempted to ignore his demands, she eventually responded when his voice became louder, his behaviour escalating to gain her attention.

Damien’s behaviour continued to escalate as the session progressed, becoming louder and more destructive. Damien tipped his chair up, emptying all the pencils on the table and banging the container. Damien then proceeded to throw toys around the room, yelling at his mother and sister. While Terry initially made no effort to contain his behaviour she intervened when Damien threatened to hit his sister, telling Damien that she would smack him if he misbehaved.

While Damien intervened at various points in the session to correct his mother’s version of events he refused to engage with the writer and rarely made eye contact, directing all of his oppositional and destructive behaviours at his mother in an apparent bid to gain her attention.

In direct contrast to Damien’s loud, boisterous presentation, Terry presented with a flat restricted affect and lowered mood. Terry appeared exhausted, with dark circles under her eyes, her hair out of place.

**Presenting Problems**

Terry reported that Damien had a longstanding history of behavioral difficulties, which included aggressive behaviors such as hitting and kicking and oppositional behaviors such as arguing with adults, swearing at them and refusing to follow directions. While Terry had generally been able to manage these difficulties in the past, she reported that his behavior had escalated since Damien began kindergarten, to the point where she no longer had control of Damien or his actions. Damien had reportedly been acting very aggressively at kindergarten, hitting, spitting and kicking other children. While these difficulties were evident during free playtime, Damien’s kindergarten teachers noted an escalation in his oppositionality during structured
activities, when he would refuse to sit down in his seat, preferring to wander around the room and distract or annoy other children.

At home, Terry reported that Damien gets “into everything” and is constantly on the go. Terry also reported that Damien could be very impulsive, hitting people or doing something naughty and then apologising, only to repeat his mistakes. As an illustration, Damien broke a window recently by throwing his toys around during an angry outburst. While he was immediately sorry and apologised to Terry, she reported that he broke another window the next day during a similar incident. Damien also had difficulty waiting for his turn, often getting into physical altercations with his sister when made to wait for the Playstation.

**Parent assessment sessions**

Terry and her youngest child attended the assessment session. David was reportedly unable to attend due to work commitments.

**Family system**

Damien, a 4½-year-old boy, lives in an intact home environment with his mother Terry, father David, older half sister and younger sister. Damien’s older sister is currently in high school. Terry reported that she could be a very good student, although her behaviour at school had degenerated in the past year, engaging in truancy and conflict with peers. Damien’s younger sister goes to creche two days a week. Terry described her as easy going and sweet natured. While generally obedient, Terry reported that she is now beginning to model her brother’s oppositional behaviours. At the beginning of the year Terry returned to work part-time. She stated that she is enjoying the change, as she has not worked since Damien’s birth. David works in a trade and is often away from home for long periods of time.

Terry reported that Damien looks up to his older sister and that the two generally get along well. On a “good” day, Damien also shares a good rapport with his younger sister, playing with her and helping her with her chores. When in a bad mood
however, Terry reported that Damien hits out at his younger sister, destroys her toys and yells at her. Damien reportedly “idolizes” his father and wants to do “everything that Dad does”.

Terry reported that she and David have very different approaches to child rearing, a fact that has caused considered tension and conflict in the household. Terry reported that David has a “short fuse”, preferring to smack the children are they were disobedient than yell at them. As a direct result Terry reported that she tends to be overly permissive, giving the children 10 warnings before smacking them.

Parent’s history

Terry is the youngest child in a sibship of three. Terry’s father left the family shortly after she was born. Terry reported that he had not contacted them since his departure. Terry and her sisters spent a great deal of time in the care of her maternal grandparents following her fathers departure, as her mother suffered from severe, chronic depression and was often unable to care for them by herself. According to Terry there is a strong familial history of depression on both her mother and fathers side of the family. Terry reported that she has always been a “worry wart”, suffering from several episodes of depression herself. These depressive episodes have been exacerbated by a long history of medical complications including endometriosis, severe kidney and bladder infections, which have not been well managed, and another rare progressive medical condition, which required several lengthy hospital admissions in the past four years. While this condition was being managed well at the time of the assessment, it is know to have a long, progressive course which is eventually terminal.

David is the middle child in a sibship of three. David’s early years appear to be marked by periods of loss and separation. David’s mother and older brother died in an accident when he was very young, leaving his father to care for the two remaining children. David’s father was by all reports very strict and unaffectionate with the children, often neglecting their emotional needs. While Terry was unsure of many of the details of David’s childhood she reported that he left school and home when he
was 15 to take up an apprenticeship. David has not been in contact with his family since that time.

Terry and David met at a party when they were in their late 20’s. When they met Terry had a 5-year-old daughter from a previous relationship. One year after they met David asked Terry to marry him. While Terry had reservations about committing to another relationship, she eventually relented. Terry and David were married for 3 years before she fell pregnant with Damien. While Terry reported that they love one another, there have been considerable marital difficulties related to their different parenting practices, David’s temper and jealousy and financial difficulties.

Developmental history

Damien was a planned pregnancy, although Terry reported that she was surprised when she fell pregnant after being off the contraceptive pill for only one week. Terry’s pregnancy with Damien was medically uneventful, although she admitted that she was extremely stressed by marital difficulties throughout the pregnancy. As a result Terry was prescribed antidepressants, which she took both during and following the pregnancy. Damien was carried to term, weighing 6lb 12oz when born. Terry reported that Damien was born with the umbilical cord around his neck, although doctors addressed this quickly and his Apgars were satisfactory by the second minute. Damien needed lights due to slight jaundice however this was also quickly resolved, with mother and infant able to go home after 5 days.

Terry reported that Damien was well as an infant, meeting all milestones at developmentally appropriate periods. While Terry had planned to breastfeed Damien until one year of age, due to difficulties weaning him, he was breastfed until he was 18 months of age, at which time he was switched to a bottle. Damien continued to be bottle fed until he was 3 years of age, at which time he refused to take any milk at all. While Terry reported that she had enjoyed breastfeeding her eldest child, she had a difficult time with Damien, as he was a demanding and restless baby who would often fidget while taking milk, hurting her.
Damien was a very fussy eater from an early age, refusing to try new foods, particularly fruit and vegetables. Damien currently eats very plain meals such as sausages and bread or plain fish, but only if its cooked by his father. Terry reported that she has become “sneaky” in the past 6 months, putting fruit and vegetables into cakes and slices to supplement his restricted food intake. Despite a restricted diet Damien has no food allergies or intolerances that Terry is aware of.

Terry also reported that Damien has always been a very restless sleeper, generally waking at least 3 or 4 times a night. While Damien slept by himself from 6 months of age, he tended to wake frequently, often crawling into bed with his parents. While Terry has attempted to address this behaviour, Damien generally causes such a “fuss” that Terry finds it difficult to argue with him, preferring to leave him in the bed with her than face a tantrum. While toilet trained at 3 years of age, Damien currently suffers from nocturnal enuresis, wearing pull-ups to bed. While both Terry and David have attempted to address this issue, Terry reported that due to their long work hours, it was difficult for them to wake during the night to take him to the toilet. Damien’s behaviour also became more difficult for Terry to manage during this period, as the interruptions in his sleep made him extremely grumpy and difficult to handle the next morning.

Terry reported that Damien was extremely energetic from a very early age, always “getting into things” and always “on the go”. Damien often pulls things apart and tries to put them back together. Damien reported that this was so he could figure out how things worked and how to build them “like Dad”. Terry reported that these behaviours gradually changed, from being energetic and “full on” in his early years to disobedient and aggressive. Terry reported that Damien was often disobedient at home, refusing to follow his mother’s instructions. This behaviour was less evident however, when David directed him to do something.

It was reported that Damien attended three-year-old kindergarten, which he appeared to enjoy although his behaviour became aggressive and bullying towards the other children in the last 6 months of the year. These difficulties continued into his current preschool, where he generally behaved in an aggressive and oppositional manner, refusing to follow his teachers’ instructions. Terry reported that she often received
negative feedback from Damien's teachers, telling her that he had a tendency to hit, punch and kick the other children, swearing at them and sometimes spitting. While Damien accepted the consequences of his actions these did not appear to influence his demeanour towards other children in the playground. Terry reported similar behaviours occurring at home, where Damien’s younger sister was generally the target.

Terry reported that Damien is a very strong willed and determined little boy, although he can also be very loving and affectionate. Damien is also very protective of his younger sister, defending her when she gets into trouble. While Terry reported that Damien does engage in some isolated play at home, he prefers her company, generally “pestering” her to come and watch him.

Terry reported a dramatic increase in clingy behaviours and separation difficulties in the past 6 months, which were not evident during his earlier development. Terry reported that, at present, Damien has difficulty leaving her to go to kindergarten, often pretending that he is unwell in an effort to remain at home. According to Terry, Damien’s current separation difficulties were precipitated by a relapse in her medical condition, which required a 7-week hospital admission.

Individual assessment sessions

Damien was very oppositional when approached in the waiting room, swearing at the writer and refusing to enter the playroom. While his mother eventually coaxed Damien into the room, he made his dissatisfaction with the arrangement evident, going straight to the dinosaurs in the corner of the room. Damien proceeded to play with the dinosaurs, occasionally interacting his sister, who had followed their mother into the playroom.

After a short period of play Damien approached the writer with the toys, initiating a playful interaction. Five minutes later Damien’s mother and sister quietly left the room. While Damien acknowledged their absence, asking where they had gone, he seemed content with the response, continuing to play with the dinosaurs. Damien demonstrated a limited attention span throughout the session, switching constantly
from toy to toy, moving about the room restlessly. Damien was also easily distracted by external stimuli, appearing irritated when he heard children’s voices in the hallway.

While Damien continued to respond in an oppositional manner when directed to complete a task, his destructive and aggressive behaviours were well contained when firm limits were set on his behaviour. There were strong themes of violence, aggression and death in Damien’s play and drawings. It was also noted that often, the father figure portrayed in his play was seen as a powerful and dominant force that exerted great power over the other, smaller creatures.

While Damien’s behaviour and degree of compliance improved notably as his assessment sessions progressed, it should be noted that his oppositional and aggressive behaviours at home and at kindergarten continued. As an illustration, during one assessment Damien behaved very well, earning a sticker for his exemplary behaviours. When Damien returned to his mother however, he became disruptive and oppositional, looking through her shopping bags and pulling at Terry’s leg, ignoring any limitations placed on this behaviour by his mother. While Terry threatened to smack Damien, the threat had little to no observed effect. Terry then failed to follow through with any disciplinary action.

**Psychometric assessment**

Due to his age, Damien completed the Wechsler Preschool and Primary Scale of Intelligence – Third Edition (WPPSI-III) over three consecutive sessions. Despite Damien’s initial reluctance to engage and early oppositional behaviours, Damien’s attitude towards the writer and his degree of compliance improved considerably as the assessment progressed. While Damien was still reluctant to engage in structured activities, he was happy to negotiate, alternating between subtests on the WPPSI-III and free play. While somewhat precocious at times, Damien was also very engaging, initiating enjoyable interactions with the writer during his free playtime. When asked to focus on the WPPSI-III tasks Damien appeared motivated to perform well, referring to the writer when he found a task too difficult or challenging. It was also
noted that Damien responded very well to praise, appearing quite pleased when the writer commented on the improvement in his behaviour.

Despite being co-operative and motivated to perform well, Damien demonstrated limited concentration and attention during the subtests, labouring over the last few items. Damien was also easily distracted by external stimuli, looking around the room until his attention was directed back to the task. While Damien was able to remain in his seat with encouragement, he was extremely restless and fidgety, tapping his fingers on the table, squirming in his seat and moving his legs.

As a result of his limited attentional capacity, Damien tended to respond to the final items on the subtests in an impulsive fashion. While able to identify his mistakes after taking a short break, he continued to make the same impulsive errors throughout the assessment.

While Damien’s assessment results generally placed him in the ‘high average’ range in both the verbal and performance based domains, there was a considerable scatter both within and between subtest, indicating that Damien possesses a range of strengths and weaknesses. Damien generally performed very well on problem solving items, responding to many of the items immediately. His performance declined however, when he was required to concentrate on one task for an extended period of time. Damien also demonstrated considerable weaknesses on tasks such as Block Design, which require a degree of forethought and planning.

Kindergarten observation

Damien was friendly, polite and familiar with the assessor during his kindergarten observation, approaching upon sight and asking the writer to play with him. Damien approached his peers with confidence, alternating between co-operative play with peers, parallel play and independent play. He often moved from group to group, interacting with a number of different children, rather than attaching himself to one group of children for a prolonged period.
While presenting as confident and friendly, it was noted that Damien tended to observe other children play for a long period of time before joining in. Damien also approached the writer several times, encouraging the writer to play with him.

While most of Damien's play was quite appropriate, it was noted that at times, his peers appeared to be scared of him, particularly when he decided to play with a large stick. While Damien responded well to limits set by his teachers, he appeared annoyed that they had taken his "whacking stick". Damien's teachers appeared surprised by his response, asserting that compliance was not typical for Damien.

During structured times Damien fidgeted in his seat, often getting up despite his teachers instructions to remain seated. Damien paced around the room, roaming from child to child. Qualitatively, Damien appeared distracted, his eyes constantly wandering around the room.

Formulation

Damien, a 4½-year-old boy, was referred to an outpatient mental health service due to behavioural difficulties which occurred both at home and at kindergarten. As Damien completed psychological and speech and language assessments, he was seen once a week for over 2 months. During this period his behaviour was quite labile. While Damien behaved in an oppositional and aggressive manner during the initial assessment session with his mother, his behaviour was notably different during his individual assessment sessions. During individual assessments Damien was well contained and responsive when clear, firm limits were set on aggressive or destructive behaviour. While Damien could still be argumentative at times, many of his overtly defiant and oppositional behaviours were also notably reduced.

During the psychometric assessment, Damien demonstrated some attention-based difficulties, which appeared to be masked during earlier sessions by his destructive and oppositional behaviour. Damien was also easily distracted and restless, constantly fidgeting in his seat and tapping his fingers on the table. Damien made a number of impulsive errors during the assessment period, which were consistent with reports of his behaviour at home.
Possible factors that may have predisposed Damien to his current difficulties include early attachment and bonding difficulties exacerbated by periods of severe maternal depression, the separation of mother and infant due to illness and Damien’s difficult temperament. Other predisposing factors include complications during Damien’s delivery such as anoxia at birth and exposure to continuing marital discord.

Inconsistent parental discipline is one factor likely to maintaining Damien’s current state of functioning. David tends to take an authoritarian approach to parenting, frequently losing his temper and smacking Damien and his sisters. As a result, Terry reported that she tends to be overly permissive. Observation of Terry and Damien’s interactions also revealed that she tends to be quite inconsistent, threatening a punishment only to fail to carry through with her threats. This situation is further exacerbated by Terry’s frequent hospital admissions, which result in her being absent from the family home for extended periods of time. Terry’s struggle with depression has also made it difficult for Terry to respond to Damien, as she often lacks the energy required to address his behavioural difficulties. As a result, Terry tends to ignore any positive bids that Damien might make for her attention, responding only when his behaviour escalates to the point of aggression. This situation appears to have precipitated a negative feedback loop in which Damien believes that he must misbehave in order to gain his mother’s attention.

Terry’s recent hospitalisations have also precipitated the development of an anxious-ambivalent attachment between Terry and Damien. Since Terry’s last hospitalisation Damien has demonstrated some severe separation anxiety, fearing that his mother will not be home when he returns. As a result Damien often misbehaves when he attends kindergarten in the hopes that he will be sent home to his mother. Damien’s behaviour in response to his mother however, is quite variable. At times Damien can respond to her in any overly clingy and affectionate manner, seeking out her approval. At other times Damien ignores or hits out at his mother, refusing to follow her directions.

Other maintaining factors include Terry’s low parental self-esteem due to her limited support network and conflict with David, David’s tendency to model unacceptable
behaviour such as hitting and swearing and Damien’s co-morbid attentional difficulties, which appear to be consistent with a diagnosis of ADHD.

Protective factors include Damien’s above average cognitive abilities, Terry’s commitment to resolving Damien’s difficulties and her willingness to engage with mental health services and Damien’s ability to respond to limits when presented in a firm, clear and consistent manner, as seen in his individual assessment sessions. Damien also shares a close bond with his older sister who is reportedly a good support for him.

Treatment

A multimodal treatment program was planned for Damien, which aimed to address his ADHD and ODD related symptoms. As Damien was only 4½ years old at the time of his assessment, his mother opted to delay the use of medication until he entered primary school. As such, only the behavioural components of his treatment recommendations will be reported.

Parenting training

At the conclusion of the assessment, it was recommended that Terry and David complete a parenting program focusing on the use of rewards training and time out as opposed to the physical punishments utilised by David. Unfortunately, David was not willing to take part in Damien’s treatment, nor was he willing to attend parenting classes. With this in mind, a number of recommendations were made which aimed to help Terry respond to Damien’s behaviour in a more effective manner.

It was noted during Damien’s individual assessment sessions that he responded well when clear, firm limits were placed on his behaviour. As such, Terry was encouraged to set firm limits on Damien’s behaviour, which included clear and obvious consequences for misbehaviour.

As a part of this program, Terry was referred to a psychiatrist to discuss the possibly of anti-depressant medication. This intervention proved to be highly effective, with
Terry's mental state improving dramatically. As a result, it was also noted that Terry's management of Damien's behaviour improved significantly, possibly due to her improved ability to respond to his demands for attention before his behaviour escalated.

**Group program**

While Terry and Damien were encouraged to engage in therapy aimed at improving their communication skills and establishing positive patterns of interaction between them, both were reluctant to engage in family work. As such, Damien and Terry were referred to a group program, which focused more on behavioural management. The program was designed for parents and children, with separate parent and children groups run in parallel for the first 90 minutes of the session. The parents group focused on behavioural management, identifying and managing angry feelings and family of origin issues. Parents were also shown the STOP-THINK-DO approach and encouraged to use it with their children. The children's group focused on problem solving skills, identify and containing strong emotions and behavioural management using the STOP-THINK-DO model. The remainder of the group session was spent in a conjoint group where parents and their children were encouraged to develop their communication skills, establish positive feedback loops and negotiate behavioural management programs. The group had not commenced at the time of Damien's discharge.

**Summary and conclusions**

Damien was referred to an outpatient mental health service due to concerns associated with aggressive and oppositional behaviour. While Damien had always had a difficult temperament, a recent escalation in his aggression at kindergarten and at home, and a tendency to defy authority and behave in an oppositional manner, made his Paediatrician query if a diagnosis of ODD was appropriate. A thorough assessment of Damien and his family history indicated that this diagnosis was indeed appropriate. A number of other issues were raised over the two-month period during which Damien was assessed however, which highlighted the importance of
conducting a thorough assessment of children presenting with these or related difficulties.

During Damien's cognitive assessment it became evident that an additional diagnosis of ADHD was appropriate, as he presented as inattentive, impulsive and restless in the absence of other outstanding conduct problems. These difficulties where not obvious during his initial assessment however, as his oppositional and destructive behaviour tended to overshadow the underlying attentional difficulties. As noted earlier, one of the primary aims of the assessment period is to reach an accurate diagnosis in light of the presenting problems. This process is complicated when additional co-morbid disorders exist however, particularly those of a more pronounced nature, such as ODD, as the hostile and oppositional behaviours associated with this disorder tend to mask any underlying difficulties that may exist. Identifying these difficulties as early as possible is essential to ensure that children are able to access the most appropriate treatments. Thus, this case highlights both the difficulties associated with differential diagnosis when co-morbid disorders exist and as such, the importance of thorough, accurate assessment.

This case also highlights the impact that maternal depression and suboptimal attachment may have on later childhood development. Due to medical and psychiatric illness, Terry and Damien were separated for protracted periods of time. This instability made it very difficult for Damien to develop a 'secure base' relationship with Terry, resulting in an anxious-ambivalent attachment between the pair. These experiences also made it difficult for Terry to bond with Damien as she tended to resent the effort required to care for and respond to a difficult child such as Damien. These early attachment issues contributed to the formation of a cycle of miscued and inappropriate communication between the pair, a pattern which had become firmly established by the time of Damien's referral.

In addition, this case highlights the impact that maternal depression may have on the presentation of hyperactivity in childhood. During their initial family session Damien engaged in oppositional, destructive and some might say, hyperactive behaviours in a bid to gain Terry's attention. Terry's flat affect, fatigue and lowered mood however, made it very difficult for her to respond to these bids, forcing Damien to increase his
activity level. While it is difficult to determine if any cause and effect relationship exists between Terry’s depression and Damien’s overactivity, it was hypothesised that his energy levels would decrease if Terry was able to respond to his demands promptly. This hypothesis was supported by observations of the pair during their feedback session, one month after Terry had commenced antidepressant medication. During this session Damien’s behaviour was far more contained as Terry responded promptly and appropriately to his demands for attention, before his behaviour escalated.

Finally, it should be noted that all the information presented within this case study was essential to his treatment plan. While the role that difficult mother-child interactions played in precipitating and maintaining Damien’s current state of functioning was unclear, these difficulties did not need to be addressed in treatment. Moreover, while a diagnosis of ADHD may not have had significant implications for the remainder of his kindergarten enrolment, specific tailored interventions may be necessary in the future as he progresses into primary school. In sum, this case highlighted some of the difficulties associated with differential diagnosis, the importance of accurate diagnosis and thorough assessment, the impact that maternal depression and separation may have on children with attentional difficulties and the importance of this information for future treatment and planning.
CHAPTER SIX: BEAU: A YOUNG BOY PRESENTING WITH HYPERACTIVITY AND POOR ATTENTION

The present chapter explores the relationship between maternal depression and the presentation of hyperactive, inattentive and aggressive behaviors in a 6½-year-old boy. Through this case study, the process of differential diagnosis will be explored in more depth, again highlighting the importance of conducting a thorough assessment of children presenting with these or similar issues. The dangers of making an inappropriate diagnosis will also be reviewed following the case presentation.

Referral

Beau’s Pediatrician referred him to an outpatient mental health service due to concerns arising from his oppositional behavior and non-compliance. While Beau’s Pediatrician had given Beau a provisional diagnosis of ADHD and recommended stimulant medication, his mother Mandy had been reluctant to put Beau onto medication without a second opinion.

Family assessment session

Beau, his mother Mandy, his younger sister and their family support worker attended the family assessment session. Beau’s father, Phil, was unable to attend any of the assessment sessions due to work commitments.

Beau presented as an engaging, active young lad who was quite tall for his age. Beau attended the assessment session in his school uniform. When he entered the assessment room Beau’s uniform, his face and his hands were all covered in chalk from the chalkboard in the waiting room. Beau chose the seat closest to his mother. He made excellent eye contact during the session, answering all questions asked of him. When given permission to play, Beau played quietly with his sister in the corner of the room. Beau did however, interrupt the session frequently to correct his 

51
mothers version of events. Towards the end of the session Beau became quite lively and animated, jumping on Mandy’s knee and moving very close to her face when speaking to her.

By contrast Mandy presented with a flat, restricted affect and lowered mood. She spoke in a muted, monotonous tone throughout the assessment, rarely making eye contact. Her posture was slumped during the session and her memories often vague at best. Despite this Mandy was co-operative, responding when able to.

**Presenting problems**

Mandy reported that Beau was very defiant and aggressive, both at home and at school. While Mandy claimed that Beau had always been defiant and moody, she asserted that his aggressive behaviors had escalated recently, leading to his referral. Mandy reported that Beau hit out at his sister and parents, often becoming upset afterwards and running to his room.

Mandy also reported that Dan was a “control freak”, becoming defiant and upset when he didn’t get his own way. He worried constantly, often crying in his sleep, and most days presented as sad and irritable. It was also reported that Beau had poor concentration, difficulty sitting still for long periods of time and experienced some social difficulties related to making and keeping friends.

Mandy reported that Beau’s presenting behaviors, particularly those of the aggressive variety, were present both at home and at school. While Beau’s teacher supported this observation she noted that, by Term Three, Beau’s aggressive behavior had become easier to manage. Beau’s teacher did report that Beau was easily distracted, had difficulty concentrating on tasks and annoyed other children. Beau also demonstrated evidence of separation anxiety at the start of the year, although this situation rectified itself at the beginning of Term Three.
Parent assessment session

Mandy, Beau's sister and their family support worker attended the parent assessment session.

Family system

Beau is the eldest of two children in an intact family. Beau has a younger sister whom he generally shares a good rapport with, sharing his toys and volunteering to play with her. When sad or frustrated however, Beau has a tendency to hit out at her, making her reluctant to approach him.

According to Mandy, Beau also shares a good rapport with his father, Phil, although his long working hours make it difficult for him to see the children. Mandy reported that he generally starts work at 5am, rarely returning home before the children are in bed. Mandy reported that Phil is a “great mate” to Beau because he can “afford to be”, with Mandy taking on sole responsibility for disciplining the children.

While Mandy reported that she loves Beau, she finds it difficult to deal with him at times, as he can be very demanding of her.

Parent's history

Mandy is the youngest of three girls, raised in an intact family. Mandy admitted that she had dichotomous feelings with regards to her own childhood. While she initially described her childhood as “great”, she admitted that she took on a great deal of the burden of her mothers care during her depressed episodes, which often took Mandy away from her friends. According to Mandy there is a very strong history of depression and addictive behaviour disorders in the family, a fact that placed an additional strain on her early childhood as she rarely received adequate support from her extended family for her mothers care. Mandy believes that these factors may have precipitated her first depressive episode at 16 years of age. While her
depression was being managed effectively by Zoloft prior to Beau’s birth, she reported that the medication has ceased to be effective postpartum.

Mandy reported that she struggled both academically and interpersonally at school, although her academic troubles were eased somewhat when she was diagnosed with a learning disorder and given strategies to manage her work. Mandy also struggled with authority at school, describing herself as oppositional and non-compliant. Despite these early difficulties Mandy reported that she was also very determined, finishing high school and going on to obtain Bachelor level qualifications at university.

By contrast, Mandy reported that Phillip didn’t like to discuss his childhood. As such, Mandy only gave a vague account of his early history. Mandy reported that on the few occasions that Phillip discussed his family he described his father as a physically abusive and controlling man who dominated his family. According to Mandy, Phil’s father physically assaulted his wife and children, including Phil, regularly. This abuse was reportedly severe and longstanding, continuing until Phil left the family home at the age of 14. Since that time Phil has maintained minimal contact with his father.

Mandy also reported that Phillip was hit by a car at the age of 8 and spent approximately 6 months in traction. Following the accident Phillip found it difficult to catch up with his studies, eventually leaving school at 13 years of age. Phil maintained steady employment as a labourer until he was in his mid 20’s, when he served a 6-month sentence for a sexual offence.

Mandy and Phillip met at a pool hall. Approximately one week after they met Mandy left for an exchange position in the U.S., where she worked as an allied health employee. During that time the pair maintained contact, writing letters sporadically and phoning each other. After a three-month working holiday Mandy returned to Australia where she resumed her relationship with Phil. Following a brief courtship the couple were married, with Dan being delivered one year later.
Mandy reported that the couple had experienced marital disharmony in the 6 years since Beau's birth. According to Mandy, the couple predominantly argue over their differing parental practices, the frequency of their sexual relations and grief and loss issues related to a number of miscarriages suffered by Mandy since Beau's birth.

Two years ago the couple went to marriage counselling but Mandy reported that they failed to resolve their differences. Shortly after marriage counselling Mandy became a gambling addict, ceasing only when Phil threatened to take sole custody of Beau. This gambling addiction, while brief in duration, placed an additional strain on the families financial resources, leading Mandy to resume working night shifts as a professional in a hospital shortly after the birth of her youngest child.

Developmental History

Beau, a 6½-year-old boy, is the eldest of two children in an intact family. While Beau was not a planned pregnancy, both parents were reportedly pleased by the news. Mandy reported that she ceased her antidepressant medication when she discovered she was pregnant with Beau, approximately 3 months into the pregnancy. Both mother and baby were well throughout the pregnancy, although the birth was induced two weeks past the gestation date.

Mandy suffered from severe postpartum depression following Beau's birth. Mandy reported that for this reason Beau was only breastfed for four weeks, then bottle-fed. While Beau fed well, Mandy reported that she had difficulty settling him into a routine. Beau also suffered from colic for a short period of time apparently adding to Mandy's stress, although she was unsure of the time frame.

Beau met all milestones at age appropriate intervals, walking independently at ten months of age and developing language skills quite early (although Mandy was not sure exactly when). Beau was observed to have some minor delays in his gross motor functioning however, with Mandy reporting a history of clumsy behaviour. Beau also had difficulty crossing his midline during the assessment sessions. This difficulty was evident in his drawings and his approach to block construction tasks.
Mandy described an ambivalent attachment between mother and child since Beau’s birth, which Mandy believes was exacerbated by his difficult temperament. During the parent session Mandy reported that she had been disinclined to have another child following Beau, as her experiences with him had been so stressful, stating, “knowing my luck I’d have another child like him”. Mandy did acknowledge however, that her chronic depression since Beau’s birth may have contributed to this perception, admitting that she often felt too exhausted and fatigued to respond to his demands, forcing him to escalate in his behaviour until he gained her attention.

Beau was described as being a “full on” and demanding toddler. He reportedly ran everywhere, exhibiting hyperactive behaviours in her presence. Mandy did note however, that Beau tended to “settle down” when his father was responsible for him. More recently Beau has been engaging in attention seeking behaviours, which, according to Mandy, escalates if he fails to get her attention. Mandy reported that these behaviours are “annoying and frustrating”; stating that when he failed to get a response from her he typically has “a sook”.

Mandy reported that Beau engages in repetitive behaviours, although she was unable to give a specific illustration of any of these behaviours. Mandy also noted that Beau has a preoccupation with death and dying.

Health History

Mandy reported that there is a strong history of depression and heart disease on both the maternal and parental sides of the family. Both of Beau’s grandmothers have been admitted into hospital due to illness in the past 2 years, as has his father, who was diagnosed with a chronic, debilitating illness four years ago. Since the diagnosis was made Phil has had several surgical procedures, which have seen him spend weeks in hospital.
Individual assessment sessions

Bean completed the WISC-III and his individual assessment over four consecutive weeks. Beau’s mood and affect were extremely labile during the assessment period. At times Beau presented as euthymic and reactive, laughing at jokes and initiating interactions with the writer. On other occasions Beau presented as flat in affect, his mood significantly lowered. During these periods Beau tended to internalise, often refusing to engage with the examiner. Beau also tended to fatigue easily, an observation that was supported by his schoolteacher.

Throughout the four-week assessment period Beau’s behaviour also changed considerably. At times Beau could be very co-operative and engaging, determined to do well on the assessment tasks and volunteering to continue after he was instructed to stop. At other times Beau became very non-compliant. This was particularly evident during timed subtests on the WISC-III, during which Beau displayed significant performance anxiety. When returned to his mother in the waiting room Beau again became loud and hyperactive, arguing with Mandy and coming very close to her face when speaking to her.

While Beau generally applied himself well to tasks, he showed evidence of low self-esteem, becoming quite disheartened when he found an item on the WISC-III difficult to complete, calling himself “silly”. Beau generally gave up on the subtest shortly thereafter, responding with “I don’t know” to all preceding items. This behaviour was particularly evident during the verbal subtests. Beau’s low self-esteem was also evident during the house, tree, and person drawing task. During this assessment Beau became very upset, claiming, “everyone hates my trees”. While he was able to continue with encouragement, he continued to make self-deprecating statements while drawing.

Beau tended to become distracted at times, although this appeared to be the result of irritation with environmental cues, such as the heater, more than an inability to concentrate. Despite these lapses in concentration Beau was generally able to go back on task quickly and without any encouragement to do so.
Consistent with Mandy's reports, Beau's storytelling generally focused around themes of death and dying. There also seemed to be any emerging sense of hopelessness in his play and stories. For example, Beau’s story of a good dream focused on a young boy (Rainman) who found a heart in a cave in the care of a bad man and took it home to his mother. The mother then rejected the heart that the boy offered to her, telling him that he shouldn’t have rescued it and directing him to take it back to the cave and the bad man. Similarly, when playing with puppets Beau told the story of a young boy who was locked in the basement by his parents. After 100 years he was told to see his parents who again sentenced him to imprisonment in the basement, first for 1,000 years then for 10,000 years.

**Psychometric assessment**

Beau completed the WISC-III in four sessions. Beau obtained a score in the 'low average' range on the Verbal Scale, compared with same aged peers. By contrast Beau obtained a score in the 'high average' range on the Performance Scale. As the differences between these two scales were significant, the Full Scale Score was not reported.

When interpreting these results it is important to note that Beau’s sporadic non-compliance makes interpretation difficult, as his behaviour often artificially lowered his scores. In order to investigate Beau's skills in the verbal domain more thoroughly, he was referred for a speech and language assessment. The results of this assessment confirm hypotheses that his behaviour artificially lowered his score, as Beau obtained scores in the 'average' to 'high average' range on all the verbal tasks assessed.

**Formulation**

Beau, a 6½-year-old boy, was originally referred to an outpatient mental health service, due to concerns regarding his inability to concentrate, impulsivity and poor attention. A number of other concerns were noted during his initial assessment including aggression and oppositional behaviour, which reportedly occurred both at home and at school. Mandy also noted that Beau could be very moody and stubborn,
sulking for long periods of time. Beau’s behaviours have occurred in the context of a chaotic family environment disrupted by marital difficulties, parental illness, maternal depression and the birth of a younger sister.

During the assessment period Beau’s mood and behaviour were very labile. At times Beau could be very engaging and co-operative, offering to complete additional tasks when he had completed those allocated. At other times Beau could become very flat, his mood irritable and sad. During these periods Beau was generally non-compliant, arguing and refusing to participate in activities. Beau showed evidence of performance anxiety during the assessment period. Beau also displayed evidence of very low self-esteem and an emerging sense of hopelessness that was particularly evident in his play. He also tended to fatigue easily during the assessment, complaining that he was tired.

Factors predisposing Beau to his current difficulties appear to include a maternal history of depression and ambivalent attachment. It is possible that Mandy became vulnerable to depression having taken on the care of family members during her adolescence. Beau was also described as having a difficult early temperament and this combined with Mandy’s history of depression is likely to have impacted on attachment and bonding experiences between Beau and Mandy.

There has also been persistent marital discord associated both with differences in parenting practices and interest in sexual relations. This discord is typically expressed in verbal conflict, which Beau has witnessed, possibly explaining his need to control his environment, an environment which he perceives as being unstable.

Additional familial issues that may be impacting on Beau include the birth of his younger sister, which has exacerbated his feelings of isolation and separation from the family, as a great deal of attention is now focused on her. Beau’s sense of isolation may be further exacerbated by his father’s physical and emotional distance from the family.

Maintaining factors include the recent illness of close family members, which has caused a great deal of anxiety in both Beau and Mandy, explaining Beau’s recent
preoccupation with death. Both Beau and Mandy are also experiencing transition in their lives, with Beau entering primary school and Mandy returning to night shifts after a prolonged absence from the workforce. As Mandy cares for Beau’s younger sister during the day, the resulting sleep deprivation is likely to have had a dramatic impact on Mandy’s mental state, exacerbating her depressive symptoms which in turn makes her less able to respond to Beau’s increasing demands.

Protective factors include a positive relationship between Beau and his current school teacher, where Beau’s behaviour has become increasingly well managed and contained, Beau’s ability to engage with his case worker and his determination.

Treatment

Due to Mandy’s flat affect and depressed presentation, therapy was initially conducted on an individual basis with a view to focusing on conjoint therapy at a later date. Due to his age, Beau was recommended for play therapy.

Sessions 1 and 2

Based on Beau’s case history and need for containment, Beau’s session were held at the same time every week. Beau was also given the opportunity to direct his sessions. While the toys in the room were selected by the therapist, Beau was able to direct many aspects of the session, sometimes requesting for additional toys to be brought in for his next session. As rapport had already been established during the assessment phase, Beaus individual session’s progressed rapidly. Beau engaged well in play therapy, using toys and drawings to work through familial issues of loss and separation. While there were reoccurring themes of death and dying throughout Beau’s therapy sessions, Beau responded well to the idea of a hospital being established in the corner of the playroom. As his sessions progressed Beau slowly relied on the toy hospital for more operations, moving it to the centre of the room.
Sessions 3 and 4

Mandy attended these sessions with Beau’s younger sister while Beau was at school. Mandy used the time to discuss management issues related to Beau’s aggression and parenting techniques. Mandy also discussed the difficulties she had bonding with Beau. These discussions were framed in terms of her past and present feelings towards Beau and her hopes for the future. The therapist also drew parallels discreetly between the difficulties Mandy had experienced with her depression and the difficulties she had experienced parenting Beau. As Mandy had some insight into the effects of her depression on the family, she was able to use this discussion to reframe her thoughts regarding some of their early attachment and bonding experiences and the challenges that Beau presented as an infant. While Mandy was responsive to therapy she was extremely critical of Beau during these initial sessions.

Sessions 5 to 8

As Beau’s play therapy progressed he began to hand over some control of the sessions to the therapist, negotiating to alternate between a game that the therapist chose and one that he wanted to play. Beau became more trusting and accepting of positive feedback during these sessions. While there were still some themes of separation present in his play, the loss aspect of his play began to dissipate with many of the critically injured toys that required hospital treatment surviving their operations.

Sessions 8 to 10

These sessions were again attended by Mandy and Beau’s sister. Mandy used these sessions to discuss parenting issues and the impact of her marital difficulties on Beau’s and her own mental state. During these sessions it was noted that Mandy was far less critical of Beau, reporting more positive interactions between them.
Session 11

As Mandy and Beau’s individual therapy had progressed rapidly and I was finalising my placement, Mandy and Beau were referred to a group therapy program, which aimed to focus on their communication skills, helping them to interact in a more positive manner. The program was also designed to provide Mandy with some practical parenting techniques and to give Beau the opportunity to engage in positive social interactions with same aged peers. As such, this session aimed to finalise the therapy and prepare Beau and Mandy for the group. During the session Beau made a box in which he placed all his “bad thoughts”, locking them away until he felt that he could deal with them.

Summary and conclusions

Beau was initially referred to an outpatient mental health service due to concerns arising from hyperactive, inattentive and aggressive behaviours that he had been demonstrating both at home and at school. Beau was referred by his Paediatrician who gave him a provisional diagnosis of ADHD, recommending immediate treatment using stimulant medication. Mandy was reluctant to commence Beau on stimulant medication however, without obtaining a second opinion with regards to his diagnosis.

During the initial family session, which was attended by both Beau and his mother, Beau exhibited behaviours that may have been consistent with a diagnosis of ADHD, such as overactivity, poor attention and poor stimulus regulation. Beau’s presenting behaviours in preceding assessment sessions and at school however, provided evidence to support an alternate diagnosis. In Mandy’s absence, Beau’s presentation changed dramatically. Generally Beau presented as flat in affect with a restricted range of emotions and restricted activity level. Throughout the assessment phase in which tools such as toys, puppets, stories, drawing and cognitive tasks were used, it was noted that Beau had very low self-esteem and an emerging sense of hopelessness which appeared to be associated with his chaotic family structure and suboptimal attachment with Mandy. Beau often appeared to be preoccupied with thoughts of death and dying and was generally anxious about leaving his mother and father at
home while he attended school, fearing that they might not be there upon his return. These thoughts appeared to have a dramatic impact on Beau’s attentional capacity, limiting his ability to concentrate on tasks for an extended period of time. When given positive incentives and encouragement however, Beau was able to complete cognitive and school-based tasks at a very high standard. Beau also tended to be highly irritable, becoming annoyed when other children passed the therapy room, despite the fact that their voices were muffled from the hall.

These observations provide evidence to support a diagnosis of Dysthymic Disorder, the predominant features of which are a sad and irritable mood, low energy and fatigue, low self esteem, poor concentration and feelings of hopelessness (American Psychiatric Association, 2000). Beau did not meet the criteria for a diagnosis of ADHD however, as his symptoms were not present in two or more settings. While it is important to note changes in a child’s symptom presentation across settings, Neven, Anderson and Godber (2002) also assert that it is important to investigate the reasons underlying these changes. When doing so, we refer to a point made in preceding chapters, namely, that behaviour is dynamic and reactive to external cues (Neven, Anderson & Godber, 2002). As such, any formal hypothesis made regarding the aetiology of Beau’s hyperactive behaviours should be made with this in mind.

Based on Beau’s presentation and information gathered during the assessment phase, it may be hypothesised that the hyperactivity evident in Mandy’s presence may in fact be a direct response to her flat affect and lack of activity as Mandy’s depressive symptoms often made it difficult for her to respond to Beau. As noted earlier, Beau often got in his mothers face when speaking to her, thus ensuring a response. Beau also actively encouraged participation from Mandy, who rarely responded to any positive bids for attention made by Beau, only directing her attention to him when he misbehaved or his activity level increased to the point where it became intolerable for her. Thus, the hyperactive symptoms seen may have fulfilled two functions. First, they may have been designed to enliven Mandy and encourage her to participate. Second, they may have been a means of gaining her attention, even if her response was negative.
The symptoms of poor attention and concentration may also be explained in this manner. As noted during his assessment, Beau often became preoccupied with his own thoughts, appearing sad and hopeless. Due to Beau’s unstable family situation, his parents’ illnesses and significant marital discord, Beau spent a lot of time focusing on his troubles at home, often losing focus on the task at hand. Thus, Beau’s symptoms of poor attention and concentration may have been owed to the other troubles that occupied his thoughts rather than any impairment or deficit in his attentional capacity. In support of this hypothesis it should be noted that Beau was often able to focus and attend to tasks when given encouragement to do so. When encouraged, Beau demonstrated above average cognitive abilities and adequate impulse control.

This case again highlights the importance of conducting a thorough assessment of children presenting with attentional difficulties. The case also highlights the significance of changes made to the ADHD criteria in revisions of the original DSM, to include the presence of symptom in two or more settings (American Psychiatric Association, 2000). It should be noted that without a thorough assessment, Beau might well have been prescribed stimulant medication. While stimulant medication is routinely prescribed for children with ADHD, with good effect in some cases, it has been found to exacerbate depressive symptoms in children who are predisposed to these difficulties (Carr, 1999). In Beau’s case, the use of stimulant medication may well have worsened his condition.

In light of the assessment results Beau’s treatment was tailored to his needs, focusing both on improving his self-esteem and on improving interactions between Mandy and Beau. Mandy also received individual work to treat her depressive symptoms and a medication review was advised. Following individual work, the pair joined a group therapy program, which aimed to control Beau’s aggressive and oppositional behaviours using Cognitive Behavioural Therapy (CBT).

In sum, this case demonstrates the impact that maternal depression may have on many of the symptoms present in ADHD, such as poor attention and concentration and hyperactivity. In Beau’s case, these symptoms appeared to be reactive to his mother’s flat affect, as they were generally not evident when Mandy and Beau were
separated. This case also highlights the importance of conducting a thorough assessment of children presenting with ADHD-like symptoms in order to rule out alternate diagnoses. Issues relating to the differential diagnosis are particularly relevant when considering treatment options, as specific pharmacological and behavioural interventions may be recommended based on the child's diagnosis.
CHAPTER SEVEN: DANIELLE: A YOUNG GIRL WITH ADHD

The present chapter includes an exploration of the role of maternal depression and the environment in understanding and treating a young girl presenting with symptoms of hyperactivity, inattention and poor emotional regulation. Danielle was seen for a 6-week assessment in a specialist clinic.

Referral

Danielle, a 7-year-old girl, was referred by her school for an assessment of her attentional capacity. Since her enrolment 6 months ago, Danielle’s teachers have noted that she has difficulty maintaining her attention and concentration in the classroom.

Family assessment session

Danielle, Kathy and Danielle’s maternal grandmother Margaret, attended the family assessment. Danielle’s father, Keith, was unable to attend due to work commitments. Kathy reported that Danielle’s six siblings were either in school or in childcare at the time of the assessment.

Danielle presented as an attractive, slight young girl of short stature. As the assessment was held in school hours, Danielle attended the assessment in her school uniform, which was torn from an earlier bike riding incident. Danielle’s hair was tied back in a loose, dishevel ponytail, much to Margaret’s notable distaste. Danielle’s mood and affect varied significantly throughout the course of the assessment. Danielle initially presented as quiet and withdrawn. Further discussion however, indicated that Danielle’s presentation was the direct result of a conflict with her mother in the waiting room. As the session progressed, Danielle became increasing vocal and euthymic, talking in a rapid animated fashion when asked about her performance in a recent school play.
Danielle’s overt behaviour also changed throughout the assessment session. Initially, Danielle sat with her hands folded across her chest, staring down at her feet. Danielle became increasingly restless as the session progressed however, tapping her feet and shifting in her chair after 10 minutes. After 20 minutes Danielle had left her seat and was actively exploring the room, picking up and discarding objects after brief examination. Danielle monitored her mother and grandmothers responses during her exploration, interrupting to correct them when she disagreed.

Danielle’s mother Kathy presented as an obese, unkempt woman who looked older than her 35 years. Kathy’s affect was flat and restricted during the assessment session, her mood lowered. She explained that she had been feeling “like crap” of late, reporting a two-year history of insomnia and depressed mood.

Danielle’s maternal grandmother, Margaret, presented as a matriarchal figure that assumed control of all decisions regarding Danielle’s assessment and treatment.

Presenting problems

Danielle’s mother, Kathy, reported that Danielle has always had difficulty concentrating in the classroom, with her behaviour at a previous school characterised by poor attention and concentration, hyperactivity, restlessness and impulsivity. Her current school reported that she had difficulty waiting for her turn, interrupting teachers and other students. Danielle also experienced some problems socially, as she had difficulty reading her friends nonverbal cues and generally spoke over them. Academically, Danielle was described as a poor student who rarely completed her homework.

At home, Kathy reported that Danielle tended to forget things easily, asking Kathy to repeat instructions to her several times as she was “away with the fairies”. Danielle tended to be on the go constantly, preferring to run rather than walk. Kathy also reported that Danielle could be quite impulsive, hitting her siblings then apologising soon after.
Parent assessment session

Danielle's mother Kathy and her maternal grandmother Margaret attended the assessment session. Keith was unable to attend the session due to work commitments.

Family system

Danielle lives in an intact home environment with her parents, Kathy and Keith, her maternal grandmother Margaret and her six siblings. Danielle has two older and four younger siblings, whose ages range from 18 years to 6 months. While Danielle is reportedly close to her younger siblings, they now tend to avoid her as she often gets them into trouble. Kathy reported that of the children, Danielle most resembles her father both in terms of appearance and behaviour. Danielle reportedly shares a close bond with Keith who is said to be extremely supportive of her. According to Kathy, while Keith loves all his children he tends to favour Danielle. Margaret believes that as a result, Keith can be overly lenient when disciplining Danielle.

Parent's history

Kathy, the oldest of six children, grew up in an intact home. Kathy reported that her early years were generally "great", recalling many pleasant family holidays and experiences with her mother. While Kathy was able to recall pleasant stories from her childhood, she also tended to be vague in her accounts, her mother often interrupting to correct her.

When asked what factors may have precipitated her history of depression, Kathy made a vague reference to some "bad stuff" which happened during her childhood. While Kathy appeared willing to elaborate on some of the details of her experiences Kathy's mother intervened, stating that it was "all in the past". At this point Kathy looked down at her feet, refusing to continue the discussion.

Margaret reported that Kathy was a very high achiever at school, describing her as a perfectionist. While Margaret was unable to recall any significant developmental
difficulties during Kathy’s childhood she reported that she did suffer from Anorexia Nervosa from the ages of 12-14, requiring hospitalisation on several occasions. While an inpatient admission in a psychiatric unit was considered, Margaret reported that Kathy did much better at home. Kathy reported that she became extremely depressed following her experience with anorexia, feeling “lost and bitter”.

According to Kathy, Keith is the youngest of four children raised in an intact home environment. While never formally diagnosed, Kathy reported that Keith had ADHD as a child, still maintaining the restless and inattentive traits of the disorder. Keith struggled academically at school, dropping out at 15 to take up an apprenticeship in the food services industry. From there Keith moved onto an apprenticeship as a carpenter, then a bricklayer. These changes became routine for Keith who is reportedly “easily bored”. Keith now owns his own business in the building industry, working in a position that he loves as he never has to stay in one place for long. Keith has been absent from the family for prolonged periods over the past 7 months due to work related travel.

Kathy and Keith met at school when they were 17 and 18 respectively. After dating for 8 months Kathy found out that she was pregnant with their first child. On Margaret’s insistence the couple married immediately, Kathy’s parents securing a house for the couple in close proximity to their own residence. While the couple struggled to care for themselves and their child financially, Kathy reported that they loved one another, working through their problems together. As Kathy had completed school just before the birth of their first child she was able to enrol in a TAFE course following the birth, obtaining qualifications in the health care services.

Developmental history

Danielle was a planned pregnancy. While Kathy planned to deliver Danielle naturally, like her older children, she was forced to have an emergency caesarean after Danielle became distressed during delivery, her heart rate dropping substantially. While Danielle herself recovered from the procedure well, Kathy reported that she experienced significant haemorrhaging, requiring a blood transfusion.
Danielle and Kathy's early attachment and bonding experiences were further complicated by the onset of postpartum depression, for which Kathy required hospitalisation. While Kathy reported that she had experienced a period of depressed affect as a teenager, she claimed that Danielle’s traumatic birth and difficult temperament were the primary precipitants of her later depressive episode. While Kathy was released from hospital after completing a 4 week treatment program, Kathy reported that she has “never been the same since”, her depression currently being managed by Prozac.

Kathy described Danielle as a difficult infant who suffered from severe bouts of colic and projectile vomiting. She was also difficult to settle into a routine, showing little regularity in feeding or sleeping. Danielle was described as emotionally demanding and “confusing” as an infant, seeking out and demanding attention from her mother, only to reject any bids Kathy made to interact with her. Developmental milestones such as walking, speech and toilet training were all achieved at typical ages.

Danielle was described as an extremely active baby in utero who went on to become a hyperactive child. Kathy reported that Danielle was on the go from the time she could walk, busily moving toys and preferring to play sport than play video games with her siblings. Despite her interest in sporting activities Kathy reported that she was a clumsy child who lacked sufficient hand-eye co-ordination to play many sports.

Danielle’s inattentive, distractible and impulsive behaviours became evident at the age of 4, when she commenced kindergarten. While Danielle enjoyed free play times, she had difficulty complying with the rules of the class, interrupting peers to respond to questions, appearing unable to contain herself. Danielle’s kindergarten teachers reported that she had a tendency to stare out of the window during story time and appeared restless and fidgety during nap times. As Danielle appeared unable to sleep during nap time, distracting other children as a result, she was separated from the class, spending the time with her teachers packing up art supplies or engaging in solitary play.
Kathy reported that Danielle found the transition to primary school difficult, frequently getting into trouble in the classroom for not paying attention. On the playground Danielle had difficulty interacting with peers, who disliked her, as she tended to interrupt their games and had difficulty waiting for her turn. While Danielle’s teacher recommended that she be assessed for ADHD, Kathy was reluctant to engage her with mental health services, recalling unpleasant experiences during her own adolescence.

Towards the end of Danielle’s first year at primary school her maternal grandfather died in a car accident. The unexpected nature of his death reportedly placed a huge strain on the family, particularly Kathy, who was admitted to a psychiatric inpatient unit for treatment of a severe depressive episode shortly thereafter. Upon Kathy’s discharge from the unit, Margaret moved into the house to provide her with some “guidance (with regards to) managing the children”.

While evident from a young age, Danielle’s impulsive, inattentive, hyperactive and restless behaviours have been more severe since beginning Grade 1, resulting in aggressive outbursts and tantrums both at home and at school. Danielle is now behind in her schoolwork and gets into trouble from her teacher frequently for forgetting her homework.

**Individual assessment sessions**

Danielle presented as a polite, engaging young girl with a keen sense of humour. Danielle talked in a rapid, animated fashion throughout the assessment, her vocal pitch and tone both very high. While her mood could generally be described as euphoric, she became downcast when discussing her peers at school, reporting that they didn’t want to be her friend because she was a “dumb nosy parker”.

Danielle appeared to be quite restless during the session, getting out of her seat several times to explore toys in the room, taking them with her to her seat when finished. Danielle was also easily distracted, stopping mid sentence to get up from her seat and examine new toys or objects.
When discussing school Danielle reported that she hated school as the work was boring and she found some of it quite difficult to complete, especially reading and spelling. She felt that she was not as smart as other children in the class, nor was she as good at sports. Her view of school was that it was hopeless trying to finish the work as she rarely had adequate time to complete it and it hurt her brain.

With regards to her difficulties at home Danielle reported that her siblings were mean to her and often “gang up”. While Danielle reported that she loves her mother, she also reported that she was angry with her, as she had been away too much and kept on having babies, but didn’t have any time for her. When discussing her father Danielle reported that she missed him terribly and couldn’t wait until he came home as she sometimes felt that he was her only ally in the household.

**Psychometric assessment**

Danielle completed the WISC-III and the Test of Everyday Attention for Children (TEA-Ch). The TEA-Ch was administered to assess the efficacy of her attentional capacity both on and off stimulant medication.

Danielle’s Full Scale Score on the WISC-III fell within the ‘above average’ range, as did her Verbal and Performance Scale Scores. There was a significant scatter noted both within and between her subtest scores, which decreased the overall reliability of these measures.

Overall, Danielle performed well on tasks that assessed her fluid intelligence and reasoning skills, demonstrating excellent problem solving abilities and an adequate capacity for short-term, focused attention. Danielle had difficulty however, when asked to complete items designed to assess response inhibition and selective attention, performing significantly lower than same aged peers. As an illustration, Danielle obtained a scaled score in the ‘borderline’ range on the Mazes subtest by making careless and impulsive errors. Assessments of Danielle’s crystallised intelligence were generally in the ‘average’ range, however it should be noted that she demonstrated an inconsistent pattern of knowledge, almost meeting the
discontinuation criteria on a subtest before responding correctly to a new item, only to repeat the pattern.

With regards to her attentional capacity, it was noted that Danielle’s performance on various tests of attention was much improved after taking stimulant medication. In the ‘off medication’ trial, Danielle demonstrated poor response inhibition, performing in the ‘below low average’ range compared to same aged peers. Danielle also had difficulty with sustained attention tasks, performing in the ‘borderline’ range. By contrast, Danielle performed well on tasks that assessed her focused/selective attention and her divided attention, obtaining scores in the ‘average’ range. The results of Danielle’s ‘on medication’ trial showed a notable improvement in her response inhibition and sustained attention scores, which were both in the ‘average’ range. Danielle’s focused/selective and divided attention scores remained in the ‘average’ range.

Formulation

Danielle, a 7-year-old girl, was referred to a specialist clinic for an assessment of her attentional capacity. At school Danielle tended to behave impulsively, interrupting peers and teachers and missing social cues. She also appeared to have difficulties sustaining her attention during class time, becoming easily distracted by external stimuli, rarely completing assigned tasks as a result. At home, Danielle was described as extremely active and on the go, a behaviour that frustrated her mother and siblings.

Observations of Danielle during the assessment were consistent with a diagnosis of ADHD. Danielle demonstrated a range of hyperactive behaviours, talking rapidly and excessively, moving about constantly and appearing restless and fidgety when asked to remain seated. During her cognitive assessment Danielle showed an impulsive response style, which was often to the detriment of her work. Danielle also had difficulty with tasks that required divided or sustained attention. There was a notable improvement in these skills following the administration of stimulant medication however, indicating that medication should have a role in her future management.
Factors that may have predisposed Danielle to her current difficulties include heredity, a low foetal heart rate during delivery and a difficult temperament. While never formally diagnosed, the family believe that Danielle’s father also has ADHD, increasing the likelihood of his offspring sharing his difficulties.

Kathy’s experiences with depression and in particular, her severe episode of postpartum depression following Danielle’s birth, may have also played a role in the aetiology of Danielle’s difficulties, directly influencing their early attachment and bonding experiences. Kathy reported an anxious-ambivalent attachment pattern between the pair, noting that her ongoing depression made it difficult for her to respond to Danielle’s inconsistent communications, frustrating her and further compounding their communication difficulties. This ineffective pattern of interaction appears to have continued through to early childhood, with Danielle still seeking her mother’s attention in an anxious, demanding manner, only to reject her bids at interaction. Kathy finds this rejection difficult to tolerate becoming frustrated and angry with Danielle as a result.

Factors currently maintaining Danielle’s presenting difficulties include her father’s frequent absences from the family and a chaotic family structure in which Danielle tends to be overlooked. As a result, Danielle’s activity level increases, her verbal communications becoming louder and more intrusive until she gets the attention she desires. Kathy’s current experiences with depression compound this negative feedback loop, as her self reported fatigue and flat affect make it difficult for her to respond to Danielle demands until her behaviour escalates to the point where she feels she must intervene or respond in some way.

Protective factors in this case include Danielle’s close relationship with her father who she describes as extremely cool and supportive, Margaret’s recent move into the house giving Kathy extra time to spend with Danielle and a supportive schoolteacher.
Treatment

Treatment in this case was multisystemic, incorporating medication, a behavioural management plan, a school based intervention and counselling.

Medication

Danielle was seen by a child psychiatrist as part of her multidisciplinary assessment to discuss the possibly of medication. Due to concerns regarding Kathy’s ability to monitor Danielle’s medication she was placed on Ritalin – long acting. Margaret and Kathy were also invited to speak to Danielle’s psychiatrist, who provided some psycho education and discussed the importance of medication compliance and regular medical review. Potential barriers that may inhibit Danielle’s compliance with her treatment regimen were also discussed.

School intervention

The aim of this component of Danielle’s treatment was to initiate contact between Danielle’s teachers and her treatment team, to devise an appropriate curriculum and to discuss a behavioural management program. Danielle’s teacher and her team worked together to apply for funding for an integration aid so that Danielle could have some one-to-one contact during the classes that she found most difficult. Feedback was also given from Danielle’s cognitive testing with an individualised teaching plan devised, which was based on her cognitive strengths. Danielle was also encouraged to join the “cool kidz” program in her school, which aimed to improve the social skills of children who had experienced difficulties in their peer relationships.

Behaviour management plan

A behavioural management and academic rewards program was also devised with input from Danielle, her parents and her teachers. Danielle’s treatment team were present to make some recommendations and to assist Danielle to negotiate her part of the plan. This program was based on a points system and set a small number of
academic and behavioural targets. These targets were then broken down into smaller, manageable components with immediate rewards and incentives for achievement. Danielle selected the rewards for attainment of her goals, which were generally home based. Interestingly, the rewards selected by Danielle generally involved individual time with one or both of her parents. A daily communication diary was also established between the school and Danielle’s parents.

Counselling

While recommended, counselling had not been commenced at the time of Danielle’s discharge. The primary reason for this was Kathy’s fragile mental state. While counselling aimed at improving the communication patterns between Kathy and Danielle would have been beneficial for both parties involved, the team felt that joint counselling would not be successful until Kathy’s mental state improved and her depression was adequately managed. As such, Kathy was referred to an adult psychiatrist for a medication review, with counselling momentarily suspended.

Summary and conclusions

This case demonstrates well the combined influence of heredity and the environment in a young girl presenting with ADHD. Danielle was a young girl who was referred by her school for an assessment of her attentional capacity. Her presenting problems included poor attention and concentration, poor frustration tolerance, impulsivity and hyperactivity. Most of these symptoms were present both at home and at school.

One of the primary objectives of this portfolio has been to establish the utility of a multimodal framework in the assessment of ADHD. Unlike the three cases presented previously, Danielle’s ADHD diagnosis was relatively clear from the beginning of the assessment process. Due to budget and time related restraints, children with a similar presentation tend to be diagnosed with ADHD based on brief, clinic based observation in a Paediatricians office. While clinic-based observation is an integral component of the multisystemic framework presented in this portfolio, it is not comprehensive enough to provide clinicians with all the information they need for their formulation, also failing to take into account the broad range of difficulties that
occur secondary to ADHD. In Danielle’s case, secondary problems included problematic peer relationships and poor academic performance. These issues had a direct impact on Danielle’s daily functioning, but would not have been evident upon direct observation.

Thorough assessment also aids in the formulation of an individualised treatment program that is specific to the many diverse needs of the child. ADHD is not a ‘one size fits all’ diagnosis but a label used to describe a broad range of symptoms. As such, clinical interventions must be individualised to meet the diverse needs of the child at that time in the child’s development. In Danielle’s case, treatment included medication to improve her concentration at school, a school based intervention aimed at improving her behaviour and academic performance at school and her peer relationships, and counselling for Danielle and Kathy to focus on improving the nature of their interactions, as poor communication based on suboptimal attachment experiences appeared to be a primary precipitating and maintaining factor in this case. Again, this information would not have been available without a thorough assessment.

Unfortunately, Danielle and Kathy had not commenced therapy at the time of discharge, as Kathy’s mental state was too fragile to commence therapy. This highlights another important factor that needs to be taken into account during the assessment and treatment of children with ADHD – their parents mental state at the time of the assessment. While information related to early attachment and bonding experiences is useful to formulate hypotheses regarding the aetiology of the presenting issues, this information cannot be incorporated into a treatment regimen if the family are unable or unwilling to engage in therapy.

In sum, this case highlights the importance of conducting a thorough assessment of children like Danielle, which takes into account background information and information relating to the child’s current environment. This information is particularly salient when planning treatment recommendations, as these need to be focused and specific to the needs of the child.
CHAPTER EIGHT: CONCLUSIONS AND IMPLICATIONS FOR CLINICAL PRACTICE

The cases presented in this portfolio were combined to highlight a number of issues relevant to the assessment and treatment of children with ADHD. The first issue highlighted within this portfolio was the importance of conducting a thorough, multimodal assessment prior to diagnosing children with ADHD. In particular, this portfolio focused on the role that systemic factors play in the aetiology and maintenance of ADHD, and the importance of investigating these factors during the assessment phase.

In Dan’s case, the importance of conducting a thorough assessment was painfully evident, as Dan had been experiencing difficulties associated with an undiagnosed learning disorder throughout his primary school years. When treating learning disabilities, early detection and treatment have been found to produce the best outcomes (Carr, 1999), making Dan’s prognosis quite poor. In Beau’s case, it appears than an inaccurate diagnosis was made. While given a provisional diagnosis of ADHD, a thorough assessment indicated that his behaviour could best be accounted for by an alternate diagnosis of Dysthymic Disorder. In a similar manner, Damien’s prominent oppositional and defiant behaviours masked underlying attentional difficulties, which became apparent during his cognitive assessment. Danielle’s case differs in that her symptom presentation was quite typical, making accurate diagnosis easier. It is important to note however, that the assessment phase doesn’t only provide information relevant to the child’s diagnosis, it also assist in the formulation of an individualised treatment plan for the child. As such, a thorough assessment is important even in the cases in which the child’s difficulties can be easily defined and diagnosed.

This portfolio highlighted the importance of conducting a thorough assessment of children presenting with symptoms of inattention, hyperactivity and impulsivity. As a part of this assessment process, it was argued that systemic issues impacting the children’s presentation should be taken into account. This approach is in direct contrast with the assessment models described by Goldstein (1998), which focused
primarily on symptom identification. In sum, throughout this portfolio it was argued that in order to assist the child to overcome his or her difficulties, clinicians must first understand the child and the context in which the child’s behaviours have occurred. In doing so, this portfolio focused extensively on that role that maternal depression may play in the aetiology and maintenance of ADHD.

In the cases of Dan and Danielle, while no direct causal links could be drawn, a correlation was noted between a decline in their mothers’ mental state which was associated with depression, and an aggravation of their overt symptoms. For Dan in particular, these difficulties appeared to be ongoing, with conflict in the family directly impacting on his emotional and behavioural regulation. The effects of maternal depression on Danielle’s symptom presentation did not appear to be as severe as Dan’s, possibly due to the number of other familial supports available to Danielle at the time of her assessment. These cases also illustrated the impact that postnatal depression may have on early attachment and bonding experiences, establishing a pattern of interaction that continued well into childhood.

When discussing Beau’s presentation, we see that his mother’s mental state had a direct impact on his symptom presentation, which changed in accordance with his environment. In his mother’s presence, Beau’s behaviour was reminiscent of a child with ADHD. In this context, Beau presented with a number of impulsive and hyperactive behaviours, running around, talking loudly and excessively and frequently interrupting his mother. In complete contrast to this performance, in his mother’s absence Beau tended to be quite introverted and flat in affect, demonstrating very poor self-esteem and an emerging sense of hopelessness. While again, one cannot assert that there is a direct causal relationship between Mandy’s severe, chronic depressive symptomatology and Beau’s hyperactive behaviours, qualitatively, they certainly appeared to exist as a form of attention seeking, as Beau’s mother rarely responded to positive bids for attention, only focusing on Beau when his behaviour escalated. In a similar manner, Damien’s oppositional, defiant and hyperactive behaviours appeared to exist in direct contrast to his mother’s flat affect. Interestingly, a significant improvement in Damien’s behavioural difficulties was noted towards the end of his assessment. This improvement appeared to have a direct correlation with an improvement in his mother’s depressed affect, following a
medication review and increase. The improvement in Terry’s mental state was also associated with an increase in her reported energy levels. Terry felt that this improvement allowed her to focus on and respond to Damien’s problematic behaviours more effectively, with a notable decline in his aggressive and oppositional behaviours noted as a result.

The final issue stressed throughout this portfolio is the importance of integrating all the information gathered during the assessment phase when formulating a treatment plan. As seen in the cases presented here, children presenting with ADHD are not a homogenous group. They often tend to present with a range of individual, systemic and interpersonal issues. Thus, interventions aimed at improving the outcomes of children with ADHD need to be individualised and specific to the needs of the child, taking into account the systemic, interpersonal and individual factors effecting their presentation. It was argued that interventions should be multimodal, incorporating the core interventions recommended within the literature, such as medication, school based intervention, parenting training and behavioural interventions depending on the child’s needs (Carr, 1999).

It was also argued that an additional counselling component would be useful to focus on the ineffective communication patterns that had been established between these four mothers and their children. While this recommendation has theoretical merits, in practice it proved difficult to apply as many of the families were reluctant to engage in any form of therapy or counselling, preferring to engage in more behavioural types of treatment which focused on the management of disruptive behaviour. Of the four cases presented, Mandy and Beau were the only mother-child pair that opted to engage in therapy. At the conclusion of their therapy, there was a notable improvement, both in terms of Beau’s symptom presentation and the quality and type of interactions between Mandy and Beau. It is difficult to ascertain however, if this form of therapy would have been as effective if Beau had met the criteria for a diagnosis of ADHD.

The aim of this portfolio was to examine the link between maternal depression and ADHD, arguing also for revisions in the manner in which clinicians approach the assessment and diagnosis of ADHD. In order to achieve these aims, four cases
studies were presented, each describing a young person who presented with symptoms in the inattention and hyperactivity-impulsivity domains. The findings demonstrated that there is indeed a strong correlation between maternal depression and the presentation of ADHD symptoms. Through a discussion of these cases we saw that postnatal depression appears to have a strong impact on early attachment and bonding experiences, possibly due to the physical and emotional distance depressive episodes place between mothers and their infants. Many of these cases also highlighted the correlation between mothers presenting with severe, chronic depression and ADHD symptoms in their children. These findings highlight the importance of conducting further research in the field, so that we can better understand the nature of the relationship between maternal depression and ADHD and also, the other factors that influence the aetiology and maintenance of ADHD, incorporating the findings into our assessment and treatment paradigms. There were however, a number of limitations associated with this study that need to be taken into account when interpreting the results.

Firstly, the results presented in this portfolio are correlation, not casual. Thus, we cannot conclude that the depressed affect of the mothers in the cases presented, contributed directly to the development of ADHD in their children. These results do suggest that there is a link between the two variables. Alternatively, these results may be explained in terms of the impact that ADHD has on maternal depression. In some cases ADHD in children could become an important precipitating factor in the development of maternal depression, as mothers struggle to cope with the stigma and isolation associated with the parenting of children with behavioural difficulties. In reality, a reciprocal relationship probably exists between the two disorders, in which changes in the child effect changes in the mother, and vice versa (Neven, Anderson & Godber, 2002). Further controlled studies are needed to identify the nature of the relationship between these variables.

Secondly, the scope of this study was limited, as only one precipitating factor – maternal depression – was discussed in depth. Clinicians and researchers in the field have identified a number of psychosocial factors that may contribute to the onset of ADHD such as paternal absence, marital discord and social disadvantage (Carr, 1999). It is important to recognise that these exist and require further research.
Maternal depression was selected for this portfolio as a strong correlation between the two variables was noted in the cases presented. Further research using a quantitative design is needed to determine the significance of this relationship.

While there were some limitations associated with this study the preliminary findings have important implications for clinical practice, particularly in the fields of clinical and health psychology. While there may not be a direct relationship between maternal depression and ADHD, the high correlation between these variables suggests that interventions targeting this relationship would be useful when formulating a treatment plan. With a focus on the early intervention and preventative models used within health psychology, programs aimed at improving attachment and bonding experiences in early infancy, and assisting infants to develop and sustain their attention and concentration, could prove useful in decreasing the rapidly growing rate of ADHD referrals. In terms of health care, these findings also suggest that we should place more emphasis on treating maternal depression before it has a detrimental impact on younger generations.

The findings presented in this portfolio also have important implications for the assessment and treatment of ADHD. Mental health clinicians are under ever increasing pressure to assess, diagnose and treat children in as short a time frame as possible. Thus, while many clinicians would like to conduct the thorough, multimodal types of assessment presented in these case studies, there appears to be little scope for clinicians to do so. It may be suggested however, that conducting a thorough assessment when children initially present with attention-based difficulties is actually more cost effective than the brief consultation approach advocated within some clinics. The rationale underlying this assertion is that, with thorough assessment and intervention early on, the difficulties associated with ADHD will be addressed and problems identified before the child’s difficulties escalate to become a firmly established pattern of behaviour. Dan’s case highlights well the potential benefits of early intervention, as his school-based difficulties may have been addressed if his learning disorder had been diagnosed during his initial assessment. Even if these difficulties were not evident at the time of his initial assessment, there were a number of years between his first assessment and his inpatient admission in which another assessment could have been conducted. By treating children early on
we hypothesise that the burden ADHD places on the mental health system will be significantly reduced. Future research investigating the efficacy of early intervention programs and the long-term cost benefits is warranted, as there are sound reasons to believe that such an approach would be associated with significant social, economic and outcome related benefits.

In conclusion, the management of children with ADHD can present a significant challenge to parents and teachers; also placing a substantial burden on the health care system. Many factors contribute to the aetiology and maintenance of ADHD. This portfolio highlighted the effects of one factor – maternal depression - on ADHD. In particular this portfolio reviewed the ways in which exposure to maternal depression during early infancy and childhood, may predispose children to developing the symptoms of inattention, hyperactivity and impulsivity seen in ADHD, and how these symptoms might then be maintained. Evaluating the correlation between these two variables is difficult however, without conducting a thorough, multimodal assessment. As such, it is argued that clinicians need to thoroughly assess children presenting with the symptoms of ADHD, creating tailored, multimodal interventions as a result. As reflected in the case studies presented, ADHD is not a ‘one size fits all’ diagnosis for which a specific intervention is routinely advised. Clinicians need to be canny and flexible in their approach to this disorder, making an effort to understand and treat the individual, not their disorder. This ethos has important implications for clinical practice, suggesting that there may be avenues for prevention programs and early intervention aimed at targeting the needs of children with the early ‘signs’ of ADHD, before any secondary behavioural difficulties become entrenched.
REFERENCES


