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DISTURBI DEL MOVIMENTO FUNZIONALI

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Research Submission

A Survey of Neurologists on the Likeability of Headaches and Other Neurological Disorders

Randolph W. Evans, MD; Rochelle E. Evans, MA

Table.—Responses to Statement, “I Like to Treat This Disease or Symptom” (n = 94)

Disease	Mean Response (SD)
1. Alzheimer’s disease	3.84 (1.67)
2. Carpal tunnel syndrome	4.25 (1.10)
3. Chronic daily headache	3.02 (1.36)
4. Cluster headache	3.90 (1.05)
5. Dizziness	2.57 (1.26)
6. Epilepsy	4.13 (0.99)
7. Essential tremor	4.34 (0.80)
8. Insomnia	2.72 (1.34)
9. Low back pain	2.86 (1.12)
10. Migraine	4.32 (0.78)
11. Multiple sclerosis	3.70 (1.20)
12. Myasthenia gravis	3.87 (1.22)
13. Obstructive sleep apnea	2.81 (1.39)
14. Painful diabetic neuropathy	3.89 (1.10)
15. Parkinson’s disease	4.35 (0.92)
16. Postconcussion syndrome	3.17 (1.30)
17. Psychogenic (functional) neurological disorders	2.04 (1.34)
18. Restless legs syndrome	4.20 (1.01)
19. TIA/stroke	4.19 (1.02)
20. Whiplash injuries	2.31 (1.29)

1-5 Likert scale (1 strongly disagree, 3 neutral/no opinion, 5 strongly agree).

TIA = transient ischemic attack.

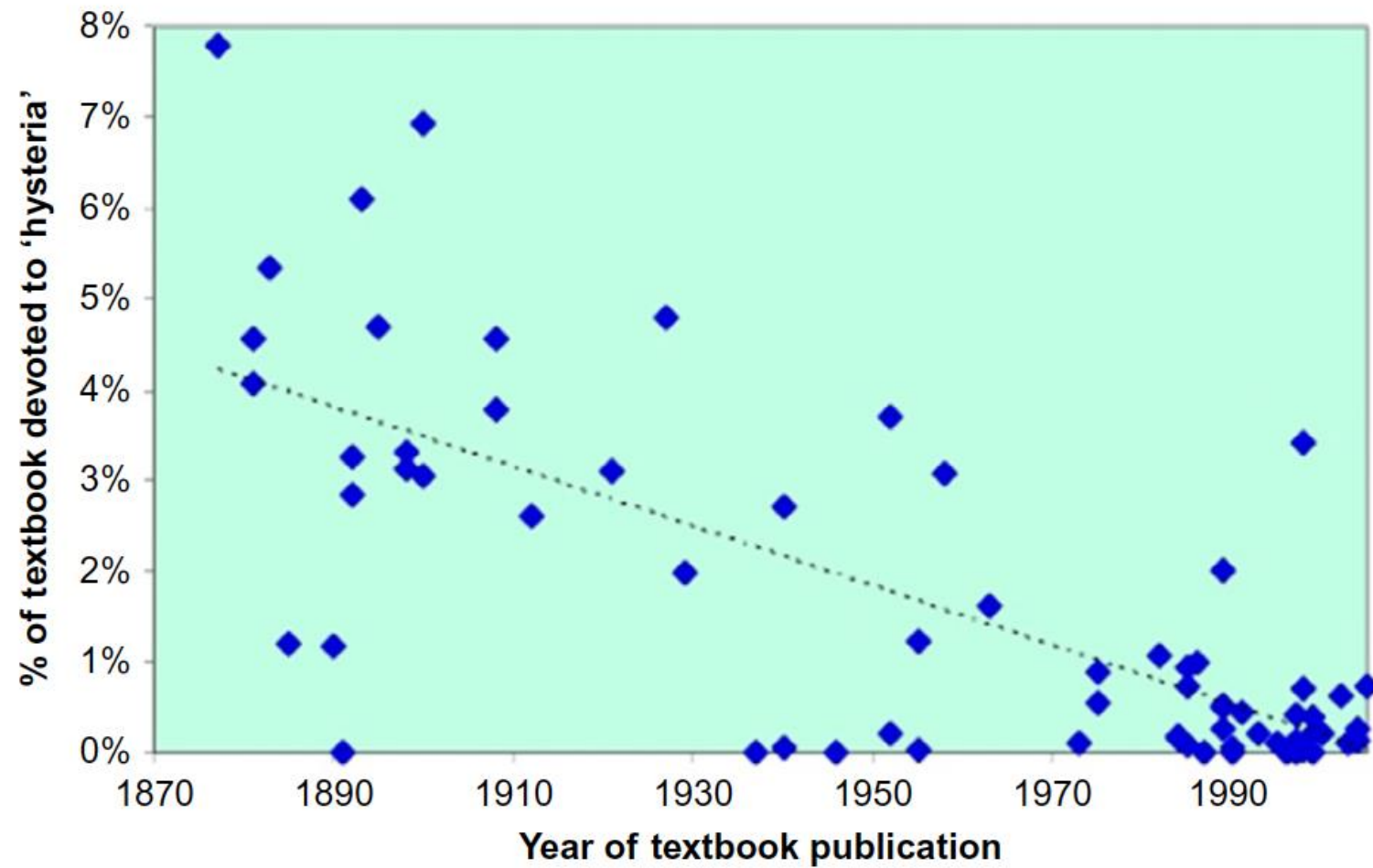


Fig. 3.2. Proportion of 68 textbooks devoted to hysteria from 1870 to 2005 (line is linear trend). (Modified from [Stone et al., 2008.](#))

Common functional disorders - any type of neurological disorders

- Seizures
- Movement disorders (tremor, myoclonus, dystonia, slowness, gait)
- Weakness
- Sensory loss, somatosensory, visual
- Dizziness
- Speech disorders
- Cognitive disorders

Terminology

- Hysteria
- Medical unexplained symptom
- Conversion disorder
- Psychosomatic
- Psychogenic disorder
- Functional Neurological Disorder

Functional Neurological Disorders

A neurological disorder, characterized by almost **any type of neurological symptom**, caused by a **brain network dysfunction** that does not exclude the possibility of normal function, sometimes due in part to a psychological cause, and **not explained by other neurological pathology** that may or may not be present.

Symptoms may be **inconsistent** or **incompatible** with other known neurological disorders or human anatomy and physiology.

Factitious and Malingering

- **Factitious disorder:** symptoms are intentionally produced (voluntary) by the person because of psychological need.
- **Malingering:** symptoms are voluntarily produced for a specific goal such as financial compensation, avoidance of work etc. It's not considered a mental disorder.

Functional vs Factitious vs Malingering

Entity	Medical Condition	Involuntary
Functional	Yes	Yes
Factitious	Yes	No
Malingering	No	No

Who is referred to neurology clinics?—The diagnoses made in 3781 new patients

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ABSTRACT

Objective: Information on the nature and relative frequency of diagnoses made in referrals to neurology outpatient clinics is an important guide to priorities in services, teaching and research. Previous studies of this topic have been limited by being of only single centres or lacking in detail. We aimed to describe the neurological diagnoses made in a large series of referrals to neurology outpatient clinics.

Method: Newly referred outpatients attending neurology clinics in all the NHS neurological centres in Scotland, UK were recruited over a period of 15 months. The assessing neurologists recorded the initial diagnosis they made. An additional rating of the degree to which the neurologist considered the patient's symptoms to be explained by disease was used to categorise those diagnoses that simply described a symptom such as 'fatigue'.

Results: Three thousand seven hundred and eighty-one patients participated (91% of those eligible). The commonest categories of diagnosis made were: headache (19%), functional and psychological symptoms (16%), epilepsy (14%), peripheral nerve disorders (11%), miscellaneous neurological disorders (10%), demyelination (7%), spinal disorders (6%), Parkinson's disease/movement disorders (6%), and syncope (4%). Detailed breakdowns of each category are provided.

Conclusions: Headache, functional/psychological disorders and epilepsy are the most common diagnoses in new patient referral to neurological services. This information should be used to shape priorities for services, teaching and research.

**Movement disorders clinics: 3-10%
FMD frequency**

Women 60-70% of cases

Economic evaluation

Research

JAMA Neurology | **Original Investigation**

Assessment of Emergency Department and Inpatient Use and Costs in Adult and Pediatric Functional Neurological Disorders

Christopher D. Stephen, MB ChB, MRCP(UK), MS; Vicki Fung, PhD; Codrin I. Lungu, MD; Alberto J. Espay, MD, MSc

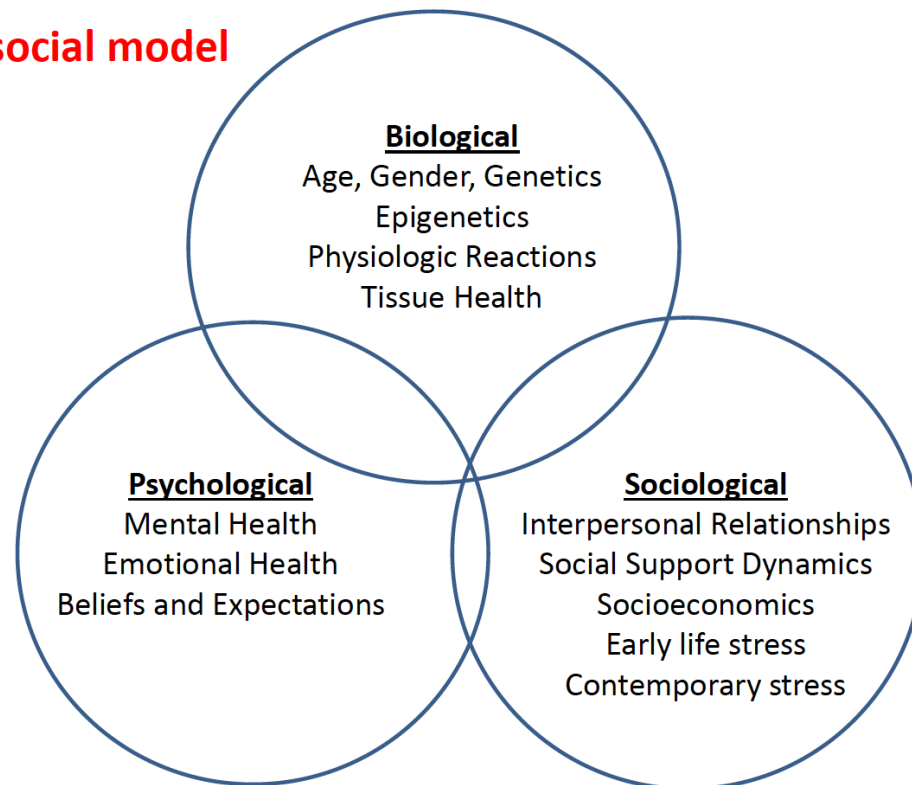
CONCLUSIONS AND RELEVANCE This economic evaluation found that the more than \$1.2 billion and increasing annual costs for ED and inpatient care of FNDs were similar to other investigation-intensive and pharmacologically demanding neurological disorders. Unnecessary investigations and iatrogenic harm inflate costs at the expense of necessary but neglected psychiatric and rehabilitative treatments.

Meaning Functional neurological disorders are associated with a high level of health care use, with treatment costs comparable to those of care-intensive neurological disorders.

Etiology

- Biopsychosocial model recognizes the multifactorial nature of the etiology.

Biopsychosocial model



Etiology

Stressful life events and maltreatment in conversion (functional neurological) disorder: systematic review and meta-analysis of case-control studies



Lea Ludwig, Joëlle A Pasma, Timothy Nicholson, Selma Aybek, Anthony S David, Sharon Tuck, Richard A Kanaan, Karin Roelofs, Alan Carson, Jon Stone

Summary

Background Stressful life events and maltreatment have traditionally been considered crucial in the development of conversion (functional neurological) disorder, but the evidence underpinning this association is not clear. We aimed to assess the association between stressors and functional neurological disorder.

*Lancet Psychiatry 2018;
5: 307-20*

Published Online
March 8, 2018

Interpretation Stressful life events and maltreatment are substantially more common in people with functional neurological disorder than in healthy controls and patient controls. Emotional neglect had a higher risk than traditionally emphasised sexual and physical abuse, but many cases report no stressors. This outcome supports changes to diagnostic criteria in DSM-5; stressors, although relevant to the cause in many patients, are not a core diagnostic feature. This result has implications for ICD-11.

FND and COVID-19 vaccination



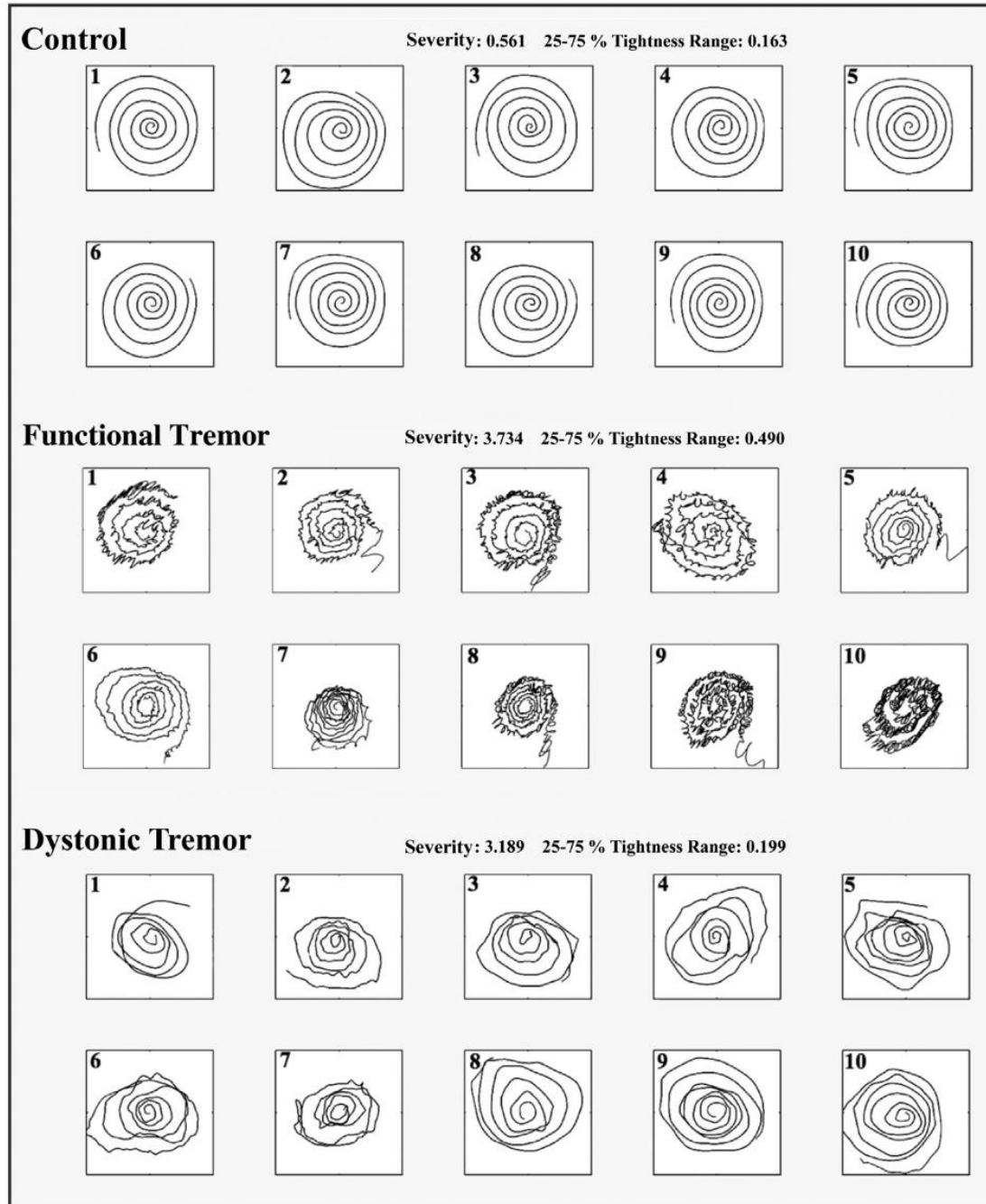
sis

- Incongruenc

- Inconsistenc

- Positive feat

RULE-IN DIAG



Functional tremor

- Signora di 58 aa
- Insorgenza acuta di tremore agli arti dopo reazione avversa a farmaci antidolorifici

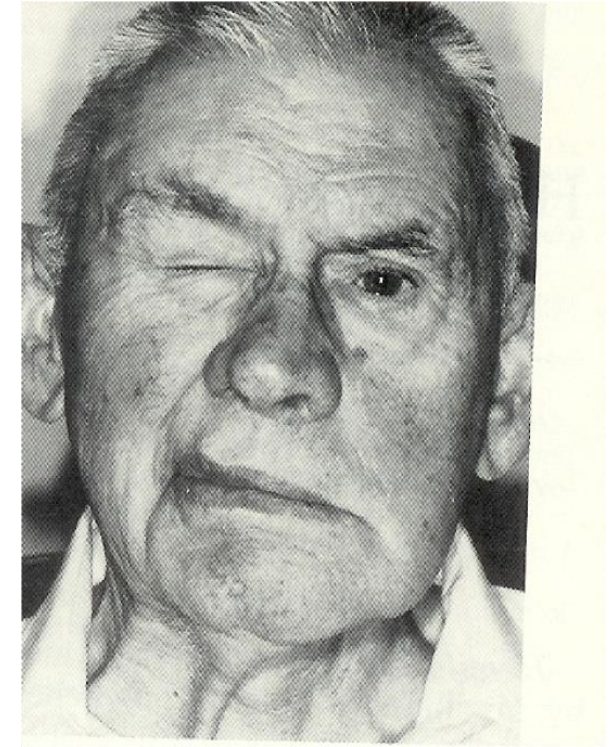


Functional tremor



Functional facial spasm

- Signora di 34 aa
- Insorgenza acuta di movimenti facciali da circa 4 anni
- I movimenti sono parossistitici e a frequenza quotidiana
- In passato terapia con Carbamazepina senza beneficio



Functional weakness

- Signora di 28 aa
- Deficit di forza ad insorgenza acuta dell'arto inferiore destro con difficoltà alla deambulazione



Functional dystonia

- La più difficile da diagnosticare
- Spesso si accompagna a posture fisse

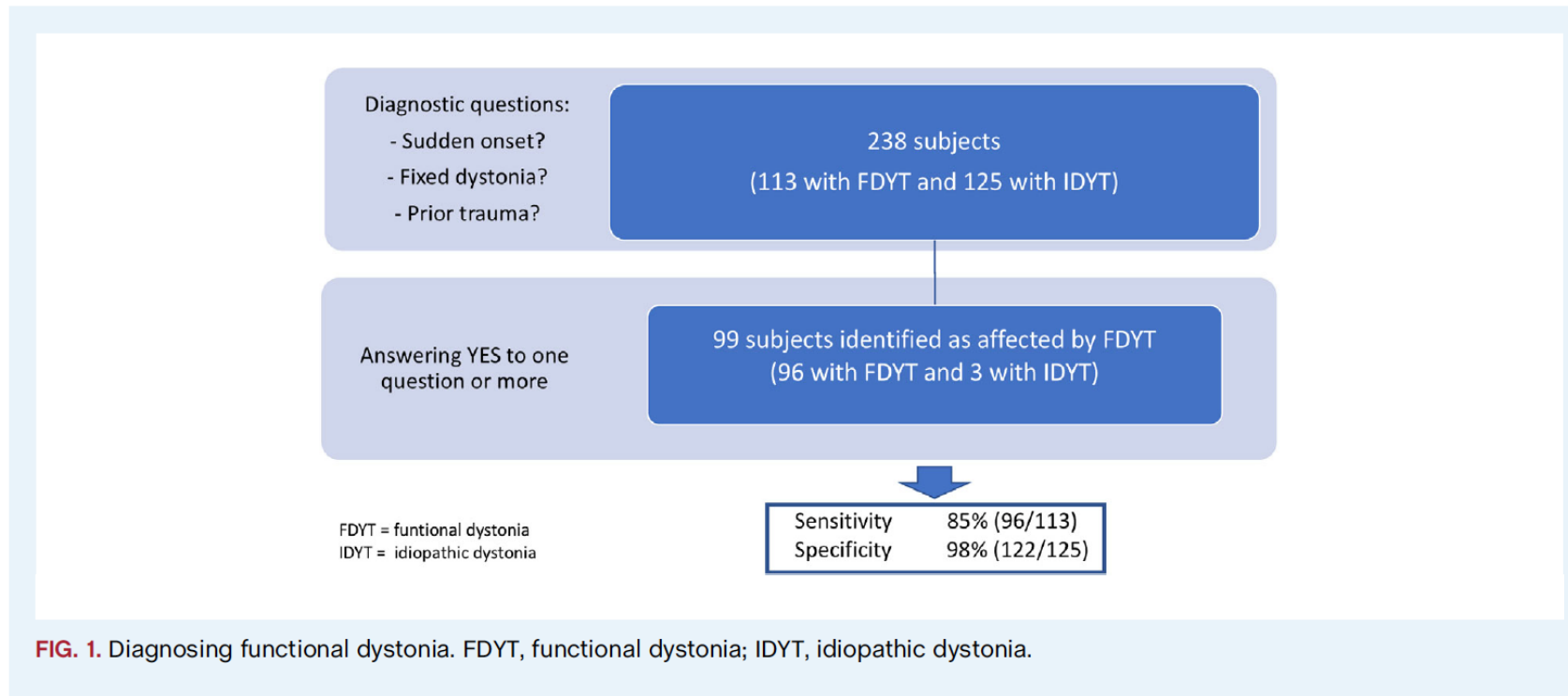


Sudden Onset, Fixed Dystonia and Acute Peripheral Trauma as Diagnostic Clues for Functional Dystonia

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ERCOLI T. ET AL.

RESEARCH ARTICLE



Functional gait

- Paziente di 37 aa
- Da qualche mese disturbo sensitivo
- Successivamente ha sviluppato un disturbo della marcia



Functional gait



How to deliver the diagnosis

**Movement
Disorders**

CLINICAL PRACTICE



HOW DO I?

How Do I Explain the Diagnosis of Functional Movement Disorder to a Patient?

Jon Stone, FRCP PhD* and Ingrid Hoeritzauer, MB BCH MRCP



Explanation is treatment

Handbook of Clinical Neurology, Vol. 139 (3rd series)
Functional Neurologic Disorders
M. Hallett, J. Stone, and A. Carson, Editors
<http://dx.doi.org/10.1016/B978-0-12-801772-2.00044-8>
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Chapter 44

Explanation as treatment for functional neurologic disorders

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Abstract

There is widespread agreement that the way health professionals communicate the diagnosis of functional neurologic disorders (FND) has a central role in treatment, as it does arguably for most conditions.

In this chapter we discuss barriers to effective diagnosis, different models of explanation and evidence regarding the importance of effective communication of the diagnosis in FND, especially movement disorders, and dissociative (nonepileptic) seizures. Debates and disagreements about how to go about this task often reflect different theoretic models held by health professionals rather than evidence. More evidence is required to know whether an initial emphasis on one model is more or less effective than another (e.g., a functional model vs. a psychologic model).

We conclude, however, that there are a number of generic components to effective explanation shared by most authors on the topic that form the basis of a consensus. These include taking the patient seriously, giving the problem a diagnostic label, explaining the rationale for the diagnosis, some discussion of how the symptoms arise, emphasis on the potential for reversibility (rather than damage), and effective triage and referral for other treatment where appropriate. Although explanation can sometimes be therapeutic on its own, its role is probably more important as a facilitator to other therapy, including self-help, physical treatments, and psychotherapy.

Conclusion

Myth 1: FND is a diagnosis of exclusion

Myth 2: Patients have either FND or another neurological disorder

Myth 3: A bizarre presentation indicates FND

Myth 4: Different phenotypes of FND indicate different disorders

Myth 5: FND symptoms are voluntary

Myth 6: There is no role for investigations in the diagnosis of FND

Myth 7: There is less harm in missing a diagnosis of FND than missing another neurological disease

Myth 8: FND is exclusively a psychological problem caused by psychological factors

Myth 9: The prognosis of FND is usually good


Myth 10: The treatment of FND is solely referral to a psychologist or psychiatrist

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Letters To The Editor | [Full Access](#)

Ten myths about functional neurological disorder

S. C. Lidstone , R. Araújo, J. Stone, B. R. Bloem,

First published: 12 May 2020 | <https://doi.org/10.1111/ene.14310> | Citations: 5

Ambulatorio Disturbi Funzionali - Policlinico di Monserrato

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THE NEUROSES

