



# FUNCTIONAL NEUROLOGICAL DISORDER

## Factsheet

[fndaustralia.org.au](http://fndaustralia.org.au)

**Functional Neurological Disorders (FND) can cause a variety of symptoms that cannot be explained by an underlying disease or anatomical abnormalities. Common problems in patients with FND are episodes of blackouts, weakness and abnormal movements.**

---

### Who is at risk of FND?

No single process has been identified as being sufficient to explain the onset of FND. Several interacting factors biologically, psychologically and socially can cause vulnerabilities, triggers and maintaining factors that contribute to FND.

**Table 1** shows the biopsychosocial model with potential factors that may contribute to FND.

### Why is this happening to me?

There are usually several underlying biopsychosocial factors which play a role in the development of FND. Some of these factors contribute to making the brain vulnerable, trigger FND episodes and prevent people from getting better. Injury and pain can be a common trigger. Anxiety, depression and traumatic life experiences can also contribute to making brains vulnerable to FND.

**TABLE 1:** Potential contributing factors of FND

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

# SYMPTOMS

**THE TWO** most common symptom groups of FND are:

## Functional Motor Disorders (FMD)

These can include a range of sometimes debilitating symptoms, such as:

- **limb weakness**
- **tremor (shaking)**
- **dystonia (abnormal posturing)**
- **gait disorders**
- **dysphagia (difficulty swallowing)**

Imagine the brain as a computer which contains hardware and software. The software controls how the hardware functions and interacts with the environment. FND is like a glitch in the software of the brain, this can cause the hardware to function abnormally and react differently to the environment. Treatment involves recognizing these glitches and learning how to troubleshoot them.

## Dissociative Attacks/Events (DA)

Dissociative attacks involve altered movements, sensations and states of consciousness that can look

like epileptic seizures but are not caused by abnormal electrical discharges in the brain.

Symptoms may include:

- **Excessive movements of the limbs, trunk, and head**
- **Dystonia (abnormal posturing)**
- **Tremor (shaking)**
- **Altered/loss of consciousness**

The driving force behind these attacks is **dissociation**. This can be a response to a combination of physical (including sensory overload), mental and social stressors. Dissociation involves feeling disconnected from the body (e.g.

thoughts, feelings and sensations) and/or disconnected from the immediate environment. People often describe dissociation as feeling spacey, zoning out, or as though their brain has shut down. Some people experience warning signs or triggers before episodes however for others they can seem to happen automatically.

In recent times we now try to avoid using the term “seizure” to describe these events as to differentiate between dissociative attacks and epileptic seizures. This reduces the chance of confusing health practitioners into thinking that you have epilepsy. Due to the very different treatment pathways for both dissociative attacks and epilepsy it is very important to distinguish them as two very different issues.

People who suffer from epilepsy may also develop dissociative attacks and people who suffer from dissociative attacks are not immune to developing epilepsy and/or other diseases in their lifetime.

## Other Symptoms

People who suffer from a Functional Neurological Disorder can often have other symptoms such as: chronic pain, fatigue and difficulty with cognitive function (i.e. poor memory, concentration) and sensory symptoms such as numbness and tingling are often described.

## TREATMENT

After receiving a diagnosis of FND from your doctor you may be treated by a multi-disciplinary team of health professionals. Your treating team may include: physiotherapists, psychologists, occupational therapist, psychiatrists, speech pathologists, social workers and nurses. The first step in the treatment of FND is to develop a good understanding of FND and to ask any questions you may have to your treating team.

It is also worthwhile to educate your support networks about FND such as your family and friends, as they will be able to help support you better during your treatment journey.

**It is important to work together with your team to set treatment goals and objectives to maximize good treatment outcomes.**

## There are many available resources online about FND for further reading:

### FND Information

[www.neurosymptoms.org](http://www.neurosymptoms.org)

[www.nonepilepticattacks.info](http://www.nonepilepticattacks.info)

[www.fndhope.org](http://www.fndhope.org)

<http://fndaustralia.com.au>

#### Go to:

⇒ Resources

⇒ Educational Videos

## YOUTUBE VIDEOS

Neuroplasticity

(Sentis)

<http://youtu.be?ELpfYCa87g>

Understanding pain and what to do about it

(Live Active)

[https://youtu.be/C\\_3phB93rvl](https://youtu.be/C_3phB93rvl)

Tame the Beast-Rethinking persistent pain

(tamethebeast.org)

<https://youtu.be/ikUzvSph7Z4>

Sensitive Sensory Lights

(Neuro Orthopedic Institute)

<https://youtu.be/uF6JMIRepGU>

