Physiotherapy Management of Functional Disorders

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Aims

- To define functional disorders in a therapy and rehabilitation context
- To describe general treatment principles with reference to published literature
- To describe practical examples of treatment based on experience
- To demonstrate a need for therapy in functional disorders
Functional Disorders

- **Common** (Stone et al 2005)

- **Costly**
  - Greater health utilisation
  - Total cost estimated £18 Billion (Chitnis 2011)

- **Worthy of treatment**
  - In need of help
  - Often lack of support, not taken seriously
  - High disability and distress (Stone 2009)
  - At risk of iatrogenic harm from unnecessary surgeries etc
Somatisation is distinct from malingering and factitious disorders

Inconsistency does not equal faking (Stone 2009; Teasell 2002)

Control may be thought of as on a continuum where thoughts and behaviours affect symptoms

Over emphasis of symptoms in order to be taken seriously (Chitnis et al 2011)

Distinguishing between malingering and somatisation is not always possible (Stone et al 2005)
## Aetiology
(Adapted from Stone et al 2005)

<table>
<thead>
<tr>
<th>Predisposing factors</th>
<th>Precipitating factors</th>
<th>Maintaining factors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIOLOGICAL</strong></td>
<td><strong>PSYCHOLOGICAL</strong></td>
<td><strong>SOCIAL</strong></td>
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<tr>
<td>Family &amp; personal history of illness</td>
<td>Poor attachment</td>
<td>Childhood neglect</td>
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<tr>
<td>Disease</td>
<td>Personality/coping style</td>
<td>Abuse</td>
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<td>Abnormal physiological (eg sleep deprivation)</td>
<td>Negative perceptions</td>
<td>Symptom modelling</td>
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<tr>
<td>Physical pain/injury</td>
<td>Depression/anxiety</td>
<td>Life changing events</td>
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<tr>
<td>Minor physical illness</td>
<td>Panic attack</td>
<td>Social stressors (eg work)</td>
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<tr>
<td>Neuroplasticity</td>
<td>Depression/anxiety</td>
<td>Fear/avoidance of work</td>
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<tr>
<td>Deconditioning</td>
<td>Fatigue</td>
<td>or family responsibilities</td>
</tr>
<tr>
<td>Biological abnormalities seen in depression</td>
<td>External locus of control</td>
<td>Welfare system</td>
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<td>Muscle tension</td>
<td>Avoidance of symptoms</td>
<td>Legal compensation</td>
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<tr>
<td>Autonomic arousal</td>
<td>Symptom checking</td>
<td>Stigma of mental illness</td>
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<tr>
<td>Pain &amp; Fatigue</td>
<td>Adaptations &amp; aids</td>
<td>Loss of face</td>
</tr>
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**Notes:**
- BIOLOGICAL: Abnormal physiological (eg sleep deprivation), Physical pain/injury, Minor physical illness.
- PSYCHOLOGICAL: Negative perceptions, Depression/anxiety, Panic attack.
- SOCIAL: Childhood neglect, Abuse, Symptom modelling, Life changing events, Social stressors (eg work).
- Other factors include:
  - Neuroplasticity, Deconditioning, Biological abnormalities seen in depression, Muscle tension, Autonomic arousal, Pain & Fatigue.
  - Depression/anxiety, Fatigue, External locus of control, Avoidance of symptoms, Symptom checking, Adaptations & aids.
  - Fear/avoidance of work or family responsibilities, Welfare system, Legal compensation, Stigma of mental illness, Loss of face.
Hughlings Jackson Ward
MDT Inpatient Rehabilitation Programme at NHNN

- The team
  - Neuro-Psychiatrists
  - Neurologist
  - Mental Health Nurses
  - Therapists – CBT, OT, SLT, Physio & RA

- Four week programme
- Goal focussed rehabilitation
  - Weekly patient focused MDT goal setting & timetabling
  - Weekly ward round + team meeting
- Patients selected for programme at MDT clinic
Principles of Treatment

- Combined physical and behavioural approach
- Communication
- Establish detailed treatment contract early on
- Functional focus
- Goal setting
- Consistent approach
- Be aware of patients suggestibility
- Involvement of family
- Praise positive behaviours, ignore negative
- Patience – expect ups and downs

Brazier & Venning 1997; Chitnis et al 2011; Mai 2004; Ness 2007; Smith 2007; Speed 1997
Initial Assessment

- Detailed and specific
  - Acknowledge and validate suffering
  - Summarise
- Start by clarifying patients understanding of diagnosis
- Bleed the symptoms dry
- Timeline of symptoms
- 24 hour routine
- Social History
- Impairment vs Functional assessment
- Establish the patients priorities and goals

Chitnis et al 2011; Stone et al 2005
Physiotherapy Management

- **Treatment – set boundaries**
  - Agree on number frequency and length of sessions

- **Education**
  - Facilitate patients understanding
  - If no psychological acceptance – “work on the changeable”
  - Normalise & reassure while recognising disability
  - Provide expectation of recovery
  - Provide rationale for treatment
  - Identify and challenge unhelpful thoughts & behaviours
Physiotherapy

- Correct abnormal movement patterns
- Address pain – See Hansen et al 2010
- Address fatigue
- Exercise nonspecific strengthening and CV (Dufour 2010)
- Equipment – often a point of contention. Avoid issuing, agree on plan to wean
- Practice strategies to control symptoms
- Relapse prevention
- 6-12 month plan with long term goal
- Discharge planning & Handing over

Chitnis 2011; Hansen 2010; Heruti 2002; Ness 2007; Speed 1996; Teasell 2002
Outcome Measures

- Visual Analogue Scale (VAS)
- Canadian Occupational Performance Measure (COPM)
- Function Impairment Measure (FIM)
- Goal Attainment
- Gait and Balance measures
- Back pain scales – eg Roland-Morris Disability Questionnaire
- Fatigue Impact Scale
- Video
- Quality of life measures (GHQ)
- Others... Functional OCM’s more useful than impairment based
Evidence for Physiotherapy

- No RCT’s
- Expert opinion – a combined physical, behavioural and psychological approach is effective (Stone et al 2005; Chitnis 2011; Smith 2007)
- Case Reports (Duck et al 2005; Ness 2007; Hughes & Alltree 1990; Withrington & Parry 1985)
- Assessment of MDT rehab programme (Moene 2002; Speed 1996)
- Difficulties with research
  - Heterogeneous population (Mai 2004)
  - Different treatment approaches
  - Question the literature! Is this right for my patient??
The patient who does not get better

- A certain percentage of patients will not improve – predicting can be difficult (Stone 2009)
- Stick to your treatment contract (Heruti 2002)
- Preserve therapeutic relationship (Stone 2005)
- Maximise independence
- Minimise secondary changes and harm
- “Do I give them a wheelchair?”
Managing Non-epileptic Attacks (NEA)

- Role of physiotherapy will vary
  - Addressing other functional symptoms – present in up 90% of cases
  - Facilitate understanding of diagnosis
  - Address avoidance behaviour – Increase function, graded exposure
  - Facilitate internal locus of control – pts with NEA report more external LOC than epilepsy

- Techniques to avoid NEA
  - Distraction & suggestion
  - Grounding techniques

- Dealing with a NEA
  - Try to appear unconcerned
  - “It’s ok, you are safe, we will continue when you are able”
  - Avoid positive reinforcement

Reuber 2008
Managing Functional Tremors

- **Realistic expectations**
  - 27% improved (12% of these following treatment) (McKeon 2009)
  - Positive indicators: presence of anxiety, medication.

- **Characteristics** (McKeon 2009; Jankovic 2006)
  - Distractibility: 60-73%
  - Variability: 62%
  - Entrainment: 8-18% of cases

- **Management**
  - Normalise – practiced movement, anxiety & stress, rationale for Rx
  - Explore the effect of positions and postures
  - Explore the effect of entrainment, distraction and relaxation

- Develop management strategies based on above and discuss rationale for your intervention
Case Study – Functional Gait Disorder
Mrs A

- **HPC**
  - 2007 – Fatigue
  - 2008 – Back pain with p&n’s
  - 2008 – Hospitalised for chest infection & developed LL paralysis
  - 3 months rehabilitation & community input
  - 2010 – Referred to NHNN MDT programme for conversion disorder

- **Social Hx**
  - Difficult first marriage
  - Current social issues at home

- **Predisposing factors** – previous experiences
- **Precipitating factors** – social stressors (work and family) & illness
- **Maintaining factors** – pain, fatigue, carers, sickness benefits, relationships, self esteem, aids & equipment
Gait on admission

video
Case Study – Functional Gait Disorder
Mrs A

- Problem List
  - Ataxic gait
  - Dependent on walking frame
  - Difficulty dressing
  - Dependent on carers for ADLs
  - Fatigue
  - Low back pain
  - Dizziness
  - Anxiety
  - Secondary muscle changes
  - Agoraphobia
Case Study – Functional Gait Disorder

Treatment

- **Neurologist**
  - Exclusion of organic illness prior to admission
  - Introduce idea of psychological cause

- **Psychiatrist**
  - Rationalise meds, pharmaceutical Mx of anxiety & depression
  - Expand on psychological nature of symptoms & oversee treatment

- **CBT**
  - Cognitive formulation
  - Cognitive restructuring
  - Addressing agoraphobia and anxiety

- **OT**
  - Fatigue management - education, planning, pacing
  - ADLs – washing, dressing, kitchen activities
  - Self esteem – Grooming, personal attention
  - Vocational Ed – advice and planning
Case Study – Functional Gait Disorder
Physiotherapy

- Education – challenging illness beliefs
- Chronic pain management
- Practice components of gait
- Body alignment & feedback using mirror
- Stretching programme for tight muscles
- Avoid practicing poor movement patterns
- Wean from walking aids
- Increase exercise tolerance
- Outdoor mobility & stairs
- Addressing aches & pains from increased activity
Case Study – Functional Gait Disorder
Outcome

video
Summary

- FD’s are complex!!
- Maintain boundaries, stick to contract, preserve relationship
- Have realistic expectations
- These patients are worthy of your time
- Therapy input can
  - Be cost effective
  - Produce impressive results
  - Rewarding
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  Hughlings Jackson Ward & Therapy Services
  National Hospital for Neurology and Neurosurgery

- **Key Resources**
  - [www.neurosymptoms.org](http://www.neurosymptoms.org) Jon Stone
    Information aimed at patients
References

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