

Behavioural Disorders in Childhood: A Singapore Perspective

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Abstract

Introduction: Behaviour disturbances in preadolescent children are common, ranging from mild disturbances to full disorders meeting official nosological criterion. The objective of this paper was to review behavioural disorders occurring in the preadolescent child using up-to-date published data supplemented by available local published data on the subject. **Methods:** Recent reviews of the various psychological disorders in childhood that have a significant behavioural component were identified through a MEDLINE search (from 1990). Information from these reviews was supplemented with relevant local studies cited on MEDLINE from 1990. Information on common behavioural disturbances facing parents locally was obtained from questions submitted to the author over a 3-year period by a local parenting magazine. A search was also conducted on the DOW JONES publications archives for relevant information from the local news media. **Results:** The perception of a problem may arise from the child, family, school, community or society's perspective. Behavioural problems can be conceptualised to exist in the following broad categories: Behaviour problems/disorders related to daily physiological activities; disruptive behavioural problems and disorders; pervasive developmental disorders and disorders of social behaviour; behaviour problems related to emotional disorders; and behaviour problems associated with other mental conditions in children. Family, behavioural and multisystemic interventions are the commonest non-drug interventions. Drug use is on the increase, especially in disruptive, affective and anxiety disorders. **Conclusions:** Behavioural disorders in children are common. They are often under-recognised and under-treated. Improved recognition demands that a good assessment is being carried out and a heightened index of suspicion for the commoner behavioural disorders. Adopting an evidence-based medicine approach and utilising recent advances in psychopharmacology and psychotherapy may improve outcome.

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Introduction

A review of five Western epidemiological studies of children aged 6 to 11 years revealed an average prevalence of 25% for psychiatric disorder (ranging from 12.4% to 48%).¹ Asian studies show a similar prevalence range, with a 6.1% prevalence in a Malaysian study of 1- to 15-year-old children,² a 8.3% prevalence for a cohort of 7- to 14-year-old children in Beijing,³ a 16.3% rate in primary school age children from Hong Kong,⁴ to a 49.1% rate in a cohort of 8-year-old Japanese children.⁵ Prevalence figures for local preadolescents are not available. Behaviour problems in Singapore preschoolers are estimated to occur in about 7%.⁶ A Hong Kong study found a rate of 12.75%.⁷ Surveys in the United Kingdom and United States suggest that 5% to 20% of preschool children (below age 5 years) have significant behavioural problems.^{8,9} Behaviour problems can be thought of as dysfunctional behaviours that cause difficulty to the child or others. Problems can broadly be categorised into behaviour problems commonly

encountered by parents; health care professionals; and teachers. A local 2-year survey of 285 teachers concluded that disciplinary problems in schools were generally well managed.¹⁰ Some idea of parental concerns is reflected by questions related to parental concerns about psychosocial issues sent to the author by a local parenting magazine over a 3-year period. Most of the children concerned were preschoolers and those in early primary school. Parental concerns focus primarily on perceived abnormalities of normal day-to-day functions (sleep, feeding and elimination) and "bad" behaviour such as bad habits and temper tantrums. Studies have looked at psychiatric referrals to the Child Psychiatric Clinic^{11,12} and to a general hospital child psychiatric clinic locally.¹³ The 1 to 6 years age group comprised 23% of cases referred in the former setting and 22% in the latter. For the 7 to 12 years age group, the figures were 32% and 48%, respectively. The prevalence of disorders from the largest study (n = 885) in which behavioural problems may be present is listed in Table I.

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Predisposing factors which increase the risk of behaviour problems include: child temperament factors including gene-behaviour-environment effects; child mental disorder; learning disability; mental handicap; parental mental

TABLE I: BEHAVIOUR DISTURBANCES ENCOUNTERED BY SCHOOLS, PARENTS AND PSYCHIATRISTS

Behaviour problems from the teacher's perspective	
Telling lies	
Being late for lessons	
Disruptive behaviour	
Vandalism	
Abusive language	
Truancy	
Stealing	
Bullying	
Smoking	
Physical violence	
Behaviour problems from the parent's perspective (n = 108)	
Bad habits (thumb sucking, pacifier dependence, nail biting, blinking) (29%)	
Defiant/disobedient/conduct (hitting, poking, biting, swearing, lying) (16%)	
Sleep problems (15%)	
Temper tantrums (12%)	
Eating/feeding problems (6%)	
Overactivity (6%)	
Wetting/soiling (5%)	
Clingy/shy (5%)	
Crying (3%)	
Too sociable (3%)	
Won't go to school (2%)	
Behaviour problems seen at Child Psychiatric Clinics ¹⁰	
Adjustment reaction (20.4%)	
Mental retardation (19.5%)	
Normal variation (13.4%)	
Conduct disorder (10.6%)	
Neurosis (9.5%)	

disorder; parenting style; family dysfunction; emotional, sexual or physical abuse; exposure to community or interparental violence; negative peer influences and negative or adverse environmental influences. This review will focus on behaviour problems in the preadolescent child. Evaluation of the young child can be aided by the acronym "HEADS" (Table II). It highlights areas of importance in the history taking and observation as well as the commonest behavioural problems/disorders. History and observation should be from as many reliable sources, for example parents, family members, school and health professionals. Parents may not always be the most reliable of historians and sometimes they may be the source of the problem. This is nowhere better epitomised than in cases of factitious (Munchausen's) disorder by proxy, where caregivers deliberately complain of or induce pathology in the child to meet their own presumed psychological need to be in a sick role.¹⁴

Behaviour Problems/Disorders Related to Daily Physiological Activities

Feeding/Eating Problems

Feeding and eating problems in young children are basically eating too little, eating too much or eating in an abnormal or strange manner. Pica is an example of abnormal eating, where the child persists in eating non-nutritive substances such as paint, hair or cloth. It is frequently related to mental retardation or developmental delay. Highly selective eating ("food fads") occurs commonly enough (20%) in preschoolers not to be considered abnormal, although it can be considered a significant problem in the older child. In young children, the predominant problem parent's fear is that their child may not be "eating enough". Children may refuse to eat, have rapidly fluctuating food preferences and poor eating habits that cause much parental

TABLE II: GUIDE TO ASSESSMENT OF BEHAVIOURAL DISTURBANCES IN THE YOUNG AND OLDER CHILD USING THE "HEADS" ACRONYM

Assessment of the preschool/early primary child	
Major areas of focus	Common behavioural disturbances
Home (family setup; warmth; nurturance; parenting style)	Habits (bad habits)
Emotions (temperament)	Eating and elimination problems
Activities of daily living (sleep, elimination, feeding)	Attention deficit hyperactivity disorder (ADHD)
Development (cognitive, physical, psychological)	Disruptive behaviour problems
Socialisation (social behaviour, play behaviour, attachment)	Sleep problems
Assessment of the late primary/early secondary child	
Major areas of focus	Common behavioural disturbances
Home (family setup; warmth; nurturance; parenting style)	Harm (self-harm)
Education (school behaviour, achievement)	Eating disorder
Activities (peer-related activities, school activities)	Anxiety
Development (cognitive, physical, psychological)	Depression
Sexuality	Substance abuse

consternation. In fact, infants and young children appear to have a built-in regulatory system to ensure that they eat enough food and in a balanced manner, provided they can access a range of food. Although meal-to-meal variability is wide, the diet is balanced and sufficient when intake is observed over a longer period of time.

Paradoxically, in spite of the above parental concerns, obesity in young children is a rising problem in Asia. It is the second most common health problem among Singapore school children accounting for 16.1% of their health problems in 1993. Among preschool children, the prevalence rose from 2.6% in 1988 to 6.8% in 1991. In students aged 6 to 16 years, prevalence rates rose from 1.6% in males and 1.1% in females in 1975 to 3.8% and 2.4% in 1983 and 15.2% and 12.9% in 1993.¹⁵ Education and intervention are essential to stem this rise. Interventions in the young rely on behavioural techniques. Core components include: self-monitoring and record keeping; habit breaking; stimulus control; modification of eating style; reinforcement of desirable behaviours and impulse/self control. Additional useful psychosocial interventions include: psychoeducation, motivational interviews, stress management, social support strategies and relapse prevention strategies. In Singapore, the Trim and Fit (TAF) programme seeks to aid obese school children lose weight.

Eating disorders are rarely encountered in the preadolescent. Body preoccupation is, however, common among preadolescents. A cross-sectional survey of 7- to 13-year-old children showed that almost half were preoccupied with their weight, more than a third had already tried to lose weight and almost a tenth exhibiting abnormal eating patterns suggestive of anorexia nervosa.¹⁶ In children as young as 6 to 7 years old, 42% of girls preferred body figures thinner than their own.¹⁷ Little data on this subject are available locally. Information on adolescents and young adult females locally show a preference for thinness not dissimilar to that in the West.¹⁸

Younger children with eating disorder are likely to present an “atypical” picture.¹⁹ Food avoidance emotional disorder (FAED) refers to avoidance of weight gain for reasons unrelated to weight gain. This may be somewhat similar to “non-fat phobic” anorexia reported from Hong Kong.²⁰ It has a slightly earlier age of onset compared to anorexia nervosa. Pervasive refusal syndrome is defined as “a profound and pervasive refusal to walk, talk or engage in self-care”.²¹ In preadolescent children, the gender ratio in anorexia is less marked than in adult cases.

Sleep Problems

Surprisingly, little rigorous controlled study has been applied to sleep problems in children.²² Common sleep problems in preadolescence are difficulty sleeping (bedtime

resistance, sleep-time anxiety and sleeplessness), daytime sleepiness; snoring or gasping during sleep; sleepwalking; nightmares; night terrors and sleep-related head banging or other rhythmic movements; and bedwetting.²³ Apart from these problems, common parental concerns may be about the child refusing to sleep alone, being unable to go back to sleep on awakening at night, being dependent on the bolster and twisting and turning in sleep. A study of preadolescent children that included perspectives from parents, teachers and children found 37% to suffer from sleep problems.²⁴ Drugs such as trimeprazine and niaprazine have a modest short-term effect. Non-drug interventions include establishing a positive “wind-down” pre-sleep routine, graduated or modified extinction by resisting reacting to the child’s cries or demands and scheduled wakes before usual spontaneous awakenings. Non-drug methods may have a more enduring effect on improving sleep problems. Daytime sleepiness may be due to sleeplessness at night, sleep apnoea or narcolepsy. In contrast to adults, children with sleep apnoea may not be obese and may manifest with daytime overactivity and disruptive behaviour.

Elimination Problems (Enuresis and Encopresis)

Primary monosymptomatic nocturnal enuresis or its lay equivalent, “bedwetting”, is common among young children. Although local figures are not available, a fairly high prevalence has been reported in a Japanese study.²⁵ Three-quarters of those attending a local public forum for the condition did not seek any medical advice or treatment. Fatigue was reported in 86.7% of parents and a third of the affected children in the same study. Alarming, 43.3% of parents perceived the cause to be behavioural problems in the child—being lazy, difficult or defiant. Punishment (including corporal punishment) was used as treatment by 20%.²⁶ Drug treatment with desmopressin or behavioural strategies such as reinforcement strategies (star charts), alarm devices and simple measures such as restricting fluids at night, forced voiding before sleep and scheduled wakening from sleep to void may be beneficial. The vast majority of children “grow out” of it, implicating neurodevelopmental maturity as the key factor. Encopresis (soiling) is less common and when it occurs in the already toilet-trained child may suggest physical or psychological factors. Constipation or withholding may also be related to psychological features, although physical causes are commoner and should be excluded.

Disruptive Behaviour Problems and Disorders

Temper Tantrums and Conduct Problems

The “terrible twos” is indeed a period when temper tantrums reach their peak. Thereafter, there is a gradual lessening in temper tantrums. Nevertheless, temper tantrums

can still present formidable problems by their sheer intensity. A common worry in parents is when children start to hold their breath or hit themselves. Reviews on discipline in young children emphasise “time-in” (positive parent-child interaction) before “time-out” (disciplinary measures).^{27,28} A balance of positive incentives to increase desirable behaviour and sanctions to reduce undesirable behaviour is needed. Children in the preschool age may find verbal explanations too abstract to understand and the positive reinforcement of getting parental attention (albeit in a less than ideal form) may maintain undesirable behaviour. The excitatory component of verbal threats and warnings may over-ride the semantic meaning of the communication, thus failing to stop undesirable behaviour.²⁹ Management of the preschool child requires more active behavioural interventions than verbal or cognitive ones.

Oppositional Defiant and Conduct Disorder

Opinions differ on whether temper tantrums and conduct problems, oppositional defiant disorder (ODD) and conduct disorder (CD) should be seen as different categories of disorders or a common core disorder occurring along a continuum of severity. Longitudinal studies show that ODD³⁰ and CD³¹ tend to be enduring patterns of behaviour for many, meriting nosological existence. Oppositional defiant disorder is defined as a pattern of prolonged negativistic, hostile and defiant behaviour occurring “more frequently” than is “typically observed” in individuals of comparable age and developmental level. Clearly there is some degree of subjectivity in what constitutes “more frequently” and what is “typical”. Prevalence peaks in preschool children³² and again in adolescence.³³ Comorbidity with depression, conduct disorder and attention deficit hyperactivity disorder (ADHD) is common. Multimodal treatments with individual therapy (cognitive-behavioural, psychodynamic and social skills training), family therapy (including parent management training) and drugs for specific symptoms (most often antidepressants and stimulants) are most commonly prescribed.

Conduct disorder is manifested by prolonged antisocial behaviour which violates the basic rights of others or societal norms, characterised by aggression to people and animals, destruction of property, deceitfulness or theft and serious violations of familial, communal or societal rules (DSM-IV). The prevalence is estimated to be between 1.5% to 3.4%.³⁴ Boys outnumber girls by a ratio of 3:1 to 5:1. High levels of comorbidity exist with substance use disorders, ADHD, anxiety, depression and learning disabilities. Prolonged comprehensive multimodal treatment seems most likely to be effective in a number of cases.³⁵ Truancy, a feature of CD, needs to be distinguished from school refusal, which is viewed as an emotional disorder. Even among children with delinquent behaviours,

some long-term follow up studies, such as the Zurich long-term outcome study, show that a significant proportion does not continue in their antisocial behaviour.³⁶ This reflects the heterogeneity of ODD and CD and the influence of environmental factors (peers and life experiences) as well as perhaps neurobiological maturity. The common disciplinary problems in schools listed above reflect a mixture of ODD and CD features.

Attention Deficit Hyperactivity Disorder (ADHD)

ADHD, the most common emotional, cognitive and behavioural disorder paediatricians, family physicians and psychiatrists treat in children, is characterised by inattention, hyperactivity and impulsivity. The diagnosis is essentially a clinical one, based on careful history taking and observation at the home, school, community and clinic setting.³⁷ Diagnoses based on the DSM-IV that allows for partial syndromes and comorbidity reveal 5% to 10% prevalence. Using the stricter ICD-10 criteria, which restricts diagnosis to the full syndrome, reduces the prevalence rate to 1% to 2%.³⁸ No local prevalence figures are available. A Hong Kong study found a prevalence of 9% using DSM-IV (1% using ICD-10) in 7-year-old boys.³⁹ Boys outnumber girls by a ratio of 3:1 to 9:1. The mainstay of treatment is stimulant drugs (ritalin is the only such drug available in Singapore).⁴⁰ The results of a large recent National Institute of Mental Health (NIMH) study showed little significant additional benefits to psychological interventions on top of medication.⁴¹ Nevertheless, it is premature to conclude that interventions such as self-control strategies are of no benefit from the results of one large study. Contrary to reports in the press, studies do not support that medications are being “over-prescribed”. Stimulants have been demonstrated to be safe and effective.⁴² However, the long-term effects of medications are uncertain.^{43,44} Media attention has also overplayed risks of addiction to medications and other illegal drugs. In fact, there is little scientific data to support the notion of significant abuse of medications and the literature points to adolescents successfully treated with stimulants being less likely to abuse illegal drugs.⁴⁵ Initial reports of growth-retardation related to stimulant use have not been substantiated by some other later reports. Half to three-quarters of cases may persist into adulthood,⁴⁶ although remission early in childhood⁴⁷ or in adolescence may occur.

Substance Abuse

Longitudinal and cross-sectional studies have reported an increase in rates of drug and alcohol use by young people over the last decade.⁴⁸ The number of people who smoked in Singapore rose from 16.6% in 1991 to 17.4% in 1995, with young people contributing most to the rise. Experimentation was mainly done at ages 12 to 13 years,

suggesting that preventive programmes need to target a younger age group to help them resist peer and environmental pressures.⁴⁹ Scant data are available about the prevalence of substance abuse in young children locally. Substance abuse, however, remains predominantly an adolescent problem and experimentation of such substances commonly occurs in adolescence. In view of the dearth of evidence on treatment effectiveness,⁵⁰ despite much research, targeting “at-risk” individuals and groups for early intervention may yield the best results. The effects of school-based prevention programmes unfortunately have shown small effects which diminish over time.⁵¹

Attempted Suicide and Suicide

Successful suicide and attempted suicide are traditionally differentiated due to the major differences between the two. There is little good data on the prevalence of attempted suicide and suicide in the very young as it is a rare event. Most studies focus on the adolescence and young adults. In children under 15, attempted suicide is 4 to 5 times commoner in girls. Nevertheless, over the period from the 1950s to the early 1980s, increasing rates of suicide and attempted suicide in young males have been noted.⁵² Contrary to the opinion that young children cannot understand death and suicide, by age 9, children already have an elaborate understanding of suicide and death.⁵³ Common precipitants to self-harm in the young include arguments with parents, boy-girl relationship problems and school/peer problems. In up to a third, there is no such precipitant, suggesting that in these cases underlying psychiatric disorders may be at play.⁵⁴ Females tend to take overdoses whereas males tend to self-injure.

A recent local study on attempted suicide in adolescents found the trend to be rising over the study period 1991 to 1998 and for a peak to occur in the month of October, before the examinations.⁵⁵ Although a similar study has not been done in preadolescents, the results indirectly support the role of examinations to the overall stress levels in school children. Local data also suggest temporal variations related to sociocultural factors (“hungry ghost” month or the 7th lunar month) and seasonal factors.⁵⁶ Seasonal factors were more prominent in the young. Increased vigilance and support during these “high-risk” periods may be of benefit.

Pervasive Developmental Disorders and Disorders of Social Behaviour

Autism & Pervasive Developmental Disorders

Autism is now considered as part of a spectrum of a group of developmental disorders of the brain—pervasive developmental disorders. It is most often identified between the ages of 1½ and 2½ years by its core features: language/speech delay (or absence), lack of interest in social

interactions—even with parents and family, and restricted and repetitive behaviours (DSM-IV). Deficits or abnormalities may be noted in repetitive play, lack of pretend play, odd mannerisms such as hand flapping, preoccupation with inanimate objects, clumsiness, odd speech and sensory abnormalities.⁵⁷ The concept of “theory of mind”, which describes the ability to “read” the thoughts and feelings of another person and thus anticipate their emotions and actions is suggested as a core deficit of autism (“mind-blindness”). Sleep problems and aggression may be particularly trying problems for family members.⁵⁸ Approximately three-quarters are mentally retarded, though a small number may have astounding abilities in certain specific areas (savants, as portrayed by Dustin Hoffman in *Rainman*)⁵⁹ and a minority achieve high levels of professional success.⁶⁰ No local prevalence figures are available. A survey of 21,610 Japanese children followed up from birth to 3 years found a 0.13% prevalence rate for autistic disorder and another 0.7% for autistic traits.⁶¹ It is one of the few local childhood psychiatric conditions to benefit from a resource centre (Autism Resource Centre) and support group (Autistic Association, Singapore). The intervention of choice is early and remedial special education targeting behaviour and communication.⁶² Drugs may be useful in reducing specific symptoms such as aggression.

Other forms of pervasive developmental disorders include childhood disintegrative disorder, Asperger’s syndrome, Rett’s syndrome and those labelled pervasive developmental disorders not otherwise specified (PDD-NOS). Childhood disintegrative disorder is extremely rare with about 100 reported cases in the literature worldwide. The child’s early development is normal prior to profound and persistent developmental and behavioural regression.⁶³ Asperger’s syndrome is characterised by social deficits but compared to autism, there is better language development and the intellect is often not impaired. As with autism, odd behaviours may be noted as in a Malaysian case demonstrating a peculiar behaviour of holding on to toothbrushes in his early childhood.⁶⁴ Rett’s syndrome occurs only in females and has a brief “autistic-like” phase after apparently normal development with eventual developmental regression and mental retardation. It is associated with stereotyped “hand washing” and “wringing”, gait and truncal abnormalities and breath holding spells.

Attachment Disturbances and Disorders

Attachment disturbances and disorders refer to severe abnormalities in attachment to a significant other (usually a parent or caregiver) in infancy. Two subtypes are defined in DSM-IV. In the inhibited subtype, the infant is unattached, emotionally withdrawn and inhibited. In the disinhibited subtype, the infant is unattached but exhibits indiscriminate

sociability with relative strangers. Zeanah and colleagues⁶⁵ have suggested an alternative classification, which includes disordered attachment relationships with caregivers (self-endangerment, clinging/inhibited exploration, vigilance/hypercompliance and role reversal) and disrupted attachment disorder (sudden loss of attachment figure). Little empirical data exist to guide interventions of choice, although various preventive studies are available.⁶⁶

Behaviour Problems Related to Emotional Disorders

Affective Disorders

There is increasing acceptance that infants and toddlers can have depressive-like signs. Spitz⁶⁷ described a pattern of withdrawal and apathy in infants separated from their caregivers because of long-term hospitalisation. A small number of case reports of depressive disorders meeting DSM-III criterion in preschool children have been published.⁶⁸ Children are less likely to manifest or complain of sad or dysphoric states. Instead, the commonest presentations are changes of behaviour (such as withdrawal, school refusal, sleep problems, separation anxiety, anger and irritability), worsening schoolwork or somatic complaints. Psychotic depression tends to manifest in the form of auditory hallucinations rather than delusions.⁶⁹ All these may reflect their limited verbal and cognitive sophistication. Research has shown that bipolar affective disorders exist in children. Onset before the age of 10 years is, however, very rare (estimated as between 0.3 and 0.5% of all bipolar patients).⁷⁰ Manic features such as disinhibition, elation and overactivity are found, much as in adult cases. Tricyclic antidepressants are dangerous and of doubtful efficacy in childhood depression.⁷¹ The drug treatment of choice is the newer selective serotonergic antidepressants that appear to be safe and efficacious.⁷² There is a paucity of data regarding the use and effectiveness of mood stabilisers, but clinical experience suggests that they are probably safe and effective.⁷³ Surveys, however, show that prescribing habits are more subjective than objective.⁷⁴ Although electroconvulsive therapy (ECT) is rarely used in young people, it appears to be effective and safe.⁷⁵ Its successful use in a girl aged 8 years with psychotic depression⁷⁶ and another aged 8½ with catatonic depression⁷⁷ have been reported. It is interesting to note that families said they would have ECT again if medically indicated and would recommend it to others in a survey of 26 teenagers receiving ECT.⁷⁸ Cognitive-behavioural therapy (CBT) is an increasingly popular mode of non-drug treatment.⁷⁹ A large controlled study comparing individual CBT, non-directive supportive psychotherapy and systemic behavioural family therapy showed similar long-term efficacy, even though CBT showed the most rapid reduction of depression and the best parent and child-rated treatment credibility at short-term follow up.⁸⁰

Anxiety and Obsessive-Compulsive Spectrum Disorders

Anxiety disorders in adulthood such as panic disorder, generalised anxiety disorder, phobias, obsessive-compulsive disorder (OCD) and post-traumatic disorder all occur in preadolescent children. Indeed, in the young child, phobias such as stranger or separation anxiety are part of normal development. It is when such fears persist that they become abnormal—for example in the case of separation anxiety disorder, often a major factor behind school refusal.⁸¹ Somatic complaints are particularly commonplace in school refusal. OCD often begins in childhood or early adolescence. In contrast to this, it is interesting to note that the average age of onset in the largest local series of OCD was 27 years.⁸² Various behavioural rituals related to themes of contamination and cleanliness, symmetry and order, security and religion may be observed in OCD. Hypochondriacal obsessions may manifest in repeated health and reassurance seeking behaviour. The treatment of choice for OCD is serotonergic antidepressants and/or behaviour therapy (exposure to the feared situation and prevention of response by performing a ritual to reduce anxiety). Although there is some argument on the applicability of current criterion for post-traumatic stress disorder (PTSD) in very young children, the current criterion appears to be applicable to older children. They may exhibit the full triad of PTSD symptom clusters, namely intrusive re-experiencing of the trauma in flashbacks and nightmares, avoidance behaviour of objects and situations which remind the child of the trauma and persistent physiological over-arousal.⁸³ Treatment in children may have to be modified to take into account their lack of capacity for abstract thinking and cognitive immaturity. Interventions through art, imagery, drama, play and stories may help the child to express him or herself.

A group of conditions having common features of impulse control and compulsivity have been hypothesised to form a family of disorders called obsessive-compulsive spectrum disorders (OCS).⁸⁴ Proposed disorders for inclusion are eating disorders, body dysmorphic disorder, trichotillomania, hypochondriasis, impulse control disorders, paraphilias and Tourette's disorder. Tourette's disorder is characterised by vocal (often expletives) and motor tics. It usually begins in childhood. The vocal tics can be particularly disabling and embarrassing, although some try to mask these with vocalisations or other sounds. Tourette's disorder has to be distinguished from motor tics, which may afflict some 20% of children at some time or other. It is one of the few childhood psychiatric conditions to respond to antipsychotic medications. Trichotillomania refers to compulsive hair pulling. A series of 7 cases reported locally found a mean age of 9.3 years. All pulled their hair in tufts and one was almost hairless.⁸⁵ OCS may

respond to serotonergic antidepressants, antipsychotics and behavioural therapy.

Selective Mutism

This is a rare condition, more likely to occur in girls, where the sufferer selectively speaks in certain situations but not others. It often begins after a stressful life event. An example is described in Maya Angelou's autobiographical novel "*I know why the caged bird sings*" after she is molested by her mother's boyfriend.⁸⁶ Another common precipitant is starting school. Sufferers are often described as shy and stubborn. In over half the cases, mutism can persist even after several years.⁸⁷ There is gathering opinion that selective mutism should be conceptualised as a form of social anxiety.⁸⁸ Current practice favours individual behaviour therapy, with family and school involvement and possible pharmacotherapy.⁸⁹

Dissociative and Conversion States

These used to be labelled "hysteria" in older nosological classifications. Dissociative states refer to the manifestation of psychological distress as disruption to consciousness, memory, identity or perception. In contrast, conversion states refer to unexplained symptoms, deficits or loss of function of motor or sensory function. Psychological factors are judged to be prominent and there is a paucity of conclusive medical findings on investigation. Careful evaluation will usually reveal particular stress factors precipitating these states and secondary gain factors perpetuating them. Treatment focuses on reducing the stress or improving coping, and reducing the gain.

Behaviour Problems Associated with Other Mental Conditions in Children

Psychoses

Psychotic disorders in the preadolescent are uncommon. As in adult cases, bizarre behaviour and perceptual abnormalities may be noted in the older child. However, onset may be insidious in some cases and delusions and hallucinations may not be overt. Onset at an early age may have a particularly devastating effect on the personality and functional development of the child as the personality of the child is still in evolution. Outcome in one study of schizophrenia in the older child was best predicted by premorbid personality.⁹⁰ Treatment is with pharmacotherapy in conjunction with psychoeducational, psychotherapeutic, and social and educational support programmes.⁹¹

Gender Identity Disorder

The diagnosis of gender identity disorder (GID) is made when boys and girls show a strong preference for sex behaviours characteristic of the opposite sex and a rejection

of such behaviours characteristic of their own sex. Evidence of this in the form of toy play, cross-dressing, play partners and identity statements often arise in the preschool years. A local study comparing male and female transsexuals confirmed its onset in early childhood and found Singapore transsexuals to often go through a homosexual and transvestite phase before becoming a transsexual.⁹²

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