PSYCHIATRIC DISORDERS IN PRE-SCHOOLERS

D S G Kong

ABSTRACT

The psychiatric disorders seen in preschoolers are reviewed. Behaviour problems are the most commonly seen. These may be due to reaction to stress, developmental problems of attachment and temperamental characteristics such as shyness and aggressiveness. Related to behaviour problems are the developmental disorders of enuresis, encopresis and constipation. The rate of behaviour problems in Singapore was found to be 7% which compares favourably with studies overseas.

Disorders that have their onset in the preschool period include Attention Deficit Hyperactivity Disorder (ADHD) and Pervasive Developmental Disorders. ADHD is increasingly important because of the response to Ritalin and pervasive disorders because of the recognition that autistic states probably cover a spectrum of disorders.

Aetiological factors of preschool psychiatric disorders include biological and psychosocial contribution. The latter is associated with the quality of the home environment and quality of care experienced by the child.

Assessment methods include the gathering of developmental data such as the IQ and appropriate behavioural checklists. Direct observation is increasingly practised. Management methods range from drug therapy (mainly in ADHD), to traditional psychodynamic, family and behavioural therapy.

Keywords: psychiatric disorders, preschoolers, toddlers, behaviour problems

INTRODUCTION

The preschool period is a period of intense development. From a helpless infant at the time of birth to that of a young schoolgoing child, the newborn would have undergone rapid developmental changes physically. In parallel with this physical development, there is also intense psychological and social development so that by the time the child is of schoolgoing age, he is now capable of complex thought, language and social behaviour within an ever widening social context. With such dramatic physical and psychological changes as the child grows, there is ample opportunity for development to deviate from the normal or even to be arrested due either to inherent causes or to the influence of the child's physical and social environment. When development is thus compromised, behaviour problems often result.

Strictly speaking, the preschool period includes that of infancy. However the problems of infancy had been intensively studied in recent years and there has been a proliferation of books and studies in infant psychiatry. In fact, infant psychiatry is now an established subspecialty within child psychiatry itself. Hence I shall limit this review to the preschool toddler to about five years.

WHAT ARE BEHAVIOUR PROBLEMS?

Behaviour problems are probably the most common psychiatric condition seen in the preschool. Behaviour problems are persistent difficulties in behaviour which are maladaptive. In the course of development, there would be problems encountered in various bodily and social function such as in control of aggression, sleep, sphincter control, peer relationships and dependence-independence difficulties. Thus, symptoms of behaviour problems include temper tantrums, problems with sleep, appetite, soiling and bedwetting, poor concentration, social difficulties, fears and disobedience.

Most of the time, such symptoms are transient and not severe. It would not be right to label such transient difficulties as behaviour problems in the preschooler. However if the preschooler has such difficulties which are severe and persistent, then the preschooler would have a clinical disorder which is diagnosable by standard diagnostic criteria such as the American DSM-IV.

In the past, authorities tend to think of behaviour problems of preschoolers as symptoms of stress reaction. However such symptoms may not be as transient as they should be if they are indeed symptoms of adjustment. There is evidence to suggest that behaviour problems in preschoolers are likely to persist to middle childhood. The type of problems that will persist depend not only on the severity but also on the type. Thus problems of hyperactivity and extreme shyness for example, are more likely to persist than others.

Statistical analyses of data gathered on preschoolers indicated that problem behaviours fall into three clusters. They roughly corresponded to the three fairly standard categories of emotional disorders, conduct disorders and hyperactivity. Other investigators such as Richman et al, identified other groupings such as that of sphincter problems, nightwetting, restlessness/food fads. In general however, it would be true to say that there are three broad groups, that of apathy/withdrawal/fears, anger/defiance and hyperactivity problems independent of conduct difficulties.

Emotional Disorders

These are diagnosed when there is a distinct pattern of fears, social withdrawal and clinginess instead of being able to cooperate and participate. The main symptom is usually a fear of the external environment and a return or regression to the comfort of earlier childhood behaviours such as being cuddled and carried. Fears may be precipitated by life events or by parental behaviours that reinforced dependency.
behaviours in the child.

Attachment disorders that arise from faulty attachment in infancy may persist into the preschool unrecognised. They are the reactive and disinhibitive types respectively. In the reactive type the child is anxious and fails to thrive, while in the disinhibitive type the child appears disinterested and ambivalent[19].

Conduct Disorders
This is rarely diagnosed in the preschool, although the behaviours that will give rise to conduct disorders in the schoolgoing age may be identified in the preschool such as aggression[16]. When not appropriately channelled, these behaviours become a part of the repertoire of the child in later life and develop into conduct disorders and delinquency.

In the preschooler, some parents would find such inappropriate aggressive behaviour to be "cute" and may subtly encourage them. When such behaviours are curbed and controlled, the child learns to behave morally. Moral learning will fail to take place if parents do not control aggressive behaviours or if they themselves exhibit such traits of aggressiveness in their daily life[18,19].

Because conduct problems in the preschool generally present itself as aggression and are often associated with considerable anxiety as well as being the result of some life events, some authorities would diagnose it as a Behavioural Adjustment Disorder[13] instead of distinguishing between Emotional or Conduct Disorders. Nonetheless, it should be borne in mind that such disorders can persist into later childhood if not properly managed.

Childhood Depression
While it is widely recognised that depressive syndromes can occur in infancy and early childhood, the study of depression in the preschool child is plagued by the fact that the young child cannot verbally report the negative cognitive mindset that is characteristic of depression. The behavioural characteristics of depression can, however, be observed such as depressed mood, social withdrawal and apathy[20]. Using such measures, the prevalence of depression in preschoolers has been estimated at 0.26[21].

Of course, in the absence of a diagnostic category for depression, clinicians would diagnose an emotional disorder based on the behavioural characteristics. A valuable technique has been the use of play behaviour for the inference and understanding of the child's inner psychological process[22]. This technique has been invaluable for therapeutic assessment and intervention.

DEVELOPMENTAL DISORDERS

Enuresis
Enuretic problems are fairly common in childhood and most physicians would have encountered them in the schoolgoing child. In the preschool period, some 13% of both boys and girls would still be bedwetting. By about 7 years, this rate would drop to about 5% with a preponderance of boys[19].

Enuresis is often tolerated by caregivers during the preschool period and therefore do not present themselves in a medical setting. It is when the child gets to school or much later on when enuresis is associated with social difficulties and embarrassment that medical advice is sought.

Encopresis
Children usually achieve control of their anal sphincters during their preschool period and by 4 years, only 4% would still be soiling. However, studies indicated that after 3 years, children with enuresis have a higher rate of behaviour problems[11]. Hence a child after 3 years who is still soiling should be managed actively.

Constipation
Constipation is often associated with congenital malformations such as a stenosis. Psychosocial stress in the toddler sometimes can precipitate constipated motion. Some authorities have linked constipation with child sexual abuse. But as has been rightly pointed out, this may be a generalised response to stress[19]. Nonetheless, the constipated child with no organic cause should be evaluated for psychiatric distress and behaviour problems.

ATTENTION DEFICIT HYPERACTIVITY DISORDER
The key features of Attention Deficit Hyperactivity Disorder (ADHD) are inattentiveness, impulsiveness and hyperactivity, difficulty with gratification. In the past, authorities focussed on hyperactivity as the key symptoms, hence variants of the name "hyperkinetic syndrome". It is now recognised that children with ADHD have the greatest difficulty with sustaining attention[24,25]. The average preschooler should be able to sustain attention for about 9 minutes for a 3-year-old to 15 minutes for a 5-year-old. ADHD are behaviourally disinhibited because of their inability to stay on task. And it is this disinhibition that leads to distractibility and impulsivity. They are also overactive, easily aroused and restless. ADHD typically present themselves during the preschool age and continue into middle childhood, affecting their school performance greatly.

ADHD is to some extent associated, though not correlated, with minimal brain damage[26]. It is also associated with exposure to lead and food additives.

The prevalence of ADHD depends on the criteria adopted. Thus American authorities which use a wider definition of ADHD quoted a prevalence rate of 5% to 15%, while British psychiatrists who use a much more stricter criteria quoted a rate of 0.1%-0.4%. The widening of the ADHD basket by American clinicians is in my view unwarranted as they lead to multiple diagnoses, viz that of conduct disorder or a learning disorder being made in conjunction with that of an ADHD[23].

AUTISM AND PERVASIVE DISORDERS
Autism and pervasive disorders include diagnoses such as Asperger's, Rett's and Disintegrative Psychosis of childhood. The prevalence is estimated at 0.03% to 0.04% with a preponderance of boys. A familial tendency is noted[27].

They are widely recognised as syndromes that arise in infancy and early childhood. Autistic children are impaired in their social, linguistic and cognitive functioning. Behaviourally they avoid eye-to-eye gaze and cannot develop normal emotional and social bonds with others. Their deficits also lead them to have stereotype and rigid play with little variety and imagination. A whole lot of characteristics ranging from food fads, overactivity, short attention span, aggression to extreme fears have been described and observed.

A related disorder, Asperger's Syndrome, share a lot of
the characteristics of autism except that the child with
Asperger's shows pedantic and stereotypical speech. Reports
that Asperger's and Autism may occur in the same family
suggest that the two conditions may have a common
etiologysi60.

INTELLIGENCE AND LEARNING DISORDERS
A major group of learning difficulties is due to a global arrest
or slowing down of cognitive development. These are
various diagnoses that give rise to Mental Handicap. Mental
handicap are of interest because not only do they give rise to
behaviour problems, but more importantly, their psychological
development need to be assisted by behavioural and other
intervention in the form of educational and training
programs60.

Learning disorders such as reading disorder may be
recognised in the preschooler. It is however rarely diagnosed
before the end of the kindergarten years with some authorities
insisting that it should not be diagnosed at all in the preschool
years60. In the preschooler, learning disorder may manifest
as a delay in the ability to read and may not present as a
psychiatric morbidity. Its association with disorders of
conduct is seen more in the schoolgoing child than in the
preschooler.

PREVALENCE OF BEHAVIOUR PROBLEMS
There have been various studies on the prevalence of
behaviour problems in preschoolers carried out mostly in the
West. By and large, these were carried out using a behaviour
screening questionnaire devised by Richman & Graham
dealing with 12 different behaviours60. This is a semi-
structured interview administered to mothers. Behaviour
problems detected were then rated according to their severity
ranging from normal, dubious, mild, moderate to severe
behaviour problems. Estimates of studies done in the West
range from 7% to 15.5%30,31,32. A recent study from Hong
Kong by Luk et al noted a rate of 12.75 %30 while in
Singapore, Kong & colleagues observed a rate of 7% in a
study involving children attending MCH clinics30. Cultural
factors were not observed to significantly influence the
prevalence rates of behaviour disorders.

When the symptom pattern of the behaviour problems
was examined and compared, it was noted that the following
symptoms were generally lower in the Singapore sample, viz
eating, overactivity, unhappy mood, worries and sleeping
difficulties30,32,39. The significantly lower rate of sleeping
difficulties here(p<0.0001) may well be due to the fact that
local mothers tend to sleep with their children in contrast
with western mothers who tend to put the child in a separate
room30. No enuresis was detected in the local sample and
again this may be due to local parenting practice of toilet
training the child very early in infancy.

The prevalence of other psychiatric disorders such as
ADHD and autistic and pervasive disorders have already been
discussed above under their respective headings.

AETIOLOGICAL FACTORS

Biological factors
Many factors can affect the biological growth in infancy
which can be compromised and give rise to psychiatric
morbidity in the preschool period. Genetic and chromosomal
abnormalities such as Down's Syndrome; insults by infections,
toxic chemicals such as thalidomide; birth injuries, accidents,
malnutrition, neglect and child abuse all can contribute to
increase a child's susceptibility to having psychiatric
 disturbance and behaviour problems. Not infrequently,
psychiatric sequelae are mediated by brain injury and manifest
in clinical syndromes such as mental handicap, autistic states,
epilepsy and attention deficit disorders60,37.

Psychosocial factors
A large number of psychosocial factors can contribute to
psychiatric disorders in preschoolers. Among social variables,
the most important is that of low socio-economic class. There
is evidence to show that children of low socio-economic status
families have a higher incidence of behaviour problems60.
This may be due to the privation and neglect common in such
families because of their need to survive. For similar reasons,
it is not surprising to find that children born to teenage
mothers show poorer social and intellectual competence
compared to children born to older mothers49.

The stress of life events may also produce behaviour
difficulties ranging from the very mild to severe30. Examples
of life events that may have an impact on preschoolers include
accidents, deaths, separation, parental discord, parental
separation, and the arrival of a new sibling. In the case of
marital separation and divorce, the genesis of behaviour
problems may be mediated by maternal depression besides
the stress of the life event60.

Some people believe that any form of institutional care is
inferior to the care provided for by mothers for their children.
There is in fact evidence that children in institutional care
have a higher rate of both physical illness and psychiatric
disorder41. The above is however true of impersonal care
associated with orphanages of the past. We now know that
high quality day care has no adverse effect on cognitive
development. More importantly a review by Scarr et al30
indicated that the effects of daycare are probably complex
and behaviour problems may not be significantly higher in
children reared in a day care setting. Similar findings were
obtained in a local study some years ago39.

ASSESSMENT METHODS
The psychiatric assessment of the preschooler will necessarily
include the interview with the caregiver, usually the mother.
It is the adults who will give the factual information for
assessing the preschooler. An aid to interview is the use of
behavioural checklists administered to or completed by the
mother. Examples of such checklists include Richman's
Behavioural Screening Questionnaire60 and Behar's Behaviour
Rating Scale60. Psychometric assessments of temperament
are sometimes carried out.

Because preschool psychiatric morbidity is often
developmental, a psychometric IQ assessment is often
necessary. Available tools for this purpose include the
WPPSI, the MacCarthy and the Leiter45,47. The MacCarthy is said
to test a wider range of abilities but is less accurate at extreme
ends of the scale as in mental handicap and the gifted child.
Leiter has the advantage that the items of the instrument are
relatively culture-free.

Behavioural assessment of children is increasingly
practised. The child is observed directly either alone or in
interaction with a caregiver. Much information can be gained
of both the child's emotional state as well as his relationship
to others by such techniques. Protocols for behavioural
assessment have been developed and used both in research
and in clinical settings30,39.
PSYCHIATRIC MANAGEMENT IN PRESCOLLERS

The treatment approaches available for managing preschool psychiatric disorders are pharmacotherapy, psychotherapy, behaviour therapy and family therapy.

Pharmacotherapy

Drug treatment is certainly not indicated in the preschooler, except in cases where there is an organic condition such as epilepsy where anticonvulsants are indicated(27).

The use of methylphenidate (Ritalin) has been widely associated with ADHD. However besides medication ADHD need to be managed by behavioural techniques and remedial help for the cognitive deficits. This is because methylphenidate improves only the attentional deficits and not the cognitive and other defects(25,26).

Psychotherapy

Child analysis has been practised in the West, but it is time consuming and expensive. Currently, most psychotherapy practitioners would practise a psychoanalytically oriented therapy with the child while the family would be counselled by a social worker. Such therapy would be effective in children where there is a strong emotional component(19).

Behaviour Therapy

This would be effective in most psychiatric disorders especially longstanding ones like enuresis, mental handicap, ADHD and pervasive disorders. Both classical conditioning and operant techniques may be used. The parent is often enlisted as a co-therapist(19).

Family Therapy

Whether used as an adjunct to other forms of therapy or as the main intervention technique, family therapy or counselling is important in preschool psychiatric disorders because of the contribution of family social factors. In family counselling, parenting skills may need to be taught if parents are coping inadequately. Intensive therapy would be indicated where family adjustment to previous grief or trauma have not been satisfactorily resolved and the child's behaviour problems become symptomatic of the family's grief(19,20).

REFERENCES

Psychiatry is a branch of medicine that is concerned with the diagnosis and treatment of mental, emotional, and behavioral disorders. However, it should also be noted that recent advances in the field have expanded its scope as the distinction between psychiatric disease and medical disorders has begun to blur. It is now widely recognized that psychiatric disease is an independent risk factor in the etiology of many disease states and disorders that have traditionally been viewed as medical.