



Mater Centre for Neurosciences

Functional Neurological Disorder (FND)

Learning guide



Exceptional People. Exceptional Care.

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Our Mission

In the spirit of the Sisters of Mercy, the Mater Hospital offers compassionate service to the sick and needy, promotes an holistic approach to healthcare in response to changing community needs and fosters high standards in health-related education and research. Following the example of Christ the healer, we commit ourselves to offering these services to all without discrimination.

Our Values

Mercy:	The spirit of responding to one another
Dignity:	The spirit of humanity, respecting the worth of each person
Care:	The spirit of compassion
Commitment:	The spirit of integrity
Quality:	The spirit of professionalism

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Functional Neurological Disorder learning guide

Aim

The aim of this guide is to provide new nursing staff and graduates an understanding of functional neurological disorder (FND). The guide breaks down the symptoms, assessment progress and treatment for FND.

Guide outline

- Introduction to FND
- Key terminologies
- Risk factors
- Symptoms of FND
- Assessment of patients with FND
- Caring for FND patients
- Transference and countertransference
- Important contacts and FND resources
- References

Introduction to FND

What is FND?

Functional neurological disorders (FND) comprise of somatic symptoms such as blackouts, paralysis and abnormal movements that suggest the presence of an underlying neurological condition but none of the symptoms are explained by diseases. FND is caused by a complex combination of biological, psychological and social factors on the brain ^[6,10].

A brief history of FND

Symptoms of FND date back to the 18th century, neurologists were perplexed as it became clear that functional symptoms had no detectable neuropathology. This gave rise to assimilating FND with 'feigning' or deducing that FND was a by-product from mental disorders. The terms 'conversion disorder' or 'hysteria' were therefore coined to describe this transition ^[7].

FND is still described as a 'crisis' among neurologists today. Some authors have interpreted FND as a primitive iconic language in which different symptoms have particular meanings. Others have argued that it would be better to conceptualise functional disorders with different symptoms as a single functional somatic syndrome ^[7,11].

Due to the complexity in understanding and diagnosis, neurologists are beginning to integrate positive signs of FND in presenting clinical symptoms and the patient's psychological background upon assessment.

Neurology is associated closely to psychology and psychiatry. All three specialties focus on the functions and disorders of a single organ, the brain. The notion that many of us in neurology have—that only a small subset of neurological disorders has a significant psychological/psychiatric dimension—is false. A neurological examination involving sensory and motor processes should therefore take into account of psychological, behavioural and social factors to be considered adequate. Psychosocial involvement among patients with disorders of the central nervous system is a rule, not an exception ^[1].

Patients with FND often come from complex psychological backgrounds, so it is important for healthcare workers to be aware of the correlation between these disciplines. The physical and psychological symptoms of disease can be related in the following ways ^[1]:

- Physical symptoms come to light by way of complex psychological processes.
- Psychological upset can manifest itself as physical symptoms.
- Physical disease commonly causes a secondary psychological reaction.
- Physical diseases affecting the brain can give rise, more or less directly, to psychological manifestations.

Despite not being well understood by many, FND is exceptionally prevalent. One third of presentations in neurology clinics, both outpatients and inpatients, are patients suffering from FND. Female patients are three times more common than male. FND is also common in young children and adolescents (two-fold more common in female), representing between 2-10% of patients seen in paediatric clinics ^[2,13].

Glossary of key terminologies

- **Functional:** Implies the problem culminates from a change in function (in the context of FND—the nervous system) rather than structure.
- **Hysteria:** An ancient term that describes a complex neurosis where psychological conflicts manifests into physical symptoms.
- **Dissociative disorders:** Indicates dissociation as the main mechanism in symptom manifestation. Dissociation has numerous definitions, but in the context of FND refers to two particular phenomena that will be explored in further detail later: derealisation and depersonalisation.
- **Psychogenic:** Suggests that symptoms are psychologically influenced.
- **Conversion disorder:** Proposition based on the idea of conversion from mental distress to physical symptoms.
- **Health Anxiety/Hypochondriasis:** Excessive anxiety about the possibility of a serious disease and stressing over minor symptoms. Patients typically seek reassurance from medical professionals but the effects are short lived.
- **Factitious disorder:** When patients intentionally fabricate symptoms for obtaining medical care.
- **Malingering:** Making up symptoms for material gain (healthcare, benefits, fraud).

Who is at risk?

No single mechanism has been identified as sufficient to explain the onset of FND but rather several interacting factors. *Predisposing factors* increase the patient's vulnerability to FND. *Precipitating factors* include historical and immediate precipitants. *Perpetuating factors* maintain or exacerbate the problem. Table 1 lists some of the possible factors that contribute to the development of FND ^[10,11].

Factors	Biological	Psychological	Social
Factors acting at all stages	<ul style="list-style-type: none"> • 'Organic' diseases • Female gender • History of previous functional symptoms 	<ul style="list-style-type: none"> • Emotional disorder • Personality disorder 	<ul style="list-style-type: none"> • Socio-economic/deprivation • Life events and difficulties
Predisposition (Vulnerabilities)	<ul style="list-style-type: none"> • Genetic factors affecting personality • Biological vulnerabilities in the nervous system 	<ul style="list-style-type: none"> • Perception of childhood experience as adverse • Personality traits • Poor attachment/coping style 	<ul style="list-style-type: none"> • Childhood neglect/abuse • Poor family functioning • Symptom modelling of others
Precipitants (Triggers)	<ul style="list-style-type: none"> • Abnormal physiological event (drug side effect, hyperventilation, sleep deprivation) • Physical injury/pain 	<ul style="list-style-type: none"> • Perception of life event as negative/unexpected • Acute dissociative episode/panic attacks 	<ul style="list-style-type: none"> • Bereavement
Maintaining Factors	<ul style="list-style-type: none"> • Plasticity in CNS motor and sensory pathways leading to habitual abnormal movements • Deconditioning • Neuroendocrine and immunological abnormalities similar to those seen in depression/anxiety 	<ul style="list-style-type: none"> • Illness beliefs • Perception of symptoms as being irreversible • Not feeling believed • Perception that movement will cause damage • Avoidance of symptom provocation • Fear of falling • Hypochondriasis 	<ul style="list-style-type: none"> • Social benefits of being ill • Availability of legal compensation • Ongoing medical investigations and uncertainty • Excessive reliance on sources of information or group affiliation which reinforce beliefs that symptoms are irreversible and purely physical in nature

Table 1: Potential aetiological factors in patients with FND ^[10,11]

Symptoms of FND

Despite having no physical explanations for the symptoms, patients are not imagining or feigning their disorder. Currently, the two most common subgroups of FND are:

Functional motor disorders

Patients display a range of debilitating physical symptoms including:

- Limb weakness
- Dysphagia
- Chronic pain
- Sensory symptoms
 - Visual disturbances
 - Cognitive symptoms
- Tremor
- Dystonia
- Gait disorders
- Fatigue

These symptoms are unexplained by any organic disorders ^[6,13,15].

Dissociative attacks

Often referred to as non-epileptic seizures/attacks, these episodes involve altered movements, sensations or experiences that closely resemble epileptic seizures but are not associated with ictal electrical discharges in the brain. The most common semiology are excessive movements of limbs, trunk and head that loosely portray tonic-clonic seizures; stiffening, tremor, atonia and loss of responsiveness may also occur ^[10,11].

The driving force behind these attacks is dissociation. This is frequently a behavioural response to mental, physical (including sensory overload) or social stress characterised by depersonalisation and derealisation. Depersonalisation refers to the feeling of disconnection from the body or thoughts; derealisation is the disconnection from the surrounding; and dissociation is the blanket term ^[12].

It is inadvisable to refer to dissociative attacks as 'non-epileptic' or 'seizures' as this may give the impression of epilepsy for FND patients. This will stem the belief that anti-epileptic medications will alleviate their symptoms when this is not the case.

Assessment for FND patients

Incongruities can arise with physical examinations as they often appear normal or inconsistently abnormal. Neurological assessments therefore should be thorough and not be regarded as prelude to treatment but rather the first stage of treatment itself. Assessment is not only for obtaining information but also aims to enable the patient to feel unburdened and gain confidence in their treatment team ^[14].

Barriers to effective assessment

Patients with FND have often had bad experiences when seeking help, common reasons include ^[14]:

- Not getting the chance to describe their symptoms, cause and discussion of potential treatment.
- Feeling that symptoms were dismissed or disbelieved.
- Perception that the doctor was adamant on finding a psychological problem to pin their symptoms on.
- Not being given enough time.

Obtaining patient's history

Keeping potential unpleasant previous experiences for the patient in mind, some therapeutic suggestions for obtaining history include ^[12,13,14,15]:

- **Cover all symptoms:** Ask about fatigue, pain, sleep and concentration. The more symptoms the patient has, the more likely it is that the primary symptoms will not be due to a recognised disease.
- **Ask about dissociation:** Dissociative symptoms are common in panic attacks and persistent fatigue but can be experienced in isolation. They are especially common in patients with dissociative attacks and patients with sudden onset functional motor symptoms. Patients are rarely able/willing to describe these symptoms spontaneously, partly because they do not know which words to use but also the fear that the clinician will think that they are mad. Therefore, it may be necessary to ask direct questions to reveal these symptoms. A patient discussing dizziness or spinning may actually be describing dissociative symptoms.
- **Ask what the patient think may be wrong and what should be done:** Does the patient have any thoughts on why they have their symptoms? What does the family/friend think? Does the patient think they have epilepsy or Lyme disease? Take note if you are aware of this to tailor your explanation for later. The discussion becomes therapeutic when the patient or family experiences relief by getting their worst fears and concerns out into the open. Find out if the patient actually wants to try to get better or did they only present because their GP referred them? What do they think will help? It is difficult to treat patients who do not want or who are not motivated to improve.
- **What happened on previous experiences:** If the patient tells you their previous doctor told them that the symptoms were 'all in their mind', it is an indicator that the patient may be sensitive to psychological questions.

- **Be mindful of ‘psychological’ questions:** It may be tempting to dive into questions about depression, anxiety or stress, however it is not always necessary. Questions about prior psychological trauma such as physical or sexual abuse may be unnecessarily intrusive on the first assessment unless the patient specifically wants to discuss it. If these things are required to be discussed, it is best to wait until the patient has gained confidence in their treatment team.

Assessment for specific symptoms

Assessment for specific functional neurological symptoms is a complex task and is most commonly performed by neurologists. There are many tests for functional motor disorders due to its broad nature. One example is the Hoover’s sign which tests for functional lower limb weakness (Figure 1) [6,14].



Test hip extension hip extension is weak



Test contralateral hip flexion against resistance—hip extension has become strong

Figure 1: Hoover’s sign is one of many tests to examine functional motor symptoms [6]

In terms of dissociative attacks, video-encephalogram (VEEG) is the gold standard diagnostic tool. Approximately 50% of patients will experience an attack during a short monitoring session, especially those who have ‘medical settings’ as a trigger. However, a normal surface ictal EEG during a dissociative event **does not** exclude epilepsy [5,13,14].

There have been cases where prolonged dissociative attacks were mistaken for status epilepticus (life-threatening persistent epileptic seizures) and the patient was wrongly hospitalised to receive unnecessary and potentially life-threatening interventions. It is therefore imperative that the two are clearly distinguished (Table 2) [13].

Distinguishing features	Dissociative events	Epileptic seizures
Duration over 5 minutes	Common	Rare
Gradual onset	Common	Rare
Eyes and mouth closed	Common	Rare
Resisting eye opening	Common	Very rare
Post ictal weeping/upset	Occasional	Rare
Side-to-side head movements	Common	Rare
Respiration	Often fast	Ceases
Grunting sound	Occasional	Common
Recall for period of unresponsiveness	Common	Very rare
Aura	Common	Common
Attacks rising from sleep		
Occasional	Common	

Table 2: Dissociative attacks versus epileptic seizures ^[14]

DSM-5

The most recent model of the diagnostic and statistical manual of mental disorders (DSM-5) removed both the requirement for a 'recent psychological stressor' as well as 'the need to exclude feigning' when it comes to diagnosing FND ^[8].

DSM-5 criteria for functional neurological disorder

1. One or more symptoms of altered voluntary motor or sensory function.
2. Clinical findings provide evidence of incompatibility between the symptom and recognised neurological or medical conditions.
3. The symptom or deficit is not better explained by another medical or mental disorder.
4. The symptom or deficit causes clinically significant distress or impairment in social, occupational, or other important areas of functioning or warrants medical evaluation.

Table 3: DSM criteria for FND ^[14]

Are patients making it up?

Unfortunately, patients who stimulate symptoms solely to obtain medical care do exist but they only account for some 5% of hospital presentations in the FND cohort. The main clues in recognising malingering or factitious disorders are ^[13]:

- Inconsistency in the history on different hospital admission (between patient, doctors or relatives).
- An admission from the patient who has been dishonest in the past.
- Deliberate avoidance of tests.
- A direct confession.
- Evidence of gross inconsistency between proclaimed symptoms and covert surveillance (a patient with bilateral lower limb weakness seen running).
- Stimulation of symptoms that mimic disease very closely (displaying head aversion and tonic clonic movements in a dissociative attack) or mimicking the symptoms of other patients.

FND under Imaging

Progress has been made in understanding the mechanisms of FND. Several recent imaging studies have attempted to gain a better understanding of the neural basis of FND ^[4].

A recent study has detected a pattern of activation involving basal ganglia and the cerebellum in patients with functional dystonia in contrast to 'organic' dystonia where the activation lies in the primary motor cortex. Furthermore, patients with functional dystonia may share features with a right parietal lobe syndrome named 'xenomelia', where healthy individual actively seek limb amputations. Magnetoencephalography studies have revealed reduced activation of the right superior parietal lobule during sensory stimulation of the affected limb, a brain region associated with body image and out-of-body experiences ^[4].

A functional MRI study showed greater activity in limbic structures (right amygdala, left anterior insula and bilateral posterior cingulate area) and decreased activity in the left supplementary motor area (SMA) during a motor preparation task in FND patients compared to a healthy control group. This indicates a possible mechanism of abnormal emotional process that is actively interfering with normal motor planning. Additionally, the left SMA had lower functional connectivity with bilateral dorsolateral prefrontal cortex regions during internally versus externally generated movements, providing evidence for impaired top-down regulation of action selection ^[4,8].

Other subsequent studies have supported this functional connectivity between the SMA and the amygdala. One functional MRI study in particular using emotional stimuli to induce stress found enhanced activity in the amygdala in FND patients compared to healthy control group ^[8].

Caring for patients with FND

Explanation of diagnosis

The first step to successful management of functional symptoms is the appropriate explanation from healthcare professionals. Current expert opinions stress the importance developing good rapport with the patients. This means communicating the diagnosis in clear terms and providing a disease model that enables the patient to clearly comprehend their symptoms ^[6,13].

Most patients will want to know the cause of their symptoms. Explaining the diagnosis in a transparent, rational and non-offensive manner is crucial. This can be adequate in producing improvements in patients.

There is no “one size fits all” solution. Nevertheless, common pointers towards a successful explanation are listed below ^[6,12,13,14]:

- **Explain what they do have:** “You have a functional weakness.” It is advisable to emphasise on the mechanism of the symptoms rather than the cause. For example: “Your nervous system is not damaged but it also isn’t working properly (functional weakness)” or “You are going into a trance-like state, like being hypnotised (dissociative attacks)”
- **Metaphors and comparisons can be helpful:** “Imagine the hardware of a computer is intact but there is a software problem”; “It’s like a piano that is out of tune”; “Something similar to a short circuit on your nervous system (dissociative attacks)”; “It is the total opposite to phantom limb where they can feel a limb that is not there, you cannot feel one that is (functional weakness).”
- **Indicate that you believe them:** The key concern for patient with FND is often that their treating team do not believe them or think they are mad/imagining/feigning their symptoms. If this is noted, something as simple as “I do not think you are imagining or putting on the symptoms” can be very effective in building rapport.

This is especially important as there is good evidence suggesting patients with FND often feel disbelieved by their therapists and are understandably angry when their symptoms are not taken seriously. Many will then look elsewhere for a diagnosis, thus, consuming further resources in second opinions and unnecessary investigations.

- **Explain what they do not have:** Emphasise the disorders that the patient does not have to alleviate health anxiety. For example: “You do not have epilepsy, stroke, etc.”
- **Emphasise that it is common:** “I see lot of patients with similar problem” is often enough to reduce the sense of alienation.
- **Emphasise reversibility:** For example: “Because there is no damage, you have the potential to get better.”
- **Emphasise self-help:** Encourage the patient to feel the sense of empowerment over their symptoms. For example: “This is not your fault and there are things you can do to help you get better.”
- **Use supporting information:** Give the patient some written information or direct them to other resources (figures 1-3, page 23).

- **Explore the psychiatric spectrum:** Use your clinical judgement to assess whether this will be helpful or not, especially at an early stage. Explain to the patient that psychiatric disorders (depression/anxiety/stress) can worsen the condition. Patients who do not show signs of responding to treatment may benefit from psychological/psychiatric involvement.
- **Talk to family and friends:** Explain and reinforce the diagnosis with the patient's family and friend to enhance understanding.

Appendix 1 (page 24) is a template on how to answer difficult questions from FND patients by a psychologist at the Mater with clinical interest in FND.

For patients with mild FND symptoms, explanation, reassurance and encouragement to reengage in their normal daily activities may be sufficient to facilitating good recovery.

Unfortunately, there will be patients who will present with more persistent symptoms and will require more extensive treatments.

Allied health

Patients with physical symptoms (gait disturbance, weakness, paralysis, dystonia, etc.) will often need physical treatment. Allied health professionals including: speech pathologist, occupational therapists and physiotherapists then becomes integral to the patient's recovery process ^[6].

Neuro-physiotherapists can offer education, movement retraining and self-management strategies. Recent research has demonstrated marked improvements in functional motor symptoms in patients who work closely with physiotherapists ^[5,6,8,9].

Occupational therapists are able to build good rapport with patients and help them with self-explorations to understand what they can/can't do, as well as, determining and addressing the specific blockages for their normal everyday functioning. This is done through a wide range of activities and relaxation techniques. Appendix 2 (page 26) explores the occupational therapy aspect in FND treatment from one of the Mater occupational therapists ^[6].

Medications

Generally, pharmacological therapy for FND is avoided when possible. In the clinical practice, their use may not be welcomed by many patients due to:

- Psychiatric stigma
- Perception of addictive and harmful properties
- Side effects

Nevertheless, antidepressants have demonstrated benefits even in those who do not have comorbid mental disorders. Tricyclics are helpful in those with insomnia and pain. Serotonin reuptake inhibitors are good for hypersomnia but not so good in pain management. Neuropathic analgesia such as gabapentin or pregabalin are used in chronic pain. Patients are often explained to that they can get better without the tablets but they are worth trying for those who are looking to explore every therapeutic avenue ^[12,13,15].

Psychiatry/psychology

Around one third of patients with FND have a comorbid psychiatric condition. Some patients experience depression and anxiety as a result of having their functional symptoms. For others, a history of trauma or adverse childhood experiences can make them vulnerable to developing

FND. Psychologists and psychiatrists can assist in the management of comorbid mental health conditions and in the treatment of FND.

Cognitive behavioural therapy (CBT) is an evidenced based psychological approach for treating FND. This can include exploring the symptoms and identifying behaviours and cognitions (thoughts) that maintain or exacerbate the symptoms to increase the patient's awareness of their symptoms. A range of CBT strategies can be taught to the patient to assist them manage their FND and mood symptoms to maximise their everyday function. (Table 3) ^[1,6,8,13,15].

	Dissociative attacks	Functional weakness
Old thought	"Oh no! What is happening to me? Do I have epilepsy? Am I going to die during one of these attacks?"	"Do I have multiple sclerosis? I'm going to end up in a wheelchair!"
Old behaviour	Avoid social interactions, tendency to succumb to attacks as a way of getting rid of warning symptoms.	Seeing many specialists, not doing much just in case symptoms are exacerbated.
New thought	"I'm having something that is similar to a panic attack"	"It's a strange diagnosis but seems like I have the potential to get better."
New behaviour	Tries distraction techniques during warning signs to negate attacks.	Gradually exercises, learn to expect relapses, good days and bad days.

Table 3: Example of changes in thoughts and behaviours of FND patients accompanied by good understanding of their symptoms ^[13]

Studies have shown that CBT has been especially effective in helping patients with dissociative attack. In the United Kingdom, guidelines have been developed for CBT aimed at patients with dissociative attacks, these involve ^[8]:

- Techniques for interrupting behavioural/psychological/cognitive warning signs at the start of an attack.
- Enabling patients to engage in the activities they were avoiding.
- Tackling unhelpful thoughts which may have influence on attack control, self-esteem, mood and anxiety.

Psychiatrists/psychologists can also assist in recovery by ^[13,15]:

- Spending longer on specific techniques to deal with anxiety and panic symptoms.
- Reinforce explanation about FND symptoms.
- Discuss how previous life events/personality traits may help explain the patient's vulnerability to symptoms.
- Monitor medication treatments.
- Detect and treat other comorbid psychiatric disorders (bipolar, depression, post-traumatic stress disorder, etc.).
- Involve another pertinent professional—community psychiatric nurse, psychotherapist, etc.

Other treatments

A variety of other physical treatments have been gaining traction in their potential to help the treatment of FND.

Hypnosis and light sedation can transiently or sometimes permanently improve the posture of a dystonic limb or help regain function of a paralysed limb. The procedure is video recorded and played back to the patient to help them believe their condition can be reversed ^[8].

Transcranial magnetic stimulation (TMS) has been a recent interest in the treatment for functional movement disorders. Applied at supra-motor-threshold intensities to the contralateral motor cortex, TMS can produce jerky movements in the functionally weak, dystonic or tremulous limb. Despite its mechanism in functional movement disorders remain uncertain; TMS has shown promising results in clinical trials ^[8].

Transcutaneous electrical nerve stimulation (TENS) was also trailed with some promise, producing stimulation intensity sufficient to produce a 'tingling sensation' without muscle twitching or pain. It is primarily focused on patients with sensory symptoms such as numbness or allodynia ^[8].

Biofeedback treatment for functional tremors use tactile and auditory external cueing for real time visual feedback to help retrain the patient's tremor frequency has also been trialed with promising results ^[8].

Aids and appliances

These can be helpful in providing independence and bolstering confidence. However, negative effects such as increased dependence on them and decreased activity have been observed. They can also pose a barrier to recovery and should be considered last resort ^[13,15].

Disability benefits

Similar to aids and appliances, disability benefits are also exquisite barriers to recovery. Such benefits can be so substantial that they are more than the patient's previous earnings, leading to a situation where the patient will lose money when they recover. Many controversies still revolve around this topic and it may be useful to discuss openly with the patient. Remember that there is evidence to suggest that secondary gain is a greater factor in patients with FND ^[13,15].

The nursing role in FND

Nurses can play a critical role in FND patient care especially inpatients. By providing round the clock care for these patients they are able to help monitor patient progression outside of therapeutic sessions provided by the multi-disciplinary team. Nurses are also able to help reinforce positive behaviours and strategies taught to FND patients by guiding patients through the reflective practice model. A strong multi-disciplinary team must include nurses in care planning to ensure that every profession is well informed of the goals of treatment.

Nursing responsibilities

- Provide around the clock hands on patient care
- Observe and monitor patient conditions
- Recording and maintaining communication with the multidisciplinary team
- Emotional support to patient and families
- Educational support

Nursing responsibilities for FND patients are no different from any other type of patient. However the way that you interact with FND patients can make a big difference in the outcomes of their inpatient care.

Nurses are around 24/7 and often deal with scenarios when the doctor or allied health profession are not there. Creating a positive environment for FND patients is key so that they are able to approach nurses with issues when members of the MDT are not available.

It is important to make a point of introducing yourself to the patient at the start of the shift and let them know that you are there to provide them with support and help.

FND patients will have treatment plans devised by physiotherapists, psychologists and occupational therapists. Nurses need to help facilitate and promote these plans to help maximise patient progress.

When patients are not following the treatment plan or are not engaging, nurses are in an ideal position to find out why this is happening. Some of these issues may be able to be solved with some extra support from nurses on the ward. If the issue is not able to be solved it needs to be documented for the appropriate members of the MDT to help.

Nurses must be mindful about disclosing sensitive patient information. Choosing where and when you disclose information (even to other nurses) can have a big impact on patient care. Before discussing anything consider if the language you would like to use appropriate?

Using the correct terminology when speaking to FND patient and their families is important for all professions treating FND patients. You should not be afraid to correct terminology with patients and their families. It may take time for their language behaviours to change, however if nurses can help to reinforce proper terminology it may help patients and families to understand their diagnosis.

Diagram 1 displays the reflective cycle model. This is an extremely useful tool that nurses and other professions can use when a FND patient is suffering from an episode.

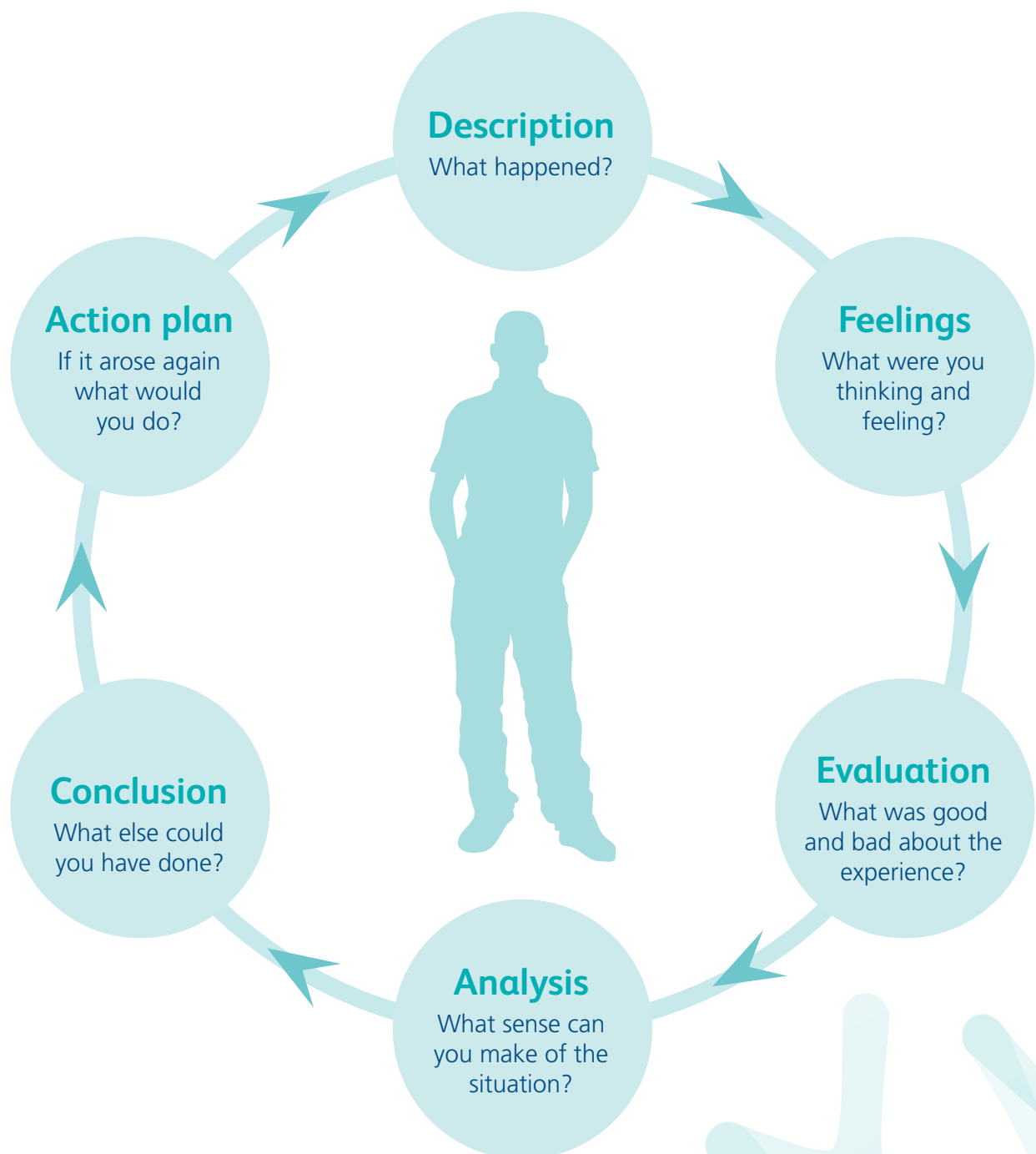


Diagram 1: Reflective cycle model (Gibbs 1988) ^[17]

Below is an example of how the reflective model can be used:

Mr X is a 35 year old male who suffers from functional lower limb weakness. He has been given a diagnosis of FND by the neurologist and has been seen by physiotherapy who have given him some exercises and coping strategies. He has notified a nurse that he is experiencing an episode of weakness.

Nurse: Hi Mr X, can you (DESCRIBE) to me what is happening?

Mr X: My legs suddenly felt really weak and I can't walk.

Nurse: Mr X were you thinking of anything or (FEELING) anything at the time your legs started feeling weak.

Mr X: I remember being very anxious about my next appointment with the occupational therapist and all of a sudden I felt weak in the legs.

Nurse: What do you feel was good or bad about the experience? (EVALUATE)

Mr X: I feel that it was good that I could call you for help. I think it was bad that my legs felt weak after worrying about my next appointment.

Nurse: What can you make sense of the situation? (ANALYSIS)

Mr X: I think that the weakness was caused by the anxiety I felt when I thought about my next therapy appointment.

Nurse: Was there anything else you could have done? (CONCLUSION)

Mr X: I did call for help, but the physiotherapist did teach me some breathing exercises. Next time I will try that first before calling for help and see if it helps.

Nurse: If that feeling happened again what would you do differently? (ACTION PLAN)

Mr X: Next time if I feel anxious I will try some deep breathing to try and calm my thoughts before calling for help to see if I can stop my limbs from becoming weak before it happens.

This example is an optimal outcome for the patient however not all patients respond in a cooperative and polite manner. Nurses need to understand that the reflective model takes time for patients to practice and nurses can help guide them through the steps with the goal that patients will eventually begin to perform the steps of the reflective model independently to help themselves begin to identify their triggers and self-manage symptoms independently.

Transference and Countertransference

Transference

Transference is a phenomenon where the feelings, desires and expectations of an individual is redirected and applied to another person. In a clinical context, the person in therapy applies certain feelings and expectations towards the therapist ^[16].

Transference can be either positive or negative. The type can depend on the person's social background or mental health. It is established that patients with FND often come from a complex social or psychological background thus it is important that the clinician is aware of how the patient projects themselves towards them.

A complex background may often result in negative transference. For example, an adolescent with history of childhood abuse may appear reserved and disconnected from an older neurologist; a person with history of domestic abuse from their partner may be defiant of healthcare worker of their partner's gender; a patient who felt disbelieved by a previous doctor may harbour disdain for neurologists ^[16].

However, positive transference is also common. Patients may see healthcare workers as kind, helpful, experts in their symptoms and in charge of their recovery. This is especially seen in those who are vulnerable and are genuinely seeking help for their symptoms.

When transference occurs, the clinician may be able to come to a better understanding of the individual based on the feelings projected, and thus, help the person in therapy to achieve goals in recovery. If correctly deployed, transference is an excellent therapeutic tool in understanding the patient's conscious and repressed feelings. Once well understood, recovery is much more likely to be successful if these underlying issues are exposed and addressed ^[16].

Countertransference

Often as a direct result to transference, countertransference is when the therapist transfers emotions to the person in therapy. As with transference, it can also be helpful or problematic ^[3].

Good countertransference is beneficial to the recovery process and helps to build the patient to clinician rapport. A therapist may meet a person who has difficulty initiating conversations. The therapist may begin conversations and lead them to provide additional prompts to the patient and encourage discussion. Clinicians who have experienced the same issues as their patients may also be able to empathise with them more deeply.

Some cases of countertransference can be negative. For example, an adolescent with a history of childhood abuse is defiant of a therapist. The therapist therefore becomes more controlling as if they were disciplining their own child. Another example could be a patient who felt disbelieved by a previous neurologist encountering a neurologist who just had experience with a patient feigning their FND symptoms. The situation leads to a total breakdown in communication as both party became increasingly cynical towards one another. Therefore, if negative countertransference is not appropriately recognised, it could negatively impact the relationship and perpetuate unhealthy patterns in the patient. This can even become harmful if the therapist uses the person in therapy to meet their personal psychological needs ^[3]. It is therefore important for healthcare workers to make the distinction between helpful and unhelpful countertransference. Having a good level of self-awareness, developing a healthy professional boundary and be aware of the threats that negative countertransference poses to the therapeutic relationship is recommended ^[3].

When the patient does not get better

Despite having 'no' disease, it is unreasonable to expect that every patient with FND will respond well to treatment. A substantial number of FND patients cannot understand or refuse to accept their diagnosis and do not benefit from treatment ^[13,14,15].

Common features pertaining to patients whom treatment fails include ^[14]:

- Inability to repeat back anything regarding their diagnosis despite receiving thorough explanation of their condition from the neurologist.
- Personality disorders.
- Very fixated views on an alternative diagnosis.
- The presence of a legal case or benefits.
- Long-standing or disabling symptoms.

It is important to recognise that there are a group of FND patients who understand their diagnosis and comply with treatment but do not see much improvements.

It is important for health professionals to recognise when treatment has not helped. It will be futile to ask both patient and therapists to continue treatment that will probably fail, demoralising both parties.

Therefore, clinicians should be at times willing to accept that they are unable to help underlying symptoms as with many other neurological conditions. These situations would warrant the use of aids such as wheelchairs or house adaptations as appropriate ^[13,14,15].

Financial benefits for disability can also be considered even though they form a large barrier to recovery. These things can be discussed explicitly with the neurologist. Ongoing surveillance should be put in place to monitor any treatable comorbid conditions (depression, anxiety) and reviews should be made if any new treatment options arise ^[14,15].

Additional resources

Free online self-help information has been developed in recent years for patients with FND symptoms.

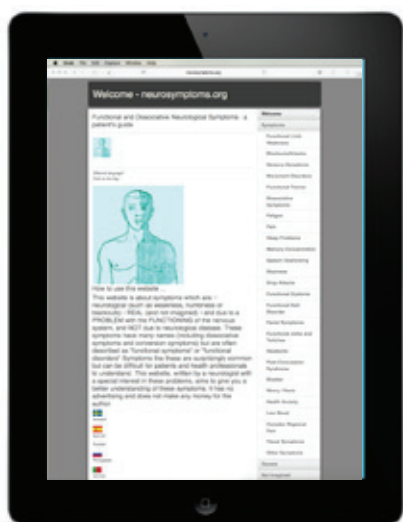


Figure 1: The site www.neurosymbols.org was developed in Edinburgh in 2009 by Jon Stone (consultant neurologist and honorary senior lecturer in Edinburgh with specialty interest in FND) and contains a wide range of information for patients with FND.



Figure 2: Another site www.nonepilepticattacks.info is developed to provide information specifically for patients suffering from non-epileptic attacks in 2011 by Sheffield hospital in the United Kingdom.



Figure 3: Additionally, in 2012, the site www.fndhope.org was established. Contents of the website were written by patients, caregivers and doctors/ researchers with the common goal of promoting understanding and better care for patients with FND.

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Appendices

Appendix 1: Answers to difficult questions for FND patients

When the patient has new symptoms, or worsening of symptoms:

I'm sorry that you are having this problem. If the problem is not at all like to your previous symptoms, you should tell your doctor, but if it is similar to symptoms you have had in the past, it is part of your Functional Neurological Symptoms Disorder. The best treatment is to keep working with your therapists to help you to recover.

When the patient is upset or angry about the treatment they are given:

I'm sorry that you are upset. It must be very frustrating for you that your problems are not going away quickly. We know that it is hard, but the best treatment is to keep working with your therapists to help you to recover.

When the patient reports that they cannot do a rehabilitation task:

Even if the progress is very slow, every rehabilitation exercise is helping your brain and nerves to learn how to work normally again. The best treatment is to keep working with your therapists to help you to recover.

When the patient asks for an explanation of their condition:

You have Functional Neurological Symptoms Disorder which means that your brain and nerves are not working the way they usually do due to an unintentional error in how they communicate with your body. This is like a software problem on a computer, rather than a hardware problem. The treatment is to keep practicing until you relearn how to move normally, while getting help to deal with the frustration and strong emotions that the problems have caused you, so they don't delay your recovery.

When the patient asks if their symptoms will get better:

The symptoms of FND almost always get at least a bit better when the person engages in rehabilitation combined with psychotherapy and 60% of patients recover completely. Sometimes movement, pain and fatigue get worse before getting better, like when a person has a limp after going to the gym, but gradually gets stronger and fitter. Symptoms often come and go, but will improve over time. Without rehabilitation, spending a long time in a chair or bed will always lead to deterioration.



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