Mental health of children with epilepsy

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Isobel Heyman MBBS PhD FRCPsych
• Most of the mental health problems in children with epilepsy are the common ones
Background: Isle of Wight, 1970

Epilepsy and brain disorders are major risk factors for psychiatric disorders.

Isle of Wight 1970

% of children with psychiatric diagnosis

- general population
- disorders not involving CNS
- idiopathic seizures
- structural brain abnormality
- seizures + structural brain abnormality
Overview

• Up to 70% of children with epilepsy have psychiatric disorders.

• These associated psychological problems are often far more distressing and impairing than the epilepsy itself.

• Untreated, the problems are often very persistent.

• Treated, the problems often improve substantially.
Rates of Mental Health Problems

- 7% general population
- 12% disorders not involving CNS
- 28% idiopathic seizures
- 38% structural brain abnormality
- 58% seizures + structural brain abnormality

- 9% general population
- 11% diabetes
- 28% uncomplicated epilepsy
- 54% complicated epilepsy

Rutter 1970
Davies et al, 2003
1999 British Child Mental Health Survey

- Methodology – Nationwide study of rates of psychiatric disorder in 5 – 15 year old (n=10 438)

- Information on 34 health problems/conditions
All psychiatric disorders are commoner - but some more than others.

- complicated epilepsy
  - emotional disorders
  - conduct disorders
  - ADHD
  - autism spectrum
  - no disorder

- controls
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  - conduct disorders
  - ADHD
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• Significantly elevated rates of anxiety on self-report > 30%
• Significantly increased rates of depression >20%
Brain illness

Physical consequences

Educational consequences

Personal and social responses

Psychopathology/mental illness

Adverse family consequences

Poor self-image

Adverse social consequences

Adapted from Heyman, Goodman and Skuse (2016)
Which patients are at particular risk?

- Structural brain abnormalities
- Learning difficulties
- Poor seizure control
- Younger age of seizure onset
- New onset seizure disorder
- Particular anti-epileptic drugs and multiple drugs
- Family/psychosocial factors
Anna: assessment

- Age 13
- Seizures since first year of life
- Continuing epilepsy
- Irritable, weepy; last 9 months
- Not enjoying school last 2 years; attendance poor; school work deteriorating
- Refusing to take medication regularly
Young person's world

seizures

Underlying brain disorder

cognitive disability

Young person’s world

medication

Family & friends

Chronic health problem

Quality of life
Anna: interventions

- Checked well supported at home and in school
- Circle of aware and supportive friends
- Any further scope for seizure control eg epilepsy surgery
- Assess for depression; do standardised measures
- Consider psychological treatment/medication
- Offered 10 sessions of evidence-based treatment for depression
- Much happier and willing to take epilepsy meds
- Repeat measures and follow-up
Anna: interventions

• Teenage developmental issues, especially social skills: social skills group
• Increased awareness of social stigma: coping strategies and explanatory skills
• Any further scope for seizure control eg epilepsy surgery
• Assess for depression; consider CBT/medication
• Psychometric assessment revealed IQ of 60; special needs acknowledged and met
• Much happier and willing to take meds
Identifying emotional and behavioural problems

Review:
- Epilepsy
- Mental health
- Behavioural analysis
- Family situation
- Education
5 key questions in psychiatric assessment:

- Symptoms
  - What sort of problem is it?

- Impact
  - How much distress or impairment does it cause

- Risks
  - What factors have initiated or maintained the problem?

- Strengths
  - What assets are there to work with?

- Explanatory models
  - What beliefs and expectations do the family bring with them
The most common psychiatric problems in children with epilepsy are the same as those in all children

• Four domains of symptoms:
  – Emotional symptoms
  – Conduct problems
  – Developmental delays
  – Relationship difficulties
Disruptive behaviour disorders

• Conduct disorder (may be less common in epilepsy)
• Oppositional defiant disorder
  – Little or no evidence for drug treatments
  – Most evidence for behavioural treatments
• Attention deficit hyperactivity disorder
  – Methylphenidate can be useful even with epilepsy

?? Other variants of these in children with epilepsy

  Disinhibited, intrusive, irritable, easily frustrated
Emotional disorders

- Depression
- Anxiety disorders
  - generalised anxiety disorder
  - social anxiety
  - specific fears and phobias
  - separation anxiety
  - obsessive compulsive disorder
- Cognitive Behaviour Therapy is first line; some evidence for medication
Robust evidence for effective treatments in child psychiatry…….

- Child/Adolescent Anxiety Multimodal Study (CAMS).
- Anxiety disorders
- Randomized to a 12-week treatment of sertraline, cognitive behaviour therapy, their combination, or clinical management with pill placebo.

and these treatments can lead to full recovery

<table>
<thead>
<tr>
<th>Treatment</th>
<th>% remitted (range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combination</td>
<td>46-68</td>
</tr>
<tr>
<td>Sertraline</td>
<td>34-46</td>
</tr>
<tr>
<td>CBT</td>
<td>20-46</td>
</tr>
<tr>
<td>Placebo</td>
<td>15-27</td>
</tr>
</tbody>
</table>
Recommended reading:

Child Psychiatry
Goodman and Scott
Wiley-Blackwell 2012

http://youthinmind.info/py/yiminfo/GoodmanScott3.py
Anti epileptic drugs and behaviour

- Listen to parents; collaborative/experimental approach
- Few systematic/controlled studies (Besag, 2001)
- More likely if pre-existing behavioural disturbance and/or learning disability
- Irritability, agitation, aggression, psychosis and depression reported with vigabatrin (Thomas, 1996)
- May be positive behavioural effects eg mood stabilisation
Psychiatry & Epilepsy

- Emotional & behavioural problems are common in children with epilepsy
- Cognitive disabilities are associated with even higher rates
- …..as are structural brain abnormalities
- Mental health problems seem highly constitutional: shift blame away from families
- Mental health problems contribute to overall level of disability
- Multidisciplinary assessment and/or screening
- Optimise management of epilepsy
- Access to effective, evidence based mental health treatments