Intellectual Disability: Management Principles

The following is relevant to interviewing individuals with intellectual disability. The communication skills of people with intellectual disabilities can be divided into three broad developmental categories: pre-symbolic, symbolic and verbal.

1. Pre-symbolic communication
   - People who only use pre-symbolic communication (likely to be those with very severe or profound intellectual disabilities) will be unable to understand or use symbolic forms of communication such as speech, pictures, photographs or signs.
   - They will largely rely on the people around them to anticipate their needs and to interpret their vocalisations, facial expressions and body language (Coupe O’Kane 1998).

2. Symbolic communication
   About 60% of people with intellectual disabilities are able to use symbolic methods such as pictures, symbols, signs or speech to communicate (Emerson 2001).

3. Verbal communication
   Most people with intellectual disabilities have mild disabilities and, although they will vary in their ability to understand spoken, pictorial or sign language and to express themselves, they will use speech or sign as their predominant form of communication (Barron 2009).

Closed questions requiring yes/no answers are therefore particularly problematic: individuals may appear to answer correctly when in fact they have not understood and have merely used their knowledge of question structure and non-verbal cues (such as tone of voice and facial expression) to give the response they think the listener is expecting (Elliott 2001).

Open questions (e.g. ‘What do you like doing on holiday?’) can also be difficult, as they require the person to think of and then retain a number of possible answers, while simultaneously having to structure their response in a coherent way.

Solutions
1. Questions or information should be broken down into small chunks, and the clinician should keep checking that the person understands before moving on (Tuffrey-Wijne 2012).
2. Presenting questions in an either/or format (‘Do you like sailing or reading?’) is often easier for the patient than using open questions, but care must be taken to ensure that the person is not simply repeating the final option given (Barron 2009). People with intellectual disabilities may feign understanding and voice opinions or comments that they have ‘borrowed’ from others (Kernan 1997).
3. It is therefore important to check the individual’s own understanding of the words and phrases they use, and not assume that their understanding of particular words is the same as the clinician’s.

4. Use short, simple sentences with everyday words, to avoid jargon and to allow time for the individual to process information.

5. Use pictures and photographs, as well as facial expression, affect and tone of voice, to show that they have understood what the patient says.

6. Give time to formulate a response. They may process language more slowly, and once they have understood a question, they may be slower to think through their answer.

7. Rephrase the question

**Conducting a Psychiatric Assessment (Principles)**

1. **Prepare in Advance:** find out before the interview how the patient prefers to communicate. The use of an informant-rated interview schedule such as the Mini PAS-ADD (Prosser 1998) ahead of the interview frees up time for questions on the day.

2. Allow a longer appointment time and to check who will be accompanying the patient to the appointment.

3. Have a notebook and pens handy, and plan to record your clinical notes on the computer later. Pictures, ‘easy read’ leaflets and picture books such as Books Beyond Words (Hollins 2010) can all be helpful in the clinical encounter.

4. Learn about the frame of reference of the patient in introduction, by considering the adaptive function of any unusual behaviours. So, for example, a patient with autism who avoids eye contact may be more settled in the meeting if the clinician also avoids direct eye contact.

5. It is important to establish the role of the accompanying person early in the interview, how long they have known the patient, as they may be new, and to ask the patient if they want the person to stay. Sometimes their presence reduces anxiety and makes for a better interview, but adults with intellectual disabilities have the same right to ask for privacy as any other patient.

**Mental state examination**

1. Assessment of the patient’s understanding and their use of spoken and body language forms an important part of the mental state examination. It is helpful to know whether communication behaviour and use of language have recently changed.

2. It is also important to avoid misdiagnosing psychosis on the basis of disorganised speech patterns that form part of a developmental language disorder.

3. Recording a sample of the patient’s actual speech, and of the interchange between clinician and patient, allows more effective support and consultation with professionals who were not present at the initial assessment.
Assessment of capacity

- Assessment of capacity to consent to treatment involves giving information in the form the patient is most likely to understand and at the time they are most likely to understand it. This will be different for different patients. It is then necessary to check that the patient has understood the information provided and is able to weigh it up to make an informed decision. The emphasis is on giving information to the patient, not just to their supporter.

Interventions for Challenging behavior in Intellectual Disability

Common causes of challenging behaviour

1. Physical complaints and symptoms
   - Constipation
   - Urinary tract infections
   - Otitis media/ear-ache
   - Respiratory infections
   - Gastritis/gastro-oesophageal reflux
   - Dental pain
   - Menstruation
   - Headache

2. Behavioural phenotypes
   - Prader–Willi syndrome
   - Fragile-X syndrome
   - Lesch–Nyhan syndrome

3. Psychiatric disorders
   - Psychotic disorders
   - Mood disorders
   - Anxiety disorders
   - Autism spectrum disorders
   - Hyperkinetic disorders

4. Psychological or social factors
   - Trauma/life events
   - Distress
   - Change in care giver
   - Bereavement
   - Change in routine

5. Behaviour serving a function
   - To gain attention from carers
   - To avoid chores/activities
   - To obtain tangibles
   - For sensory reinforcement
Diagnostic issues
1. The diagnosis of mental illness in individuals with intellectual disability and challenging behaviour can pose significant problems for clinicians. For example, if the patient is unable to communicate, the clinician must rely on whether changes in biological symptoms (e.g. sleep and appetite) have occurred.

2. Diagnosis of mental illness may also be complicated if atypical symptoms are present, or if there are inconsistencies in the reports given by informants (Moss 1999).

3. The presence of autism may also complicate the presentation of psychiatric symptoms.

4. Agitation and inappropriate sexual behaviour in a young man with autism may be mistaken for hypomania; a young woman with autism observed talking to herself or engaging in concrete thinking may be incorrectly diagnosed with psychosis. At times of stress, individuals with autism may also present with transient psychotic-like symptoms such as anxiety, thought disorder and persecutory ideas, particularly if they are asked to stop an activity that they are engaged in or asked to begin a new activity (Berney 2000).

5. Diagnostic overshadowing (Reiss 1982) may occur, meaning that a symptom or behaviour is attributed to the person’s intellectual disability or environmental factors when it is in fact due to mental or physical illness (Palucka 2003).

The process of functional analysis (O’Neill 1997)
1. Obtain a clear description of the behavior: Events and observed behaviour can be recorded on an ABC chart for subsequent analysis of the antecedents (A), behaviour (B) and associated consequences (C). In addition, questionnaires and rating scales such as the Motivation Assessment Scale (Durand 1992) may be used to gather information about the possible function of the behaviour.

2. Identify factors that predict whether the behaviour will or will not occur

3. Identify the factors or consequences that maintain the behaviour

4. Develop a hypothesis about the function of the behaviour

5. Make direct observations that provide evidence supporting the hypothesis

Management of Challenging Behaviour

Psychosocial Interventions

1. Social interventions

Social interventions for challenging behaviour in people with intellectual disability can focus on a range of factors, including level of care, communication and environmental manipulation. For example, nidotherapy (Tyrer 2005) involves making systematic environmental changes (physical, social and personal) to suit the needs of the individual.
2. Active support

3. Cognitive Behavioural therapy

4. Mindfulness

5. Applied Behavioural analysis and Behavioural Support

Features of positive behavioural support

- The goal is to enhance quality of life by improving community participation, choice and personal competence in addition to behavioural change
- A functional analysis is conducted to understand the purpose of the behaviour
- The intervention attempts to alter the triggers of a behaviour (including setting events) in order to reduce the likelihood of it occurring
- Skills teaching is a central component and includes teaching communication skills and coping skills
- The intervention has a multi-component focus, reflecting that multiple types of challenging behaviour may be present
- No punishment is used
- Reinforcement is used to maintain good behavior
- Both reactive and proactive strategies are incorporated
- The intervention instigates changes in carers’ behaviour and how services are delivered

Pharmacolical Interventions

Antipsychotics

- Risperidone in addressing challenging behaviour in children with autism spectrum disorder, including those with intellectual disability (Unwin 2011; National Collaborating Centre for Mental Health 2012).
- In individuals with autism, antipsychotics may reduce the arousal and anxiety contributing to the challenging behaviour.

Mood stabilisers

- There are two double-blind controlled trials showing beneficial effects of lithium compared with placebo in treating aggression in people with intellectual disability.

Antidepressants

- Little evidence

References


Somatising Behaviour in Children

Etiological Factors

1. Predisposing factors

Family
- Many somatic symptoms experienced (genetic component?)
- Limited in verbal communication about emotional issues, including conflict
- ‘Conditional caretaking’
- Suspicious attitude to medical expertise
- Parental history of somatoform illness, anxiety or depression
- Problems with boundary setting for children
- Parental ill health
- Cultural factors
- Emotional Expression (alexithymia: physical distress is more easily communicated)

Child
- Temperamental factors, including conscientiousness, emotional lability, vulnerability and worthlessness
- Earlier emotional abuse
- Low IQ
- Social-relating difficulties
- Precipitating factors

Child
- Anxiety, depression
- Life stresses of all types – overt and covert
- Physical illness
- Peer group problems
- Academic problems and cognitive limitations
- Low self-esteem
- Parent:
- Life events/crisis

Maintaining factors

Child, parent and professional
- Current family relationship difficulties
- Child’s Predicament is resolved by symptoms
• Family model of serious illness
• Current parental mental ill health, particularly anxiety and somatisation
• School problems
• Models of sickness and conflict avoidance
• Benefits of sick role
• Professional behaviour that reinforces anxieties and sick role

Management of Somatising behavior in Children and Adolescents

Principles of managing somatising disorders in children and adolescents (These principles also apply to adults)

• Take a good history, which identifies stresses and recent life events
• Provide clear reassurance about negative physical findings when the appropriate investigations have been completed
• Examine family beliefs about illness in order to prepare for the step of encouraging a return to a normal lifestyle
• Provide a model to explain psychosomatic symptoms to the family
• Multidisciplinary approach: Paediatricians, surgical specialists and GPs and CAMHS
• Encouragement to express feelings, emotional distress, underlying worries or fears through direct, verbal means rather than through physical complaints. (This step may not be essential for mild and brief presentations in families without strong beliefs.)
• Skills and support to alter attitudes to physical symptoms: exploration of the child’s and parent’s current attributions of serious physical causes to symptoms, followed by rehearsal of alternative beliefs and cognitions, introducing new ideas with more optimistic beliefs about the possibility of recovery
• Managing the physical symptom(s) with a variety of physical and/or psychological methods, depending on type and illness stage: physical methods include analgesics, transcutaneous electrical nerve stimulation (TENS) machines, monitoring using diaries or pain charts, distraction with activity; psychological methods include cognitive-behavioural techniques
• A strategy to resume gradually, rather than avoid, activities normal for the developmental stage, with attention to any areas of functioning that have become disrupted, such as sleep patterns, exercise and study
• Attention to treatment for any concurrent psychiatric symptoms such as depression or anxiety: this may include appropriate medication or other psychological approaches
• Attention to all possible maintaining factors in child or family: problems of learning, temperament, peer relations, other family relationship issues
• Consideration of parental capacity to encourage recovery through activity, and, if there is continued persistent pursuit of abnormal illness
behaviour by parents, exploration of the reasons so that these can be addressed

- **Prevention of unnecessary medical investigation** and interventions through paediatric and primary care liaison, with agreement about gatekeeping of referrals to other medical and surgical specialists. In other words, if the family cannot contain their urge to seek more physical investigations, the professionals must provide this boundary and a clear medical rationale must be agreed with the family and all professionals if new opinions are sought

- **Maintenance of a systemic perspective throughout**, Other professionals with input to the family (health service, educational, self-help group or others) may have very different beliefs about management and outcome, and unless the family (and professionals) are helped to resolve conflicts of opinion between sources of advice, through clarification and discussion, they may find it difficult to maintain their support of an active rehab

- **Psychodynamic or CBT based approaches**: Non-verbal or other indirect techniques (art, play or drama therapy) are effective and psychodynamically informed approaches in which the input of a child psychotherapist may provide an opportunity to reach the young person and begin to help him or her to acknowledge distress. The objective of all these approaches is to encourage more direct expression of feelings and verbal expression rather than somatisation.

### Behaviourism and cognitive-behavioural approaches

- In relatively well-functioning children and families where the level of impairment is limited, behavioural management of specific single symptoms (such as headache) and or multiple symptoms has been shown to be successful in both children and adolescents
- **Address** sleep, pain and Inactivity
- **Systemic Family Therapy**

### References


Self Harm In Young Adults and Adolescents

Types of self-harm

- **Self-injury**: cutting, swallowing objects, insertion of objects into body, burning, hanging, stabbing, shooting, jumping from heights or in front of vehicles
- **Self-poisoning**: overdosing with medicines, swallowing poisonous substances
- **Other risk-taking behaviours**: smoking, recreational drug/substance misuse, over-eating, food restriction, promiscuity

Evidence-based reasons for self-cutting

- Psychosis
- Depression
- Obsessive–compulsive disorder
- Release from predicament or present/past trauma
- Emotion regulation/coping:
  - a. anger, guilt or self-blame
  - b. inadequate coping strategies
  - c. feelings of loss of control or detachment
  - d. alcohol and drug use
  - e. personality disorder
- Unhealthy care-seeking
- Cultural identification

Psychological characteristics associated with self-harm

- Impulsivity
- Poor problem-solving
- Hopelessness
- Impaired positive future thinking/goal re-engagement
- High levels of self-criticism
- Perfectionism

(National Collaborating Centre for Mental Health 2011)

Risk assessment

1. **The attempt**: detailed description, suicide ideation, lethality, intent/motivation and current intent. Previous suicidal behaviours and triggers.

2. **Presence of mental health disorder**: assess for depression, conduct
disorder, eating disorder, anxiety, post-traumatic stress disorder and psychosis. Ask about substance and alcohol misuse. Previous history of mental disorders/treatment. **Psychiatric disorder is very common in adult suicides, but 40% of suicide completers under the age of 16 do not appear to have had a diagnosable psychiatric disorder.** For these young people, intent was low and lethality of means high (Brent 1999). The idea of ‘accidental adolescent experimentation’ has been used to depict a ‘prank’ gone disastrously wrong.

3. **Family–environmental factors:** parental psychopathology, family history of suicidal behaviour, family dislocation, experience of loss, family discord, and physical, emotional and sexual abuse.

4. **Social/educational:** not attending education, disaffection, learning difficulties, social isolation, bullying, and social-related difficulties. Marginalisation and ‘not fitting in’ are important in adolescents, for whom being accepted by a peer group is crucial to healthy development.

5. **Previous experience of treatment:** motivation to change, engagement, assessment of ability to take responsibility for own safety, availability of carers, wider support in accessing treatment.

**Screening instruments for the identification of at-risk individuals**

6. Beck Hopelessness Scale (Beck 1974): hopelessness is a stable construct and correlates with depression

7. Inventory of Suicidal Orientation–30 (King 1994): 30-item self-report questionnaire with five subscales: hopelessness, suicidal ideation, perceived inadequacy, inability to cope with emotions, and social isolation and withdrawal


9. PATHOS (Kingsbury 1996): five-item interview questionnaire designed to screen young people presenting to accident and emergency

10. Reasons for Living (Linehan 1983): 48-item self-report which assesses belief systems that ‘buffer’ against suicidal behavior

**Treatment Approaches**

**Interventions for self-harm in adolescents**

- In-patient treatment
- Medication
- Family intervention
- Dialectical behaviour therapy
- Developmental group psychotherapy
- Multisystemic therapy: It comprises individual, parent, family and school interventions based around the young person.
Stepwise approach to managing self-harm in CAMHS

- Risk assessment: risk of suicide; presence of mental illness; psychosocial evaluation involving key family/carers
- Offer specific treatment/review if there is presence of a mental health disorder
- For young people who repeatedly self-harm and are assessed as low risk but to re-present, offer consultation by CAMHS, multi-agency problem-focused approach
- For young people assessed as being at high risk, involvement of CAMHS is appropriate: offer specific interventions (e.g. group therapy, family therapy or cognitive–behavioural therapy); aim to manage in the community if possible; take a long-term view and involve Social Services if indicated; minimise the number of professionals involved; care coordination is essential
- If there is no response to focused out-patient intervention and the young person is assessed as high risk, consider specialist Tier 4 referral for residential assessment/very specialist interventions such as dialectical behaviour


REASSURE: mnemonic guidelines for staff dealing with repeated self-injury

- Respond sensitively and with empathy
- Explore the reasons that the person has injured him- or herself
- Accept that self-injury may continue for some time. The aim is to understand and support the individual in their distress, to help them gain more control over their feelings and increase their self-esteem
- Support the person (emotionally and practically) following self-injury
- Seek support for yourself
- Understand that self-injury is underpinned by distress or unhappiness of some kind
- Recognise that self-injury is a mechanism that is used to manage problems, feelings and experiences
- Examine associated problems such as bullying, bereavement or relationship difficulties

Do not

- Accuse the person of being manipulative or attention seeking. It is simplistic to think that self-injury is carried out as a way of manipulating the system or individuals in it. It is very unusual for people to injure themselves simply to gain ‘attention’
- Criticise the person for what they have done. This will make them feel
worse and is likely to be counterproductive

- Conclude that the person is a ‘lost cause’ and nothing can be done to help them
- Expect too much of yourself. It is very unlikely that you will have all the answers. You are not expected to ‘get to the bottom’ of the individual’s problems or to be able to solve it
- Put pressure on the person to tell you about underlying factors if they don’t want to
- Threaten to take away your support if the person harms him- or herself again


- Careful history of events surrounding self-harm
- Concentrate on factors indicating intent
- Previous mental health problems
- Substance misuse, current and past
- Social circumstances and problems
- Can family be recruited to help?
- Forensic history and a mental state examination
- Depression, current suicidality and plans or intent to self-harm again

**References**


### Neuroimaging in Dementia

#### Typical neuroimaging findings in the major types of dementia

<table>
<thead>
<tr>
<th>1. Alzheimer's disease</th>
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<tr>
<td><strong>Structural (CT and MRI)</strong></td>
<td><strong>Functional (SPECT)</strong></td>
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<tr>
<td><strong>CT</strong></td>
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<tr>
<td>Standard axial: generalised cerebral atrophy and ventricular enlargement</td>
<td>Temporo-parietal hypoperfusion</td>
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<td>Angled axial: reduced medial temporal lobe width</td>
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<tr>
<td><strong>MRI</strong></td>
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<td>Medial temporal lobe atrophy</td>
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<td>Periventricular white matter lesions (seen as areas of hypoattenuation on CT and as hyperintensities on proton density and T(_2)-weighted MRI scans)</td>
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<th>2. Vascular dementia</th>
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<td><strong>Structural (CT and MRI)</strong></td>
<td><strong>Functional (SPECT)</strong></td>
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<tr>
<td>Infarct/s</td>
<td>Patchy multi-focal pattern of hypoperfusion</td>
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<td>Extensive deep white matter lesions</td>
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<th>3. Dementia with Lewy bodies</th>
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<td><strong>Structural (CT and MRI)</strong></td>
<td><strong>Functional (SPECT)</strong></td>
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<tr>
<td>Generalised ventricular enlargement</td>
<td>Posterior deficits (often similar to Alzheimer's disease)</td>
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<tr>
<td>Relative preservation of medial temporal disease lobe structures</td>
<td>Reduced D(_2)-receptor density and dopamine transporter</td>
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<td>Similar white matter changes to Alzheimer's disease but less extensive than vascular dementia</td>
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<th>4. Frontotemporal dementia</th>
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<td><strong>Structural (CT and MRI)</strong></td>
<td><strong>Functional (SPECT)</strong></td>
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<tr>
<td>Frontal lobe atrophy</td>
<td>Anterior perfusion deficits</td>
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Body Dysmorphic Disorder
(Body dysmorphic disorder, APT, 2011)

In the DSM-V, BDD comes under Obsessive –Compulsive and Related Disorders along with OCD, Hoarding Disorder, Trichotillomania, Skin-Picking Disorder, Obsessional Jealousy, Shubo-Kyofu (variant of taijin kyofusho similar to BDD characterized by excessive fear of having a bodily deformity), Koro (episode of sudden and intense anxiety that the penis in males or vulva and nipples in females will recede into the body, possibly leading to death, Jikoshu-kyofu (variant of taijin kyofusho characterized by fear of having offensive body odour)

BDD Criteria DSM-V

- Preoccupation with one or more perceived defects or flaws in physical appearance that are not observable or appear slight to others
- At some point during the course of disorder, the individual has performed repetitive behaviours (e.g mirror checking, excessive grooming, skin picking) or mental acts (e.g. comparing his or her appearance with that of others) in response to appearance concerns

The DSM-V has a specifier called with muscle dysmorphia (preoccupation that his or her body is too small or insufficiently muscular)

BDD can occur with good or fair insight, poor insight or absent insight or with delusional beliefs.

Common symptoms

- Preoccupation with perceived appearance of defect
- Depressive symptoms
- Delusional thoughts and beliefs related to appearance
- Suicidal ideation
- Anxiety, panic attacks
- Chronic low self-esteem
- Self-consciousness in social situations; thinking that others notice and mock their perceived defect
- Feelings of shame
- Social and family withdrawal, social phobia, loneliness and self-imposed social isolation
- Overdependence on others such as a partner, friend or parents
- Inability to work or an inability to focus at work owing to preoccupation with appearance
- Decreased academic performance (problems maintaining grades, problems with school/college attendance)
• Problems initiating and maintaining relationships (both intimate relationships and friendships)
• Alcohol and/or drug misuse (often an attempt to self-medicate)

Compulsive behaviours
• Mirror-checking, glancing in reflective doors, windows and other reflective surfaces
• Alternatively, avoidance of one’s own reflection or photographs of oneself; often the removal of mirrors from the home
• Attempting to camouflage imagined defect (e.g. using cosmetic camouflage, wearing baggy clothing, maintaining specific body posture or wearing hats)
• Excessive grooming behaviours (e.g. skin-picking, combing hair, plucking eyebrows, shaving)
• Compulsive skin-touching, especially to measure or feel the perceived defect
• Becoming hostile towards people for no known reason, especially those of the opposite gender
• Seeking reassurance from loved ones
• Excessive dieting and exercise
• Comparing appearance/body parts with that of others, or obsessive viewing of favourite celebrities or models that the person with body dysmorphic disorder wishes to resemble
• Use of distraction techniques: an attempt to divert attention away from the person’s perceived defect (e.g. wearing extravagant clothing or excessive jewellery)
• Compulsive information-seeking: reading books, newspaper articles and websites which relate to the person’s perceived defect (e.g. hair loss or dieting and exercise)
• Preoccupation with plastic surgery or dermatology procedures
• Attempt to perform cosmetic surgery on themselves, including liposuction or removal of unwanted blemishes
• Avoidant behaviour: avoiding leaving the home, or only leaving the home at certain times, for example, at night

(Phillips 2005a)

Co-Morbidity
• About 80% of people with body dysmorphic disorder will experience major depressive disorder at some point in their life, significantly more than the 10–20% expected in the general population (Phillips 2005a).
• About 37% also have social phobia and about 32% fulfil criteria for OCD.
• Eating disorders such as anorexia nervosa and bulimia nervosa are also sometimes found in women with body dysmorphic disorder, as are generalised anxiety disorder and trichotillomania.
• At least 50% of individuals with body dysmorphic disorder have comorbid personality disorder. The most common are Cluster C personality types.

Treatment

1. General Principles
• To prevent adoption of the sick role
• To minimize unnecessary costs and complications by avoiding unwarranted hospitalizations, diagnostic and therapeutic procedures, medications, and, in particular, corrective surgical procedures (BDD patients are rarely satisfied with the results of corrective surgery, and in some cases, they become even more obsessed after such treatment)
• To achieve pharmacologic control of comorbid syndromes and BDD

1. Psychological interventions
General strategies include the following
• Consistent treatment, generally by the same physician
• Supportive office visits scheduled at regular intervals
• Gradual shifting of focus from symptoms to personal and social problems
• Efforts to prevent body inspection rituals and reassurance seeking

a. Cognitive–behavioural therapy
Cognitive–behavioural therapy (CBT) is considered the treatment of choice. Pathological processes such as ruminating and comparing are focused on using exposure and behavioural experiments (Veale 2010).

b. Exposure and response prevention
• Exposure and response prevention involves facing anxiety-provoking situations while resisting the typical (reinforcing) response to them. It is often given in conjunction with CBT. The individual draws up a hierarchical list of feared and avoided situations and then selects an item to address.
• Patients may be asked to consider an alternative explanation for their body image problem and to test this out to determine whether their method of coping (avoidance, checking, comparing, ruminating, being excessively self-focused) maintains their preoccupation and distress.
• Gradually, patients are encouraged to increase exposure to public and social situations while dropping their safety behaviours.

3. Pharmacological treatment
• Higher doses of SSRIs and longer durations of treatment than those used for other psychiatric disorders
• Clomipramine was also found to be effective among patients with delusional beliefs.

• Antipsychotic drugs have been disappointing according to retrospective case reports (Phillips 1996). Even delusional thoughts tend to be unresponsive and individuals may be troubled by adverse effects such as weight gain, which may exacerbate a body image problem.

4. Non-psychiatric medical treatment (e.g. surgery)

Non-psychiatric medical treatment does not appear to be effective for the majority of people with body dysmorphic disorder (Crerand 2006). Surgery is rarely helpful to patients with body dysmorphic disorder and cosmetic surgery can lead to never-ending requests for more surgery and consequent financial difficulty.

NICE Guidelines

**Mild:** Guided Self-Help

**Moderate:** SSRI or CBT

**Severe:** Combination therapy
Important Points in Delusional Disorder

In DSM-V Delusional Disorder comes under Schizophrenia Spectrum and other psychiatric disorders

1. The presence of one (or more) delusions with a duration of 1 month or longer
2. Criteria A for schizophrenia has never been met.
3. Apart from the impact of the delusions functioning is not markedly impaired and behavior is not bizarre or odd.

Subtypes include: erotomanic, jealous, persecutory, somatic, mixed type and unspecified type.

Differential diagnoses of delusional disorder

- **Affective psychosis**: delusions are mood-congruent and the affective component is clear
- **Anorexia nervosa**: low weight and disordered body image are diagnostic
- **Body dysmorphic disorder**: preoccupation with appearance specifically excluded from delusional disorder classification
- **Dissociative disorder**: abnormal experiences occur during dissociative state only
- **Emotionally unstable personality disorder**: characteristic identity and attachment issues, risk-taking behaviour and pseudopsychotic experiences from late teens (may be comorbid)
- **Panic disorder**: loss of insight occurs as part of panic reaction only
- **Paranoid personality disorder**: general suspicion and mistrust; when formulated into a clear belief system may be comorbid with delusional disorder
- **Obsessive–compulsive disorder**: usually ego-dystonic repetitive intrusive thoughts with ‘undoing’ rituals
- **Schizoaffective disorder**: as schizophrenia but significant affective component
- **Schizoid personality disorder**: cold, reserved, aloof, lack of emotional engagement (may be comorbid)
- **Schizophrenia**: auditory hallucinations, thought alienation phenomena, negative syndrome
- **Social phobia**: loss of insight occurs in social situation or situation of public performance
- **Somatisation disorder**: history tends to be vague and multiple fluctuating symptoms as opposed to a clear delusional explanation
Management Principles

1. Engagement
   • Attempt to establish a therapeutic alliance
   • Medico-legal framework may be necessary taking risks into account

2. Medication
   • No randomised controlled trial evidence
   • Case reports suggest that the disorder is amenable to treatment with any effective antipsychotic drug but that attention to adherence is important and patients may default on treatment without telling the clinician
   • Drugs amenable to plasma-level assay allow monitoring of adherence
   • Use a second-generation (atypical) antipsychotic for preference and begin with a low dose to reduce discontinuation due to adverse effects
   • Increase the dose as required in accordance with product recommendations
   • It may be necessary to try different drugs before finding one that the patient is prepared to take
   • If treatment has to be offered compulsorily, use an orodispersible form and monitor taking, or use depot/long-acting injection
   • No evidence for duration of maintenance treatment and it may be lifelong

3. Psychological therapy
   • Evidence only for cognitive therapy, which has trial data but is intensive and may not be cost-effective
   • Psychodynamic/psychoanalytical therapy has no evidence and may be harmful as it requires the patient to revisit their experiences in detail, thus re-affirming the delusional belief
   • Symptomatic work based around anger management, social skills and living skills as additional supportive treatment.
   • ECT: No evidence for long-term benefit unless there is underlying affective disorder

Reference

Obsessive Compulsive Disorder

The most common obsessions concern

- prevention of harm to the self or others resulting from contamination (e.g. dirt, germs, bodily fluids or faeces, dangerous chemicals)
- prevention of harm resulting from making a mistake (e.g. a door not being locked)
- intrusive religious or blasphemous thoughts
- intrusive sexual thoughts (e.g. of being a paedophile)
- intrusive thoughts of violence or aggression (e.g. of stabbing one’s baby)
- need for order or symmetry.

An important cognitive process in OCD is the way thoughts or images become fused with reality. This process is called ‘thought–action fusion’ or ‘magical thinking’ (Rachman, 1993). Thus, if a person thinks of harming someone, they think that they will act on the thought or might have acted on it in the past.

The most common compulsions

- Checking (e.g. gas taps; reassurance-seeking)
- Cleaning/washing
- Repeating actions
- Mental compulsions (e.g. special words or prayers repeated in a set manner)
- Ordering, symmetry or exactness
- Hoarding

Areas to cover in clinical assessment

- The context in which OCD has developed
- The nature of the obsession(s): their content; the degree of insight; the frequency of their occurrence; the triggers; the feared consequence (What is the worst thing that can happen?); the patient’s appraisal of the obsession (What did having the intrusive thought mean to you? What sense did you make of it? Could harm occur as a result of this? What would happen if you could not get rid of the intrusions?)
- The main emotion(s) linked with the obsession or intrusion
- The compulsion(s) and neutralising behaviours: what the person does in response to the obsession; a rating of predicted distress if the compulsion is resisted; the feared consequences of resisting it; their experience of trying to stop a compulsion; the criteria used for terminating the compulsion and the assumptions held if they stopped using a compulsion. Indirect assessment might include activities such as the number of rolls of toilet paper or bars of soap used per week
- The avoidance behaviour: all the situations, activities or thoughts
avoided are listed and rated on a scale (e.g. 0–100 in standard units of distress), according to how much distress the person anticipates if they experience the thought or situation without a safety-seeking behaviour

- The **degree of family involvement**
- The **degree of handicap in the person’s occupational, social and family life**
- **Goals and valued directions in life**
- **Readiness to change and expectations of therapy**, including previous experience of CBT for the disorder

**Treatment**

1. **Exposure and response prevention**

Behavioural therapy for OCD is based on learning theory. This posits that obsessions have, through conditioning, become associated with anxiety.

**The treatment method**

- A functional analysis is conducted and a hierarchy of the patient’s feared situations and thoughts is generated.
- Graded exposure beginning with the stimuli that are the least anxiety-provoking.
- The rationale of habituation is explained to the patient: repeated self-exposure to feared stimuli will lead to extinction.
- Response prevention involves instructing the patient to resist the urge to carry out a particular compulsion and wait for the ensuing anxiety to subside.
- Patients are never forced to stop a compulsion, but the therapist may act as a model for exposure and response prevention and gently encourage the patient to follow.
- Compulsions may be reduced gradually or patients instructed to delay their compulsive response for as long as possible.
- A patient unable to resist a compulsion to wash their hands would be asked to re-expose themselves to the feared stimuli – for example recontaminating themselves by touching a toilet seat and thus negating the effect of the compulsion.
- It is **essential that the involvement of the therapist fades over time**, with the patient taking responsibility for their progress.
- Prolonged (90 minute) exposure sessions held several times weekly with frequent homework will result in greater symptom reduction. Combining actual and imagined exposure is superior to actual exposure alone.

2. **Normalising intrusive thoughts and urges**

- The initial strategy in CBT is to normalise the occurrence of intrusions and to emphasise that they are irrelevant to further action.
2. Treatment Algorithm for treatment resistant OCD (pharmacotherapy only)

Consider adjunctive behavioural treatment with the below algorithm

Suggested pathway for treatment-resistance obsessive-compulsive disorder. SRI, serotonin reuptake inhibitor; SSRI, selective serotonin reuptake inhibitor

First-line treatment:
SRI, maximum dose, 12 weeks

Switch to SSRI or clomipramine, maximum dose, 12 weeks

Increase dose beyond formulary limits
Add second-generation antipsychotic

Add haloperidol
SSRI or clomipramine (both intravenous)
Venlafaxine
Combination SSRI and clomipramine

Novel agents
4. **Novel Agents**

- **Inositol**
- **Neuropeptides** e.g. oxytocin
- **Glutamate modulators**: A neuroimaging study found that children with OCD had abnormally high glutamatergic concentrations that decreased with SSRI treatment, in line with symptom severity (Rosenberg 2000). These findings have sparked a number of case reports and open-label series involving drugs that modulate glutamate.
  - Memantine, Riluzole, D-Cycloserine
  - **Ondansetron**
  - **Electroconvulsive therapy and transcranial magnetic stimulation**

5. **Neurosurgery**

- Modern stereotactic neurosurgical techniques (cingulotomy, capsulotomy) for resistant OCD ablate connections between the frontal lobes and subcortical structures
6. Deep-brain stimulation

Deep-brain stimulation (DBS) is based on neuro-modulation methods. It has been successfully used in the treatment of Parkinson’s disease and serves as an alternative to traditional neurosurgery. The technique involves implanting electrodes that deliver an electric current directly into the neural structures considered to underpin OCD (Krack 2010).

Key clinical points

- SSRIs are the cornerstone of pharmacological treatment and lead to substantial clinical improvement in the majority of cases
- SSRIs are the preferred first-line treatment; clomipramine is a good alternative for those who cannot tolerate or fail to respond to SSRIs
- Gradual dose titration upwards within licensed limits, measuring clinical response and side-effects, is appropriate
- Treatment at maximally tolerated dose levels for at least 12 weeks is advisable to properly assess effectiveness
- Clinical response should be measured objectively using standardised rating scales (e.g. Y-BOCS)
- In the majority of patients, symptoms respond only partially to SSRIs, and around one-third of patients do not achieve a clinical response
- Maintenance treatment appears to protect against relapse
- In treatment-resistant OCD, combination CBT plus pharmacotherapy, increasing dosages or switching between SRIs are practical next steps
- In refractory OCD, evidence supports the addition of dopamine antagonists at the lower end of their dosing range, although long-term data are lacking and the response remains unsatisfactory for many patients
- Novel pharmacological treatments such as drugs acting on the opiate, serotonin and glutamate systems offer promise and are under investigation

References

## Eating Disorder

Comparative clinical features of DSM-5 eating disorder diagnostic groups.

<table>
<thead>
<tr>
<th></th>
<th>Anorexia Nervosa (AN)</th>
<th>Atypical anorexia nervosa</th>
<th>Bulimia nervosa (BM)</th>
<th>Binge eating disorder</th>
<th>Avoidant/Restrictive food intake disorder</th>
<th>Purging disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overvaluation of weight/shape</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
<td>May occur</td>
<td>Not required</td>
<td>May occur</td>
</tr>
<tr>
<td>Fear of fatness and/or behaviour preventing weight gain</td>
<td>Required</td>
<td>Required</td>
<td>May occur</td>
<td>Uncommon</td>
<td>No fear of fatness but food is restricted</td>
<td>May occur</td>
</tr>
<tr>
<td>Underweight</td>
<td>Required</td>
<td>Not present</td>
<td>NA</td>
<td>NA</td>
<td>May occur</td>
<td>May occur</td>
</tr>
<tr>
<td>Unmet nutritional and/or energy needs</td>
<td>Required</td>
<td>Required</td>
<td>May occur</td>
<td>NA</td>
<td>Required</td>
<td>May occur</td>
</tr>
<tr>
<td>Overweight</td>
<td>NA</td>
<td>May occur</td>
<td>May occur</td>
<td>Not required but is common</td>
<td>NA</td>
<td>May occur</td>
</tr>
<tr>
<td>Regular (weekly) binge eating</td>
<td>May occur</td>
<td>May occur</td>
<td>Required</td>
<td>Required with distress and 3/5 descriptors</td>
<td>NA</td>
<td>Absent</td>
</tr>
<tr>
<td>Regular (weekly) compensatory behaviours</td>
<td>May occur</td>
<td>May occur</td>
<td>Required</td>
<td>Do not occur</td>
<td>NA</td>
<td>Regular purging required, not compensatory</td>
</tr>
<tr>
<td>AN not concurrent</td>
<td>NA</td>
<td>NA</td>
<td>Required</td>
<td>Required and no BN</td>
<td>Required and no BN</td>
<td>Not meeting full criteria for AN or ARFID</td>
</tr>
<tr>
<td>Subtypes</td>
<td>Restricting or binge purging</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>NA</td>
</tr>
<tr>
<td>Remission specifier</td>
<td>Partial/full</td>
<td>None</td>
<td>Partial/full</td>
<td>Partial/full</td>
<td>In remission</td>
<td>NA, is a subtype of OSFED</td>
</tr>
<tr>
<td>Severity specifier</td>
<td>BMI scale</td>
<td>None</td>
<td>Frequency of compensatory behaviours</td>
<td>Frequency of binge eating</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
**Important Points**

- **Bulimia nervosa and binge eating disorder are both defined in the DSM-5 by having regular and sustained binge eating episodes.**
- A new disorder added to DSM-5 is avoidant/restrictive food intake disorder (ARFID) which, like binge eating disorder, and in contrast to anorexia nervosa and bulimia nervosa, is not characterised by body image disturbance.

**Risk Factors**

- Female gender
- Being from the developed world where the ‘thin ideal’ prevails.
- Migrants from the developing world
- Those living in urban areas and undertaking life pursuits where body image concerns predominate, for example, competitive gymnastics and fashion modelling.
- Genetic predisposition
- Early menarche
- Epigenetic changes to DNA structure: food deprivation, severe trauma
- Family history of eating disorders
- Early attachment and developmental difficulties
- Premorbid obesity
- Interpersonal problems
- Dieting or other causes of rapid weight loss (Mitchison and Hay, 2014; Stice, 2002).
- Rapid weight loss from any cause, including physical illness, can trigger cognitive changes

**Psychological factors**

- A ‘milieu’ of weight concern in formative developmental years
- Low self-esteem (all eating disorders)
- High levels of clinical perfectionism for those with anorexia nervosa
- Impulsivity for bulimic disorders.
- Emotional and sexual child abuse increases personal vulnerability, most likely through impeding a robust sense of self-worth and adaptive coping. The eating disorder then provides a sense of improved self-esteem and self-control for the individual (Stice, 2002).
- Obsessive thinking about food, in turn precipitating and perpetuating the symptoms of anorexia nervosa (Keys et al., 1950).

**General principles of treatment for all eating disorders**

1. Person-centred informed decision-making
For children and adolescents the decision balance will be age appropriate and will involve their parents or legally appointed guardian.

2. Involving family and significant others

Unless there are contraindications or the individual is opposed, family or significant others should be enlisted as partners in the assessment and treatment process.

3. Recovery-oriented practice

4. Least restrictive treatment context

• Where possible, treatment should be offered in the setting that is least restrictive and best suited to the individual’s needs and preferences.

• Offering options and control can help with therapeutic engagement.

• Legislation in both New Zealand and Australia allows for involuntary assessment or treatment if a person with anorexia nervosa has impaired decision-making capacity, and is unable or unwilling to consent to interventions required to preserve life.

• Although involuntary treatment may provide the opportunity to prevent fatal complications, the potential adverse effects on therapeutic alliance needs to be considered (Carney et al., 2007).

• The short-term weight gain response of involuntary patients with anorexia nervosa has been shown to be comparable to those admitted voluntarily (Watson et al., 2000). Many of those who are treated on an involuntary basis later agree that treatment was necessary and remain therapeutically engaged (Guarda et al., 2007; Tan et al., 2010; Watson et al., 2000).

5. Multidisciplinary approach

• Medical, dietetic and psychological approaches. The general practitioner is often in the best position to be the key coordinating clinician, especially if the treating specialists are not co-located.

6. Stepped and seamless care

• Outpatient, intensive outpatient with meal support, day program, and inpatient treatment should be available.

7. A dimensional and culturally informed approach to diagnosis and treatment

Significant symptom variability occurs within and between individual experiences of anorexia nervosa, bulimia nervosa and binge eating disorder and other eating disorders. A rigid approach to diagnosis should be avoided (Pike, 2013).

Assessment

Comprehensive initial assessment of adults should include the following components:

1. History Taking: Symptoms of anorexia nervosa which include but are not limited to: dietary restriction; weight loss; inability to restore weight; body image disturbance; fears about weight gain; binging; purging; excessive exercise; early satiety; constipation; and the use of laxatives, diuretics, or medications to lose or maintain low weight (APA, 2013).

2. Disturbed eating behaviours, e.g. eating apart from others and
ritualistic patterns of eating such as prolonged meal times and division of food into very small pieces (Wilson et al., 1985).

3. **Accurately assess nutritional and fluid intake:** Specific enquiries made as to the adequacy of main meals and snacks consumed.

4. **Collateral:** Collateral sources such as family members and other clinicians involved in the person’s care should be utilised.

5. A brief **physical examination including measurement of weight, height, calculation of BMI, seated and standing pulse rate to detect resting bradycardia and/or tachycardia on minimal exertion due to cardiac deconditioning, blood pressure (seated and standing) and temperature.** These findings are needed to determine if immediate hospital admission is required. The assessment should also include any history of fainting, light-headedness, palpitations, chest pain, shortness of breath, ankle swelling, weakness, tiredness and amenorrhoea or irregular menses.

6. **Investigations:** Serum biochemistry to detect hypokalaemia, metabolic alkalosis or acidosis, hypoglycaemia, hypophosphataemia, and hypomagnesaemia, serum liver function tests, serum prealbumin levels and a full blood examination looking for evidence of starvation-induced bone marrow suppression such as neutropaenia and an electrocardiogram (ECG). A **bone mineral density scan** should be performed routinely if the person has been underweight for six months or longer with or without amenorrhea and thereafter every two years whilst still struggling with an eating disorder (Mehler et al., 2011).

7. **Assessing psychiatric comorbidity:** e.g. anxiety, depression, substance misuse, suicidality, personality disorders, anxiety disorders and deliberate self-harm. However, clinicians should be aware that depression, obsessional thinking, anxiety and other psychiatric symptoms can represent the reversible effects of starvation on the brain (Keys et al., 1950).

8. **Cognitive Assessment:** Assessing cognitive changes due to starvation such as slowed thought processing, impaired short-term memory, reduced cognitive flexibility and concentration and attention difficulties (Hatch et al., 2010).

9. **Possible predisposing and precipitating factors:** see risk factors above
## Indicators for consideration for psychiatric and medical admission for adults

<table>
<thead>
<tr>
<th></th>
<th>Psychiatric admission indicated&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Medical admission indicated&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>Body mass index (BMI) &lt; 14</td>
<td>BMI &lt; 12</td>
</tr>
<tr>
<td>Rapid weight loss</td>
<td>1kg per week over several weeks or grossly inadequate nutritional intake (&lt; 100kcal daily) or continued weight loss despite community treatment</td>
<td></td>
</tr>
<tr>
<td>Systolic BP</td>
<td>&lt; 90 mmHg</td>
<td>&lt; 80 mmHg</td>
</tr>
<tr>
<td>Postural BP</td>
<td>&gt; 10 mmHg drop with standing</td>
<td>&gt; 20 mmHg drop with standing</td>
</tr>
<tr>
<td>Heart rate</td>
<td>≤ 40 bpm or &gt; 120 bpm or postural tachycardia &gt; 20/min</td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td>&lt; 35.5°C or cold/blue extremities</td>
<td>&lt; 35°C or cold/blue extremities</td>
</tr>
<tr>
<td>12-lead ECG</td>
<td>Any arrhythmia including QTc prolongation, non-specific ST or T-wave changes including inversion or biphasic waves</td>
<td></td>
</tr>
<tr>
<td>Blood sugar</td>
<td>Below normal range*</td>
<td>&lt; 2.5 mmol/L</td>
</tr>
<tr>
<td>Sodium</td>
<td>&lt; 130 mmol/L*</td>
<td>&lt; 125 mmol/L</td>
</tr>
<tr>
<td>Potassium</td>
<td>Below normal range*</td>
<td>&lt; 3.0 mmol/L</td>
</tr>
<tr>
<td>Magnesium</td>
<td>Below normal range*</td>
<td></td>
</tr>
<tr>
<td>Phosphate</td>
<td>Below normal range*</td>
<td></td>
</tr>
<tr>
<td>eGFR</td>
<td>&lt; 60ml/min/1.73m² or rapidly dropping (25% drop within a week)</td>
<td></td>
</tr>
<tr>
<td>Albumin</td>
<td>Below normal range</td>
<td>&lt; 30 g/L</td>
</tr>
<tr>
<td>Liver enzymes</td>
<td>Mildly elevated</td>
<td>Markedly elevated (AST or ALD &gt; 500)*</td>
</tr>
<tr>
<td>Neutrophils</td>
<td>&lt; 1.5 × 10⁹/L</td>
<td>&lt; 1.0 × 10⁹/L</td>
</tr>
<tr>
<td>Risk assessment</td>
<td>Suicidal ideation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Active self-harm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderate to high agitation and distress</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Please note, any biochemical abnormality which has not responded to adequate replacement within the first 24 hours of admission should be reviewed by a medical registrar urgently.

<sup>b</sup> Patients who are not as unwell as indicated above may still require admission to a psychiatric or other inpatient facility.

<sup>c</sup> Medical admission refers to admission to a medical ward, short stay medical assessment unit or similar.
Treatment

1. Engagement
To enable therapeutic engagement it is crucial that the clinician take a non-judgemental, inclusive, empathetic and non-threatening stance. **Countertransference:** Treating someone with severe and enduring anorexia nervosa is an entirely different experience to more conventional treatment and the work can be long-term and not immediately rewarding.

2. Medical stabilisation
- Admission to hospital is indicated if the person is at imminent risk of serious medical complications, or if outpatient treatment is not working (Beumont et al., 2003).
- **Ideally, whenever possible and practicable, people with anorexia nervosa requiring admission should be admitted to a specialist eating disorders unit.** There is debate about rates of weight gain in inpatient settings with recommended rates ranging from 500–1,400g/week (NICE, 2004b; Yager et al., 2006).
- Where patients are at very high medical risk (e.g. with BMI < 12 or significant medical complications), they will need to be admitted to a medical setting with input from psychiatry consultation-liaison services until medically stabilised, before being transferred to a psychiatric or eating disorders specialist unit for ongoing nutritional rehabilitation and psychiatric treatment.

Physical and laboratory findings and their management

<table>
<thead>
<tr>
<th>System</th>
<th>Physical/lab findings</th>
<th>Action/investigation</th>
</tr>
</thead>
</table>
| Cardiac           |  • Bradycardia and/or hypotension and/or tachycardia and/or prolonged QT interval and/or arrhythmias<sup>a</sup> |  • ECG  
  • Cardiac monitoring  
  • Cardiology consultation  
  • Nutritional assessment/resuscitation  
  • Re-hydration: preferential use of oral fluids because of risk of cardiac failure, note glucose based solutions may increase risk of refeeding syndrome |
| Core body temperature |  • Hypothermia (may mask serious infection)                                              |  • Monitor; warm with external heat, nutrition                                       |
| Endocrine         |  • Hypoglycaemia<sup>b</sup>  
  • Poor metabolic control in co-existent Type I diabetes  
  • Amenorrhoea  
  • Secondary hyperaldosteronism<sup>c</sup> |  • If in first week of refeeding, give thiamine; ensure adequate, steady carbohydrate supply and monitor blood glucose levels  
  • Specialist management of diabetes  
  • Nutritional restoration until menstruation returns<sup>g</sup>  
  • Provision of very slow IV fluids |
### Fluid and electrolyte changes
- Hypokalaemia, hypochloraemia, metabolic alkalosis<sup>c</sup>
- Hypophosphataemia (frequently emerges during refeeding)
- Hypomagnesaemia<sup>c</sup>
- Hyponatraemia
- **Suspect purging, careful K+ replacement**: best orally and correct alkalosis first, monitor closely
- Phosphate Sandoz 500mg bd then recheck phosphate level, keep replacing until normal<sup>e</sup>
- Replace magnesium
- **Suspect fluid loading, or over drinking as part of weight loss behaviours. 1.5 litre/day fluid restriction. Monitor in all patients**

### Haematological
- Anaemia<sup>d</sup>
- Neutropaenia
- **Monitor in all patients. Consider iron level and stores of B<sub>12</sub> and folate. Replace as necessary**<sup>f</sup>
- Improve nutrition

### Gastrointestinal
- Severe acute pancreatitis<sup>c</sup>
- Parotid and salivary gland hypertrophy<sup>c</sup>
- Reduced gastric motility (and early satiety)
- Mallory-Weiss tears, ruptures<sup>c</sup>
- Oesophagitis
- Constipation
- Raised liver enzymes and low albumin
- **Bowel rest, nasogastric suction and IV fluid replacement**
- **Nil specific**
- Smaller but more frequent meals may be preferred
- Urgent surgical referral
- Consider proton pump inhibitor for severe symptoms – symptomatic relief for mild symptoms
- Reassure, increase nutrition, stool softeners (do not use stimulant laxatives such as senna)
- **Monitor/improve nutrition**

### Skin/bone
- Osteopaenia, stress fractures
- Brittle hair, hair loss, lanugo hair
- Dorsal hand abrasions, facial purpura, conjunctival haemorrhage<sup>c</sup>
- **Monitor bone density, nutritional restoration until menstruation returns, calcium<sup>h</sup> and Vitamin D, specialist referral**
- No specific treatment
- No specific treatment

### Dental
- Erosions and perimyilolysis
- **Dental referral**

---

<sup>a</sup> Cardiac arrhythmia is a common cause of death

<sup>b</sup> Hypoglycaemia in the first weeks is generally post prandial and occurs several hours after refeeding, hence some units preferentially use nasogastric feeding (Hart et al., 2011a)

<sup>c</sup> Complications caused by purging behaviours as well as starvation (Bahia et al., 2012)

<sup>d</sup> May be normocytic and normochromic, as characteristic of nutritional deficiency, but microcytic (iron-deficiency) is increasing as more people choose vegetarianism. Copper deficiency may also play a role.

<sup>e</sup> For patients at risk of refeeding syndrome (e.g. first 7-10 days of inpatient refeeding) prophylactic phosphate is recommended.

<sup>f</sup> Iron injections should not be given to the medically compromised patient as it is potentially hepatotoxic. Oral replacement is preferred.

<sup>g</sup> Oral contraceptives are not effective in restoring bone health

<sup>h</sup> Phosphate required to prevent or treat refeeding syndrome should take precedence over calcium. Calcium should not be given at the same time as phosphate.

<sup>i</sup> Mild acute pancreatitis is almost universal and not an indication for the proposed intervention.

Refeeding Syndrome

- Refeeding syndrome is understood to be due to the switch from fasting gluconeogenesis to carbohydrate-induced insulin release triggering rapid intracellular uptake of potassium, phosphate and magnesium into cells to metabolise carbohydrates (Kohn et al., 2011).

- The low body stores of such electrolytes due to starvation, can lead to rapid onset of hypophosphataemia, hypomagnesia and hypokalaemia. In addition, insulin-triggered rebound hypoglycaemia can occur, exacerbated by the fact that such patients have depleted glycogen stores.

- Risk of refeeding syndrome can be reduced by ‘starting low’ and ‘going slow’ with nutrition, and monitoring serum phosphate, potassium and magnesium daily for the first 1–2 weeks of refeeding, and replacing these electrolytes immediately if they fall below normal range.

- The CPG group recommends taking a ‘middle path’ with adults, commencing refeeding at 6000kJ/day. This should be increased by 2000kJ/day every 2–3 days until an adequate intake to meet the person’s needs for weight restoration is reached.

- This diet should be supplemented by phosphate at 500mg twice daily and thiamine at least 100mg daily for the first week, and thereafter as clinically indicated for people at high risk of refeeding syndrome (e.g. BMI <13).

- For people at high risk of refeeding syndrome, commencing with continuous nasogastric feeding with low-carbohydrate preparations (i.e. 40–50% of energy from carbohydrates) seems prudent to avoid triggering postprandial rebound hypoglycaemia due to insulin secretion in people with inadequate glycogen stores.

4. Specific Treatments

Individual therapies

- CBT-Enhanced

- Specialist supportive clinical management (SSCM) (McIntosh et al., 2006) has been shown in one trial to be more effective than CBT or interpersonal therapy.

- The Maudsley model of anorexia nervosa treatment for adults (MANTRA) is a recently developed manualised individual therapy for adults with anorexia nervosa, drawing on a range of approaches including motivational interviewing, cognitive remediation and flexible involvement of carers. It aims to address the obsessional and anxious/avoidant traits that are proposed as being central to the maintenance of the illness.

- Motivation-based therapies (motivational interviewing, motivational enhancement etc.), interpersonal psychotherapy, cognitive analytic therapy, focal psychoanalytic and other psychodynamic therapies.

- Family therapies (Family Based Treatment (FBT))
There is moderate research-based evidence for family therapies in younger people with anorexia nervosa up to their late teens, living with family and with an illness duration of less than three years, with evidence that family therapy is more effective than individual treatment.

5. Pharmacological Treatment

- Low doses of antipsychotics such as olanzapine may be helpful when patients are severely anxious and demonstrate obsessive eating-related ruminations
- In a single small double-blind trial, zinc supplementation was associated with a more rapid rate of body mass increase

Eating Disorders in Children and Adolescents

- The most common comorbid illnesses in adolescents with anorexia nervosa are anxiety disorders, including obsessive compulsive disorder (OCD) and major depressive disorder (MDD)
- Multidisciplinary assessments: professionals with expertise in psychiatric diagnosis, medicine and dietetics.
- Assessment should involve both children and their families or carers unless this is contraindicated due to safety concerns such as abuse or domestic violence (Mariano et al., 2013).

Management

In addition to principles discussed previously,

- Outpatient care as the first-line treatment in adolescent anorexia nervosa: It should typically include psychoeducation of families, nutritional and medical therapy (at times pharmacotherapy) and may require case management involving schools and other agencies.
Guidelines for inpatient admission for children

<table>
<thead>
<tr>
<th>Indicators for admission(^a) and specialist consultation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medical status(^b)</strong></td>
</tr>
<tr>
<td>Heart rate</td>
</tr>
<tr>
<td>Cardiac arrhythmia</td>
</tr>
<tr>
<td>Postural tachycardia</td>
</tr>
<tr>
<td>Blood pressure</td>
</tr>
<tr>
<td>Postural hypotension</td>
</tr>
<tr>
<td>QTc</td>
</tr>
<tr>
<td>Temperature</td>
</tr>
<tr>
<td>Hypokalaemia</td>
</tr>
<tr>
<td>Neutropenia</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
</tr>
<tr>
<td><strong>Children</strong></td>
</tr>
</tbody>
</table>

NB: These are a guide only and do not replace the need for individual clinical judgement.

\(^a\)For children, admission would generally be to a medical ward

\(^b\)People may also require admission for:

- Uncontrolled eating disorder behaviour
- Failure to respond to outpatient treatment
- Severe psychiatric comorbidity

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outpatient treatment is the first-line treatment in adolescent anorexia nervosa</td>
<td>EBR I</td>
</tr>
<tr>
<td>For most children and adolescents with anorexia nervosa, family based therapy (FBT) or an alternative family therapy is the treatment of choice</td>
<td>EBR I</td>
</tr>
<tr>
<td>Individual therapy should be considered in older adolescents with anorexia nervosa where family therapy is inappropriate or not suitable</td>
<td>EBR II</td>
</tr>
<tr>
<td>Options for individual therapy include adolescent focused therapy</td>
<td>EBR II</td>
</tr>
<tr>
<td>Options for individual therapy include CBT</td>
<td>EBR III</td>
</tr>
<tr>
<td>‘Treatment as usual’ is not supported in adolescent anorexia nervosa</td>
<td>EBR II</td>
</tr>
<tr>
<td>Use anxiolytic or antidepressant or other medications with caution</td>
<td>CBR</td>
</tr>
<tr>
<td>Selective serotonin reuptake inhibitors (SSRIs) are not indicated in the acute or maintenance stages of anorexia nervosa</td>
<td>EBR I</td>
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</table>
1. Psychological treatment

- **Family therapy:** (Family Based Treatment – FBT) **FBT is now the first-line treatment for adolescents with anorexia nervosa who are aged less than 19 years and have a duration of illness of less than three years**

- **Individual therapy:** Ego orientated individual therapy (EOIT) or a modification of it called adolescent focused therapy (AFT).

1. Nutritional Management

- Golden recommends a ‘target-weight’ between the 14th and 39th BMI percentile for age (Golden et al., 2008). Key and colleagues (2002) have promoted the use of pelvic ultrasound demonstration of ovarian follicles as an indicator of normal weight. This is likely to be achieved between the 13th and 30th BMI centile

- Use BMI Centile charts when monitoring

- Initiation of nutritional therapy in significantly malnourished adolescents has risks, and should be undertaken carefully, by experienced clinicians who are cognisant of the risk of refeeding syndrome

- For medically unstable adolescents the process should proceed cautiously, **that ‘full feeds’ for longer-term weight recovery should be achieved within 5–7 days of initiation, usually with the use of nasogastric tube feeding to ensure that nutrients are delivered, and that the risk of hypoglycaemia and electrolyte shifts is minimized.**

- Supplement with phosphate and thiamine during this period Monitoring of serum electrolytes and minerals is important during initiation of feeding.
Bulimia Nervosa and Binge Eating Disorder

Assessment

1. **Behaviours**: binge eating (uncontrolled episodes of overeating large amounts of food),

2. **Weight control behaviours** that may or may not be compensatory for binge eating (self-induced vomiting, laxative, and/or diuretic misuse)

3. **Dietary restriction and/or fasting, compulsive or driven exercise** and others such as insulin misuse in diabetic patients or misuse of diet pills or illicit stimulant drugs such as methamphetamine; and

4. **Cognitions of weight and/or shape overvaluation**, and body image and eating preoccupations.

5. People should be assessed for a **past history** of other eating disorders, especially anorexia nervosa

6. Other common **psychiatric co-morbidities** are anxiety and mood disorder(s), impulse control and substance use disorder

7. **Physical examination is important**: measurement of weight, height, pulse rate and blood pressure and calculation of BMI. Serum biochemistry should be done to check for hypokalaemia and dehydration (effects of purging behaviours).

8. **Investigations**: Other assessments such as random glucose and cardiovascular examination and ECG should be done as medically indicated.

Treatment

1. **Psychological therapies**

   - First-line treatment for bulimia nervosa and binge eating disorder in adults is an individual psychological therapy. **The best evidence for such therapy is for CBT.** CBT has been found to be superior consistently to wait-list control and most other psychological therapies for bulimia nervosa

   - A specific transdiagnostic enhanced therapy (CBT-E) developed by Fairburn (**Fairburn, 2008**) has been found more efficacious than other psychological approaches

CBT Steps

- **First stage**: Psychoeducation and a CBT informed formulation of the processes maintaining the person’s disorder

- Introduction of monitoring of key behaviours, establishment of regular meals and snacks, and within session weighing (sessions 1–7 over one month).

- The **second stage** (sessions 8 and 9, weeks 5 and 6) is a ‘taking stock’, or reflection and review phase with revisiting and modification of the formulation as appropriate.

- The **third stage** (sessions 10–17, weeks 7–14) is a personalised program where the main mechanisms maintaining the eating disorder are addressed. This includes the utilisation of behavioural experiments to reduce problematic behaviours, particularly those associated with
weight/shape overvaluation such as body checking, and an additional module addressing a core maintaining factor, namely mood intolerance.

- **Stage 4** (sessions 18–20, weeks 15–20) looks to the future, ensuring improvements are maintained and includes relapse prevention.

- A broad version (CBT-Eb) has been developed to address additional core maintaining factors with three optional modules addressing interpersonal deficits, clinical perfectionism and low self-esteem if applicable.

**Other psychological therapies**

**Weaker evidence base**

- IPT
- DBT
- Mindfulness

**2. Pharmacotherapy**

- **Tricyclic antidepressants** may be efficacious for people with bulimia nervosa

- **High dose fluoxetine (60mg/day)** is effective for people with bulimia nervosa and this or other SSRI antidepressants are effective for both bulimia nervosa and binge eating disorder.

- **The antiepileptic topiramate** also is effective in both conditions and is associated with weight loss. However, topiramate may cause problematic side effects such as paresthesias and taste perversion.

**Avoidant / Restrictive food intake disorder (ARFID)**

Restriction of food intake accompanied by one of the following: significant weight loss; significant nutritional deficiency; marked interference with social functioning; or dependence on enteral feeds or oral supplements, in the absence of body image concerns.

**Reference**

Palliative Care and Issues
(Including for Dementia)

Definition
An Approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems; physical, psychosocial and spiritual (WHO 2002)

1. **Physical health and collaborative treatment** with multiple specialties
2. **Pain:** Pain management specialists and stepped care approach (Non-opioids – Mild Opioids – Short opioids)
3. **Infections and fevers**
4. **Artificial nutrition and hydration** (tube feeding and risk of aspiration pneumonia)
5. **Resuscitation:** For Resus or Not for Resus
6. Awareness of medico-legal considerations (capacity, guardianship etc.
7. Involve family
8. Advanced care directives
9. **Families and Carers:** Carer burden, support and counseling
10. **Psychological, social and spiritual needs**
    • **5 stages of Kubler-Ross** (1970) reaction to a terminal diagnosis: Denial, Anger, Bargaining, Depression and Acceptance
    • **Spirituality:** What illness means to the patient and if there are any issues relating to god or dying)
    • **Difficulty in diagnosing depression** in context of physical disease (Anhedonia which is pervasive and extends to a loss of interest or pleasure in almost all activities is a valid criterion for diagnosing depression)
    • SSRI’s are useful antidepressants
    • **Consider Neuropsychiatric Disorders:** e.g. delirium due to medication or electrolyte abnormalities
    • **Coping Strategies** – CBT, Problem Solving Techniques
    • **Psychological management of physical symptoms:** CBT, relaxation, distraction, guided imagery, controlled breathing, hypnosis and cognitive restructuring
Depression in Physical Illness
(Olver and Hopwood MJA 2012)

1. Factors contributing to the increased risk of depression in physical illness
   - Biological
   - Hormonal, nutritional, electrolyte or endocrine abnormalities
   - Effects of medication
   - Physical consequences of systemic and/or intracerebral disease
   - Psychological
   - Sense of loss associated with serious medical illness
   - Effects on body image, self-esteem, sense of identity
   - Impaired capacity to work and maintain relationships

2. Diagnosis of depression in medical illness is difficult as many diagnostic tools rely heavily on the presence of neuro-vegetative symptoms for diagnosis.
   - The diagnosis of depression in medically ill patients relies more heavily on symptoms of psychological distress, including preoccupation with guilty themes and failure, impairments in self-esteem, and an inability to derive joy from previously enjoyed activities.
   - Hawton et al (1990) reported three cardinal affective symptoms that help to differentiate depression from non-depression in medical patients – depressed mood, morning depression and hopelessness.
   - Covert manifestations of depression include poor compliance or refusal of essential medical treatment.
   - Capacity assessment in refusal of medical treatment
   - Physical illness is inevitably associated with losses, and depressive symptoms such as sadness, worry and irritability may be judged by both patients and primary carers as an “understandable” reaction to these losses, and subsequently minimised in importance. This kind of misjudgement by the clinician can lead to either underdiagnosis of depression or overdagnosis and inappropriate prescribing of antidepressants, adding to the side-effect load of other medications.
   - The Center for Epidemiologic Studies Depression Scale (CES-D) is a 20-item self-report measure
   - The Hospital Anxiety and Depression Scale (HADS) is a 14-item self-report scale
Management

1. General Approaches
   - Re-examination of the illness and a thorough review of the treatments provided so far, including a review of the success or otherwise of treatments, and their side effects
   - A rehabilitation approach should be considered for chronic conditions, as a state of deconditioning may contribute to fatigue and loss of functioning, which tends to reinforce negative views of the self, lower self-esteem and confidence, and may contribute to maintaining a “sick role”.
   - **Impact of medications on mental state:** good evidence linking atypical depressive syndromes with corticosteroids, interferon-α, interleukin-2, gonadotropin-releasing hormone agonists, mefloquine, propranolol and some antiepileptic medications, including topiramate.
   - Sleep Hygiene techniques
   - A structured physical activity program tailored to the individual’s capacity can be beneficial for both the medical and emotional problems of the patient.
   - Peer support programs developed to help both patients and carers

2. Specific Approaches
   - Psychotherapeutic Approaches
     - Cognitive behaviour therapy (CBT): group or individual formats.
     - Relaxation training and supportive psychotherapy

3. Pharmacotherapy
   - Anti-depressant treatments were associated with consistently improved efficacy over placebo
   - TCA’s have increased side effect burden
   - Take into account pharmacokinetic interactions (e.g. displacement of warfarin by SSRI's, P450 enzyme inhibition or induction, elimination of drug).
   - Citalopram is the least likely of the SSRIs to interact with warfarin
   - Moderate renal insufficiency and careful monitoring of side effects

4. Important drug interactions
   - Reduce and monitor lithium levels if taking non-steroidal anti-inflammatory drugs
   - Reduce propranolol dose if selective serotonin reuptake inhibitors (SSRIs) have been prescribed
   - Reduce doses of tricyclic antidepressants (TCAs) or moclobemide if taking cimetidine
• Increase dose of TCAs by up to one-third if on a high-fibre diet
• Reduce and monitor warfarin dose if fluoxetine or fluvoxamine have been prescribed
• Reduce dose of donepezil if an SSRI is added
• Avoid monoamine oxidase inhibitors with opioids
• Dextropropoxyphene increases carbamazepine (CBZ) levels
• Avoid TCAs and CBZ if bone marrow suppression occurs due to chemotherapy
• SSRIs/clomipramine and selegiline (Parkinson's) may trigger acute confusion
• Lithium and sumatriptan (migraine) may trigger central nervous system toxicity
• TCAs have reduced efficacy and increased toxicity with the oral contraceptive pill

5. Specific disorders

Cardiovascular disease
• Myocardial infarction is associated with an increased incidence of depression, which in turn is associated with increased mortality post-myocardial infarction.
• First choice is an SSRI medication, avoiding fluvoxamine and citalopram if there is a risk of overdose, which has been linked to cardiotoxicity
• Of the newer antidepressants, mirtazapine is safe for patients with arrhythmias.
• Lithium is known to cause electrocardiogram (ECG) changes, such as flat or inverted T-waves (generally benign), and widened QRS complexes.

Hepatic disease
• All antidepressants are predominantly metabolised by the liver and so have increased half-lives with reduced clearance. Initial dosing of all antidepressants should be reduced by at least 50% in patients with hepatic insufficiency
• Desvenlafaxine does not undergo first pass metabolism
• Lithium is the mood-stabiliser choice

Renal disease
• In this group of patients, TCAs are probably safer than SSRIs. As with hepatic disease, the degree of renal impairment rather than the cause is most important.
• Carbamazepine and valproate are the preferred mood stabilisers in renal failure.
**Diabetes mellitus**

- Selective serotonin reuptake inhibitors may reduce serum glucose by up to 30% and cause appetite suppression, resulting in weight loss. Fluoxetine should be avoided, owing to its increased potential for hypoglycaemia, particularly in non-insulin dependent diabetes.

- TCAs are more likely to impair diabetic control as they increase serum glucose levels by up to 150%, increase appetite (particularly carbohydrate craving) and reduce the metabolic rate.

- Of the mood stabilisers, lithium can be used safely in patients without renal disease.

- Sodium valproate may give false positive urine tests (for glucose) in patients with diabetes.

**Neurological disorders**

- In patients with epilepsy, all non-MAOIs may lower the seizure threshold. SSRI’s are first choice

- TCA’s reduce seizure threshold

- **Parkinson’s Disease:** The amotivational syndrome of Parkinson’s disease may be difficult to distinguish from depressive illness, and the additional symptom of anhedonia is helpful in differentiating the two. TCAs are effective in Parkinson’s disease and their anticholinergic effects may help extrapyramidal symptoms (EPS), but potentially increase confusion.

- SSRIs may exacerbate tremor and should not be prescribed for patients on Selegeline (an MAO-B inhibitor), owing to serotonergic reactions and increased EPSE.

- Clomipramine and MAOIs should similarly be avoided with selegiline. Carbamazepine is the preferred mood stabiliser as lithium and valproate may exacerbate tremor.

- SSRI’s are drugs of choice post-stroke.

**ECT**

- ECT is used relatively safely in cardiac, pregnant and elderly patients. However, it is wise to proceed particularly cautiously in patients with increased intracranial pressure, a recent intracranial bleed or myocardial infarction, cerebral or aortic aneurysms, acute respiratory tract infection and patients at risk of complications from a general anaesthetic.

**Reference**

Principles of Recovery Oriented Practice

Recovery-oriented practice encapsulates mental health care that (ANZJP, 2014)

- **Recognises** and embraces the possibilities for recovery and wellbeing created by the inherent strength and capacity of all people experiencing mental health issues
- **Maximises** self-determination and self-management of mental health and wellbeing
- **Assists** families to understand the challenges and opportunities arising from their family member’s experiences
- **Provides** evidence-informed treatment, therapy, rehabilitation and psychosocial support that helps people to achieve the best outcomes for their mental health, physical health and wellbeing
- **Works** in partnership with consumer organisations and a broad cross-section of services and community groups
- **Embraces** and supports the development of new models of peer-run programs and services
- **Maximises** choice
- **Supports** positive risk-taking
- **Recognises** the dignity of risk, i.e. the individual’s right to make treatment choices that the treating health care team might not see as being the most effective decision
- **Takes into account** medico-legal requirements and duty of care
- **Promotes** safety,