

Common developmental problems in preschoolers

Dr Fanny LAM

MChB (CUHK), MRCP (UK), DCH (Ireland), FHKCPaed,
FHKAM (Paed)

Honorary Clinical Assistant Professor, Department of
Paediatrics and Adolescent Medicine, HKU

Tutor, The Association for Research in Infant and Child
Development, UK





Prevalence

- 15% of preschool children are affected by developmental problems
- Types of developmental problems –
 - Physical and cognitive impairment
 - Learning and communication difficulties
 - Behavioral and emotional difficulties



3

The clumsy child





Causes of motor clumsiness

- Underlying physical disabilities
- Acquired brain injuries
- Intellectual disabilities
- Attention deficit hyperactivity disorders
- Developmental co-ordination disorders (DCD)



Developmental Co-ordination Disorders

發展性協調障礙

- ▶ Definition: Children with difficulties with daily motor tasks
- ▶ Prevalence – 6%
- ▶ Boys > Girls
- ▶ Diagnosed between the age of 6 to 12 years old, rarely before the age of 5
- ▶ Symptoms:
 - ▶ Delay in self-care skills e.g. brushing teeth, dressing and tying shoe laces
 - ▶ Delay motor skills
 - ▶ Gross motor- could not catch a ball, ride tricycle/ bicycle
 - ▶ Fine motor – poor pen grip, poor hand-writing
 - ▶ Frequently bump into things



Average Age of Attainment of Adaptive and Social Motor Skills

Skill	Average age of attainment (years)
Buttoning and unbuttoning	4
Dressing self (except tying shoelaces)	4.5
Riding a bicycle with training wheels	4.5
Cutting across a page with scissors	4.5
Coloring within the lines	4.5
Tying shoelaces	5.5
Printing first and last name	5.5
Jumping down several steps	5.5



Average Age of Attainment of Motor Skills

Skill	Average age of attainment (years)
Drawing a square	5
Standing on one foot for 15 seconds	5
Repetitive finger tapping of thumb and index finger	5.5
Tripod pencil grasp	5.5
Rhythmic skipping	6
Drawing a diagonal line	7

Reference: Hamilton S. Evaluation of clumsiness in children. *Am Fam Physician* 2002; 66: 1435-40



8

Red flags – symptoms that require urgent medical attention

- Regression in motor development
- **Sudden** onset of motor clumsiness
- Asymmetry of 4 limbs movement
- Any neurological signs such as
 - Motor weakness
 - Abnormal tone and posture



Management - DCD

- Physiotherapy
- Occupational therapy
- Extra support at home and at school
- Resource-Can Child-DCD

<https://canchild.ca/en/diagnoses/developmental-coordination-disorder>



The withdrawn and stubborn child



Photo © National Autism Association





Autistic Spectrum Disorders (ASD) 自閉症譜系障礙

- Prevalence:
 - U.S. most recent estimate is that 1 out of every 68 children, or 14.7 per 1,000, have some form of ASD as of 2010
 - Hong Kong (2008): prevalence of 1.68 per 1,000 for children under 15 years
- Boys > Girls
- Symptoms
 - Deficits in social communication and social interaction AND restricted repetitive behaviors, interests, and activities

A child with autism - or - an autistic child?

The signs of Autism..

Inappropriate playing with toys

Inability to relate to others

Hyperactivity or Passiveness

Inappropriate laughing or crying

Oversensitive or undersensitive to sound

Strange attachment to objects

Poor speech or lack of speech

Difficulty dealing with changes to routine

Lack of awareness of danger

halcyon
 Registered Charity No: 1141655
 Providing accredited training to people dealing with challenging behaviour
 www.halcyon-foundation.org.uk
 Tel: 02920 553919

AUTISM PUZZLES
 Registered Charity No: 1148010
 Support when you need it the most.
 www.autismpuzzles.co.uk
 Tel: 07971 045128

The reality of Autism..

Playing with toys in ways that don't make sense to others

Finds other kids less interesting than the rest of the universe

Unexpected energy levels

Finds different kinds of things delightful or frustrating

Good hearing or really likes to listen

Likes things

Less interested in talking to people than they would like

Wants the world to make sense

Pays attention to different things

LIVING HUMAN AMONGST
 amongsthumans.com



Management: Autistic Spectrum Disorders

- Social skills training
- Speech therapy
- Occupational therapy +/- sensory integration training
- Extra support at home and at school
- Child psychiatry referral for emotional and behavioural problems



14

The anxious and clingy child





Childhood anxiety disorders

兒童焦慮症

► Generalised anxiety disorders (廣泛性焦慮症)

- Excessive worries about a variety of things such as family issues, relationship with peers, academic performance or performance in extra-curricular activities
- strive for perfection

► Separation anxiety disorders (分離焦慮症)

- Some degree of separation anxiety is normal in children age 18 months to 3 years old
- If the child is older and experiences excessive anxiety away from home or when separated from his/ her parents/ carers. Also symptoms include school refusal, refusal to participate in camps/ sleepovers etc.

► Social anxiety disorders (社交焦慮症)

- Intense fear of social and performance situations and activities such as being called in class or starting a conversation with peers



Childhood anxiety disorders

兒童焦慮症

- ▶ **Selective mutism (選擇性緘默症)**
 - ▶ Refuses to speak in situation when talking is expected/ necessary
 - ▶ They may stand motionless and expressionless, avoid eye contact and withdraw into a corner to avoid talking
 - ▶ These children can be talkative at home or in an environment where they feel comfortable
- ▶ **Specific phobias (特殊恐懼症)**
 - ▶ Intense, irrational fear of a specific object e.g. a dog or a situation such as air travel
 - ▶ Children will avoid situations or things that they fear by crying, throwing tantrums, clinging, avoidance, headache or stomach ache.



Management: Childhood anxiety disorders

- Cognitive behavioural therapy (認知行為療法)
- Medication
- Combination of the above
- Extra support at home and at school – give reassurance and encouragement



18

The fidgety child and the day dreamer





Attention deficit hyperactivity disorders

專注力不足/過度活躍症

DSM-V DIAGNOSTIC CRITERIA

- ▶ **Inattention: Six or more symptoms of inattention; symptoms of inattention have been present for at least 6 months**
 - ▶ Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or with other activities.
 - ▶ Often has trouble holding attention on tasks or play activities.
 - ▶ Often does not seem to listen when spoken to directly.
 - ▶ Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g., loses focus, side-tracked).



Attention deficit hyperactivity disorders

專注力不足/過度活躍症

DSM-V DIAGNOSTIC CRITERIA

- ▶ **Inattention: Six or more symptoms of inattention; symptoms of inattention have been present for at least 6 months**
 - ▶ Often has trouble organizing tasks and activities.
 - ▶ Often avoids, dislikes, or is reluctant to do tasks that require mental effort over a long period of time (such as schoolwork or homework).
 - ▶ Often loses things necessary for tasks and activities (e.g. school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses, mobile telephones).
 - ▶ Is often easily distracted
 - ▶ Is often forgetful in daily activities.



- ▶ **Hyperactivity and Impulsivity: Six or more symptoms of hyperactivity-impulsivity; symptoms of hyperactivity-impulsivity have been present for at least 6 months :**
 - ▶ Often fidgets with or taps hands or feet, or squirms in seat.
 - ▶ Often leaves seat in situations when remaining seated is expected.
 - ▶ Often runs about or climbs in situations where it is not appropriate (adolescents or adults may be limited to feeling restless).
 - ▶ Often unable to play or take part in leisure activities quietly.
 - ▶ Is often "on the go" acting as if "driven by a motor".
 - ▶ Often talks excessively.
 - ▶ Often blurts out an answer before a question has been completed.
 - ▶ Often has trouble waiting his/her turn.
 - ▶ Often interrupts or intrudes on others



- ▶ **In addition, the following conditions must be met:**
- ▶ Several inattentive or hyperactive-impulsive symptoms were present before age 12 years.
- ▶ Several symptoms are present in two or more setting, (such as at home, school or work; with friends or relatives; in other activities).
- ▶ There is clear evidence that the symptoms interfere with, or reduce the quality of, social, school, or work functioning.
- ▶ The symptoms are not better explained by another mental disorder (such as a mood disorder, anxiety disorder, dissociative disorder, or a personality disorder). The symptoms do not happen only during the course of schizophrenia or another psychotic disorder.
- ▶ **Based on the types of symptoms, three kinds (presentations) of ADHD can occur:**
 - ▶ *Combined Presentation*
 - ▶ *Predominantly Inattentive Presentation*
 - ▶ *Predominantly Hyperactive-Impulsive Presentation*



Management – ADHD

- Counselling by clinical psychologist regarding diagnosis and behavioural therapy
- Medications:
 - Stimulants e.g. Ritalin (Methylphenidate)
 - Non-stimulants e.g. Strattera (atomoxetine), Intuniv (guanfacine), and Kapvay (clonidine)
- Support at home
 - Daily aerobic exercise of 30 minutes
 - Good sleep hygiene
 - Exclude medical causes of ADHD features
- Support at school



The Creative Academically & behind child



25

Specific Learning Difficulties

特殊學習困難

- Prevalance: 10%
- Boys : Girls 3:2
- Strong genetic influence



26

Types of Specific Learning Difficulties

- Dyslexia 讀寫障礙
- Dyscalculia 數字障礙
- Disorder of written expression
書寫障礙



Management: SLD

- Family & school support
- Strategies to learn literacy
 - Multisensory learning
 - Break down the Chinese words into smaller parts
 - ↑ morphological awareness of Chinese characters
 - ↑ phonetic awareness of English words
 - Spiral approach
- Experiential learning
- Explore areas of strength for the child
- Examination accomodation

Thank You

Q&A