NHS
Health Education England

Anxiety and Depression

Child and Adolescent Psychiatry

Dr N Aslam

Consultant Child and Adolescent Psychiatrist

Dr Szumanska-Ryt

Consultant Child and Adolescent Psychiatrist

Developing people
for health and
healthcare

Anxiety

- It is normal to be anxious in certain circumstances e.g.
  - before an exam, before a job interview
- Anxiety disorders are characterised by, fearful anticipation of further danger or problems accompanied by an intense unpleasant feeling (dysphoria) or physical symptoms
  - anxiety is out of proportion to the challenge or situation

Overview

- Most common psychiatric disorder in childhood
- Affect 5 –18% of children: (*Merikangas* et al 2009)
- Significant clinical impact even if diagnostic criteria are not met
- Often co-morbid with other disorders such as ADHD, often precede onset of depressive symptoms (worse prognosis) (*Merikangas* et al 2009)
- Increase risk of:
  - major depression, substance misuse and educational underachievement in later life

Anxiety disorders of childhood and Adolescence

- **Anxiety disorders are based on different fears:**
  - **Separation Anxiety Disorder**
    - Unreasonable fear of being separated from parent or caregiver
  - **Specific phobias**
    - Fear of one thing e.g. blood, spiders, dogs
  - **School phobia**
    - Anxiety related to going to school/stating in school – often leads to school refusal

Anxiety disorders of childhood and Adolescence

- **Social phobia**
  - Fear of social situations
- **GAD**
  - An unreasonable fear of almost anything
- **PTSD**
  - Fear related to something unpleasant that has actually happened in the past
- **OCD**
  - Intrusive anxiety related thoughts (contamination, death) followed by compulsions

Theoretical constructs, aetiology and risk factors

- **Parent/child and environmental factors**
  - Genetic/Family history
  - Affective and Cognitive processes
  - Temperament
  - Psychosocial development
  - Psychodynamic theory
  - Neuropsychiatry
  - Parent-child interaction
    - Attachment
    - Parenting styles

NHS
Health Education England

Genetics

- Anxiety disorders run in families
- Children of anxious parents are prone to develop anxiety problems
- Parents of anxious children show more anxiety problems then parents of non-anxious children
- Modest but significant genetic role
  - Heritability estimates vary with, type of anxiety disorder, age and gender (Silverman and Field 2011)

Environment

- Families that harbour threat and/or provide insufficient protection from it
  - Eg abuse, neglect, parental discord, conflictual home environment
  - Disorganised attachment
- Families that promote threat sensitivity and/or impede the development of coping skills
  - Vicarious learning
  - Social referencing

Impact of maternal Anxiety

- **Mothers with Anxiety Disorders** (Moore et al 2004)
  - Higher levels of criticism
  - Less positive, less warm
  - More catastrophising
  - Less involved in play
  - Over-reactive discipline
  - Over-protective parenting
  - child appraises situations as unsafe
- This has implications for clinical intervention
  - It is necessary to work with the parent and child

Developmental Aspects of Anxiety Disorders

- Types of stimuli which elicit fear change throughout childhood and adolescence
- Changes parallel developments in cognitive and social competencies and concerns
  - Psycho-social development theory
- Table showing developmental aspects of anxiety

Age	Psychological and social competencies	Main source of Fear	Main anxiety disorder
2-4 Years	**Preoperational Thinking** Can imagine but unable to distinguish fantasy vs. reality	Imaginary creatures Potential burglars The dark	Separation anxiety
5-7 Years	**Concrete Operational Thinking** Can think in concrete terms	Natural disasters Injury Animals	Animal Phobia Blood Phobia Separation anxiety
8-11 Years	Self esteem based on academic/sports ability	Failure/poor performance	School phobia OCD
12-18 Years	**Formal Operational Thought** Can anticipate future dangers Self esteem based on peer relationships	Peer rejection	Social phobia Agoraphobia Panic disorder

Assessment

- Distinguish transient and developmentally appropriate worries and fears from anxiety disorders
- Assess developmental difficulties which could contribute to Anxiety (e.g. ASD, ID)
- Assess impact of stressors or traumas on the development or maintenance of anxiety symptoms.
- Gather information from various sources about anxiety symptoms (child, parent, teacher)
- Assess for comorbid disorders, and evaluate severity and functional impairment
- Children may be more aware of their inner distress (GAD), parents are more likely to appreciate the impact of anxiety on family life (SAD), and teachers are skilled at observing social functioning relative to same-age peers (social phobia)

Assessment

- Somatic symptoms commonly accompany childhood anxiety disorders
  - headaches, abdominal complaints, muscle tension, restlessness, and difficulty in sleeping
- Early screening for anxiety can help decrease excessive medical workups
- Assessing somatic symptoms before initiating treatment can decrease later confusion with adverse effects of medication

Assessment

- Self-report measures for anxiety
  - Multidimensional Anxiety Scale for Children (MASC)
  - Screen for Child Anxiety-Related Emotional Disorders (SCARED)

  can help clinicians screen for anxiety symptoms at baseline and monitor response to treatment
- Children and parents can use visual analogues, such as a feelings thermometer to rate severity of anxiety symptoms and impairment
- Younger children may prefer other visual tools for rating, such as smiley faces and upset faces

Treatment

- Psycho education for child and parent
- Psychotherapy (CBT)
- Psychotherapy + medication

Treatment

- **Child/Adolescent Anxiety Multimodal Study (CAMS- 2014)**
  - placebo-controlled trial in youths with moderate to severe SAD, GAD, and/or social phobia, compared CBT, Sertraline, or placebo with combination treatment with Sertraline and CBT
  - CBT (60% improved)
  - Sertraline (55% improved)
  - Placebo (24% improved) for the treatment of childhood anxiety disorders
  - Combination of CBT and Sertraline (81% improved)

Health Education England

CBT components

- Psychoeducation
  - For child and parents about anxiety and CBT for anxiety disorders
- Somatic symptom management
  - self-monitoring, muscle relaxation, diaphragmatic breathing, relaxing imagery
- Cognitive restructuring
  - challenging negative thoughts and expectations, learning positive self-talk
- Practicing problem solving
  - generate several potential solutions for anticipated challenges and generate a realistic action plan ahead of time
- Exposure methods
  - imagined and live exposure with gradual desensitization to feared stimuli
- Relapse prevention plan
  - booster sessions and coordination with parents and school

Pharmacotherapy

- SSRIs
  - Well tolerated
  - Caution re: suicidality
- Buspirone
  - Alternative to BDZ
  - no RCT evidence of efficacy
- Benzodiazepines
  - Short term
- Betablockers
  - Somatic symptom control
- TCAs
  - Conflicting results from controlled trials
  - need cardiac monitoring
  - Not often used

Health Education England

Depression

- Depression used to be seen as a predominantly adult disorder
  - Children were considered too developmentally immature to experience depressive disorders
  - Low mood in adolescence seen as part of 'normal' teenage mood swings
- Developmental studies have shown youth depression is associated with a range of adverse outcomes (Rao et al 2009)
  - social and educational impairments
  - physical and mental health problems later in life
- Research has identified similarities and correlates in the course and clinical presentation of depression across developmental stages
  - However there are age-related variations
  - Is it the same disorder in childhood and adulthood ?

Clinical Features

- Diagnostic criteria for unipolar depression
  - Core symptoms of persistent and pervasive sadness, a loss of interest or pleasure in activities
  - Other symptoms include low self-esteem, excessive guilt, suicidal thoughts or behaviours, sleep and appetite disturbances, and psychomotor agitation or retardation
- Generally these criteria are applied independent of age
  - In the DSM V criteria for MDD, marked irritability is allowed as the cardinal mood symptom for children and young people only

NHS
Health Education England

Epidemiology

- Depression is relatively uncommon in pre-pubertal children, affecting 1- 2%
  - rates differ little between boys and girls
- Incidence increases in early teens, more in girls than in boys
- Mid teens, the median 12-month prevalence of unipolar depression is around 4-5%,
  - females affected more than males as in adult depression
- Throughout the life course depression is comorbid with other psychiatric disorders (Rao et al 2009)
  - In school-aged samples around 2/3 of young people with depression show at least one comorbid disorder, and over 10% show two or more
  - Overlaps with disruptive disorders, Attention Deficit Hyperactivity Disorder, Oppositional Defiant Disorder and Conduct Disorder are common

Epidemiology

- Depression in young people is a chronic and recurrent condition
  - although most episodes remit within a year
- Risk of recurrence in clinical samples is high
  - 50-70% likely to develop a further episode within five years
- Follow ups of epidemiological samples highlight poor outcomes, with implications for young people's social functioning as well as for their later mental health (Rao et al 2009)

Risk Factors/Aetiology

- Evidence for inherited and psychosocial risks has been established for many years
- For children and preschoolers (Rao et al 2009)
  - family history of depression and exposure to stressful life events are the most robust risk factors for depression
  - Depression runs in families, with three-to-four fold elevated rates in the offspring of depressed parents
  - Inherited factors partly account for these effects
- In addition, genetic studies suggest that psychosocial mechanisms are important in familial transmission,
  - adoption studies, show an excess risk of depression in the offspring of ***depressed mothers*** even in ***biologically unrelated*** mother-child relationships (Rao et al 2009)

Risk Factors/Aetiology

- Psychosocial risks
  - family bereavement
  - separations and conflict
  - child maltreatment and neglect
  - peer conflict and bullying
  - Chronic stressors affecting relationships have a greater impact than isolated acute events, especially in girls
- Inherited and environmental risk balance appears to vary across development,
  - twin studies report ***lower*** heritability estimates for depression in childhood than in adolescence
  - Childhood adversities including poverty, sexual abuse and psychopathology may also be risk factors for depression in adulthood through selection into more difficult life circumstances

NHS
Health Education England

Risk Factors/Aetiology

- Gene-environment interplay
  - genes and environments together influence vulnerability
  - heritable factors increasing risk of both *exposure* to stressful environments ***and*** *susceptibility* to psychosocial stress
  - evidence that one variant of the gene serotonin transporter gene variant 5-HTTLPR increases risk for depression in those exposed to stressful life events

Treatment

- Most treatments for childhood depression were first developed in the treatment of adults and then used with young people
- Three main treatment modalities
  - Fluoxetine/other SSRI
  - CBT
  - IPT

Treatment

- **Fluoxetine**
  - meta-analytic evidence from RCTs for the treatment of depression in both children and adolescents 6-18 years
  - other SSRIs not shown to be consistently effective
  - Escitalopram recently approved for the treatment of adolescent depression in the US on the basis of an RCT
  - effects of SSRIs on youth depression are at best moderate partly because of the high placebo response rates in young people
  - evidence of the effectiveness of SSRIs is limited
  - SSRIs useful for relieving the symptoms of depression but effects on other outcomes, including quality of life, are less
- SSRIs are related to suicidality in youth, with evidence to suggest that suicidal ideation is higher in those treated with fluoxetine compared to those treated with placebo in RCTs
- **BUT** the risk of suicidal ideation is outweighed by the benefit of treatment with anti-depressant
  - the number needed to treat for anti-depressants is 10, while the number needed to harm with anti-depressants is 143
  - Supports prescribing antidepressants in young people while also closely monitoring for suicidality and other side effects

Treatment

- CBT is a widely recommended for the treatment of depression in children and adolescents
- United Kingdom - first line treatment for mild depression and an adjunct for moderate to severe depression
  - Meta-analytic evidence suggests effects that are in the lower moderate range (less than 0.3; Weisz, McCarty, & Valeri, 2006)
- US Treatment of Adolescents with Depression Study (TADS)
  - adolescents receiving CBT did not do better than those on placebo (March et al., 2004)
- Evidence on the effects of combining medication with CBT is mixed
  - In the TADS, combined CBT with Fluoxetine led to significantly greater improvement than Fluoxetine alone
  - UK Adolescent Depression, Antidepressants and Psychotherapy Trial (ADAPT), there was no additional benefit from adding CBT to Fluoxetine (Goodyer et al., 2007)
- Treatment of Resistant Depression in Adolescents (TORDIA) study
  - switching from Fluoxetine to another SSRI achieved significantly better response in those who also received CBT (Brent et al., 2008)

NHS
Health Education England

Treatment

- Computerized CBT may be at least as effective as treatment as usual, including face-to-face counseling with clinical psychologists (Merry et al., 2012)
- Interpersonal therapy (IPT) may be a useful treatment for depression
  - evidence of effectiveness in schools (Mufson et al., 2004)
- Comorbid disorders
  - little trial evidence on how to treat comorbidity in depression: is it better to treat the depression or the comorbid condition or both?
  - case-by-case decisions - treating first the condition that is more severe/chronic

Treatment

- Maternal mental health
  - suggestion that remission of maternal depression associated with a significant improvement in children's depression and persistence of maternal illness was associated with new onset of children's depression (Weissman et al., 2006)
- Prevention
  - Garber et al (2009) compared a group-based cognitive and behavioural prevention programme to usual care alone in adolescents at high risk as a result of prior depression or current subthreshold symptoms The rate of incident depression and of self reported depressive symptoms was significantly lower in those randomised to the prevention arm.

References

- Merikangas KR, Nakamura EF, Kessler RC. Epidemiology of mental disorders in children and adolescents. *Dialogues in Clinical Neuroscience*. 2009;11(1):7-20.
- Anxiety Disorders in Children and Adolescents, 2nd Edition 2011, Cambridge University Press.
- Interactions Between Mothers and Children: Impacts of Maternal and Child Anxiety.
- Moore, PS.; Whaley, SE.; Sigman, M, Journal of Abnormal Psychology, Vol 113(3), Aug 2004, 471-476.
- Rao U, Chen L-A. Characteristics, correlates, and outcomes of childhood and adolescent depressive disorders. *Dialogues in Clinical Neuroscience*. 2009;11(1):45-62.

Anxiety

1. **Treatment of social anxiety disorder in children and young people include all except which?**

- A. Group CBT
- B. Individualised CBT
- C. Psychoeducation
- D. Skills training for parents
- E. Mindfulness based therapy

1. **Treatment of social anxiety disorder in children and young people include all except which?**

- A. Group CBT
- B. Individualised CBT
- C. Psychoeducation
- D. Skills training for parents
- E. **Mindfulness based therapy –** NICE advises against mindfulness based approaches for the treatment of Social anxiety disorder.

2. **What percentage of children and adolescents in the UK have clinically significant anxiety disorders?**

- A. 2-4%
- B. 4-8%
- C. 8-12%
- D. 12-15%
- E. 15-20%

2. **What percentage of children and adolescents in the UK have clinically significant anxiety disorders?**

- A. 2-4%
- B. **4-8% -** Quoted in ‘Child and Adolescent Psychiatry’ third edition Goodman& Scott**.**
- C. 8-12%
- D. 12-15%
- E. 15-20%

3. **The following regarding specific phobias are true, except**:

- A. Fear of animals peaks at 2-4 years of age
- B. Fear of the dark peaks at 4-6 years of age
- C. Fear of war is most common in adolescents
- D. Fear of death peaks at 5-10 years of age

3. **The following regarding specific phobias are true, except:**

- A. Fear of animals peaks at 2-4 years of age
- B. Fear of the dark peaks at 4-6 years of age
- C. Fear of war is most common in adolescents
- **D. Fear of death peaks at 5-10 years of age -** Fear of death commonly peaks in adolescents along with fear of war. Quoted in ‘Child and Adolescent Psychiatry’ third edition Goodman & Scott.

4. **According to ICD10, separation anxiety can include all except:**

- A. Repeated nightmares involving separation
- B. Preference to sleep away from home
- C. School refusal
- D. Getting up frequently at night to check on parents/carers
- E. Persistent and unrealistic worry that harm will come to their parents/carers

4. **According to ICD10, separation anxiety can include all except:**

- A. Repeated nightmares involving separation
- B. **Preference to sleep away from home -Separation anxiety is characterised by children commonly being reluctant or refusing to sleep away from home**
- C. School refusal
- D. Getting up frequently at night to check on parents/carers
- E. Persistent and unrealistic worry that harm will come to their parents/carers

5. **The diagnosis of Generalised anxiety disorder in childhood includes all except:**

- A. Onset before 18 years of age
- B. Multiple anxieties occurring across at least 2 situations
- C. Feeling worn out and irritable
- D. The anxiety must not due to another condition or substance abuse
- E. Occurring for over 12 months

5. **The diagnosis of Generalised anxiety disorder in childhood includes all except:**

- A. Onset before 18 years of age
- B. Multiple anxieties occurring across at least 2 situations
- C. Feeling worn out and irritable
- D. The anxiety must not due to another condition or substance abuse
- **E. Occurring for over 12 months -A history spanning over 6 months, not 12 is a diagnostic feature of GAD**

Depression

NHS
Health Education England

1. **The prevalence of depression in 11 – 15 year olds in the UK is:**

- A. 0.1% - 1%
- B. 2% - 8%
- C. 11% - 15%
- D. 16% - 20%
- E. 21 – 30%

1. **The prevalence of depression in 11 – 15 year olds in the UK is:**

- A. 0.1% - 1%
- **B. 2% - 8%**
- C. 11% - 15%
- D. 16% - 20%
- E. 21 – 30%

2. **A 12 year old girl is referred to the CAMHs team with symptoms of moderate – severe depression. What is your first-line treatment?**

- A. Commence citalopram
- B. Commence fluoxetine
- C. Offer a specific psychological therapy
- D. Admit to an inpatient unit
- E. Refer back to GP for management of symptoms

2. **A 12 year old girl is referred to the CAMHs team with symptoms of moderate – severe depression. What is your first-line treatment?**

- A. Commence citalopram
- B. Commence fluoxetine
- **C. Offer a specific psychological therapy - NICE guidelines state that psychological therapy should be offered first-line (CBT/IP/FT).**
- **Antidepressants should not be offered except in combination with concurrent psychological therapy. Offer fluoxetine if no response after 4-6 sessions**.
- D. Admit to an inpatient unit
- E. Refer back to GP for management of symptoms

3. **The below are all risk factors for completed suicide except:**

- A. Previous suicide attempt
- B. Presence of substance/alcohol abuse
- C. Presence of psychiatric disorder
- D. Strong religious beliefs
- E. Lack of social support

3. **The below are all risk factors for completed suicide except:**

- A. Previous suicide attempt
- B. Presence of substance/alcohol abuse
- C. Presence of psychiatric disorder
- **D. Strong religious beliefs**
- E. Lack of social support

4. **The use of medication in adolescents who self-harm:**

- A. SSRIs is recommended for reducing self-harming behaviour
- B. Flupentixol is recommended for reducing self-harming behaviour
- C. Is always indicated when it occurs in the context of mental illness
- D. There is no evidence that medication reduces self-harming behaviour
- E. Risperidone is indicated in the presence of self-harming behaviour

4. **The use of medication in adolescents who self-harm:**

- A. SSRIs is recommended for reducing self-harming behaviour
- B. Flupentixol is recommended for reducing self-harming behaviour
- C. Is always indicated when it occurs in the context of mental illness
- **D. There is no evidence that medication reduces self-harming behaviour**
- E. Risperidone is indicated in the presence of self-harming behaviour

5. Select the correct statement from the below regarding self-harming behaviour amongst adolescents:

- A. Is common under 10 years of age
- B. In community surveys, it is described by 80% of the adolescent population
- C. Is more common in girls than boys
- D. The majority of adolescents who self-harm wish to kill themselves
- E. Only around 75% of adolescents who self-harm seek help

5. Select the correct statement from the below regarding self-harming behaviour amongst adolescents:

- A. Is common under 10 years of age
- B. In community surveys, it is described by 80% of the adolescent population
- **C. Is more common in girls than boys**
- D. The majority of adolescents who self-harm wish to kill themselves
- E. Only around 75% of adolescents who self-harm seek help

6. **Among adolescents who self-harm, risk factors for later suicide include all except:**

- A. Depression
- B. Unclear reason for act of deliberate self-harm
- C. Psychosis
- D. Female gender
- E. Male gender

6. **Among adolescents who self-harm, risk factors for later suicide include all except:**

- A. Depression
- B. Unclear reason for act of deliberate self-harm
- C. Psychosis
- D. Female gender
- **E. Male gender**

7. Depression in children and adolescents can present in different ways. Please match the incorrect statement:

- A. Adults – change of appetite with associated weight loss or weight gain. Children – similar to adults
- B. Adults – loss of confidence, self esteem. Children – similar to adults
- C. Adults – somatic syndrome may or may not be present. Children – somatic complaints are
- frequent in children
- D. Adults – depressive mood for most of the day. Children – mood irritable or depressed
- E. Adults – disproportionate self blame and feelings of excessive guilt or inadequacy. Children –excessive or inappropriate guilt not usually present

7. Depression in children and adolescents can present in different ways. Please match the incorrect statement:

- **A. Adults – change of appetite with associated weight loss or weight gain. Children – similar to adults -**

  Children tend to stop gaining weight rather than lose it.
- B. Adults – loss of confidence, self esteem. Children – similar to adults
- C. Adults – somatic syndrome may or may not be present. Children – somatic complaints are
- frequent in children
- D. Adults – depressive mood for most of the day. Children – mood irritable or depressed
- E. Adults – disproportionate self blame and feelings of excessive guilt or inadequacy. Children –excessive or inappropriate guilt not usually present

8. Please select the correct statement regarding suicide amongst children and adolescents in the UK:

- A. Suicide is common under the age of 12 and gets progressively rarer after
- B. There are roughly five suicides per million children aged 5 – 14 per year
- C. Since the mid 1990's suicide rates have increased by around 20% in both males and females
- D. More female children than male children commit suicide
- E. Most adolescent suicide are carefully planned in advance

8. Please select the correct statement regarding suicide amongst children and adolescents in the UK:

- A. Suicide is common under the age of 12 and gets progressively rarer after
- **B. There are roughly five suicides per million children aged 5 – 14 per year**
- C. Since the mid 1990's suicide rates have increased by around 20% in both males and females
- D. More female children than male children commit suicide
- E. Most adolescent suicide are carefully planned in advance

9. **You assess a 14 year old male who has self-harmed in the A&E department. All of the following suggest serious suicidal intent except:**

- A. Extensive premeditation
- B. Other people informed beforehand of his intention
- C. Suicide note left
- D. Carried out in isolation
- E. He informed someone of his actions soon after the event

9. **You assess a 14 year old male who has self-harmed in the A&E department. All of the following suggest serious suicidal intent except:**

- A. Extensive premeditation
- B. Other people informed beforehand of his intention
- C. Suicide note left
- D. Carried out in isolation
- **E. He informed someone of his actions soon after the event**

10. An 8 year old girl is referred to you. For the past month she has been performing poorly in school, complains of being bored for most of the time, has run away from home on 3 occasions, and has been taken to the GP by her mother due to generalised abdominal pain, for which no cause can be found. She has a younger sibling who is 3 years old. Suggest the most likely diagnosis:

- A. Factitious disorder
- B. ADHD
- C. Depression
- D. Sibling rivalry disorder
- E. Atypical autism

10. An 8 year old girl is referred to you. For the past month she has been performing poorly in school, complains of being bored for most of the time, has run away from home on 3 occasions, and has been taken to the GP by her mother due to generalised abdominal pain, for which no cause can be found. She has a younger sibling who is 3 years old. Suggest the most likely diagnosis:

- A. Factitious disorder
- B. ADHD
- **C. Depression**
- D. Sibling rivalry disorder
- E. Atypical autism