Who do we meet in FND clinic?

A review of the demographics and symptomology of new patients seen at a tertiary FND clinic

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Introduction

- Functional neurological disorder (FND) is the most common presentation in general neurology clinic after headache, accounting for approximately one-quarter of referrals.
- There is growing recognition of a need for tertiary FND services to support diagnosis and treatment of complex and disabling presentations.
- Tertiary FND service set up at University Hospitals Plymouth NHS Trust in 2020. It sees patients from across the UK's south-west peninsula: a heterogeneous population including urban communities and significant rural and coastal deprivation.
- The service primarily consists of two outpatient clinics per week, jointly delivered by a Consultant Neurologist and Clinical Psychologist.

Aim

- **Our aim was to collect data on the demographics and symptomology of new patients seen in this outpatient service.**
- As clinical coding seldom picks up on functional presentations, accurate records capturing this data is not readily available.
- Analysis of these factors would inform and drive funding decisions relating to commissioning of relevant services.

Methods

- Clinic letters were manually interrogated for patient demographics, symptomatology and diagnosis.
- New patients to the service between November 2020 and December 2022 were included in the analysis.

Results

- 207 patients were included, of which 194 (93.7%) had a new or re-confirmed diagnosis of FND at clinic. Alternative diagnoses included: cardiac dysfunction (n=1), other neurological dysfunction (including parkinsonism, cerebellar syndrome, multi-territory stroke, myelopathy, migraine) (n=7), or required further investigations at time of data entry.
- 149 (72.0%) were assigned female sex at birth and 192 (92.8%) were under 65 years of age at the time of review. Indices of Multiple Deprivation (IMD) scores covered the full range of the spectrum (1 to 10), with a mode of 4 and mean of 5.5. *See Figure 1.*

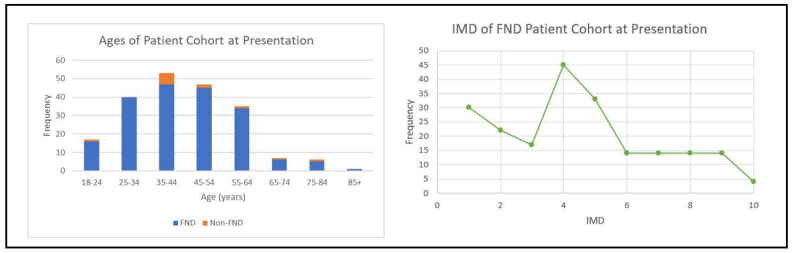
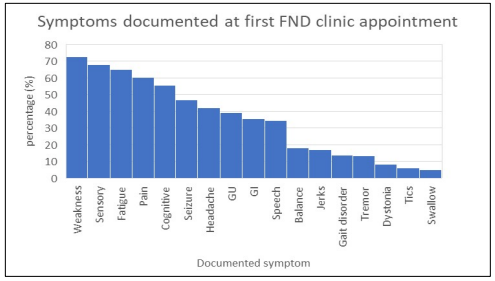


Figure 1: Ages and Indices of Multiple Deprivation of Patient Cohort at First Presentation to our FND Clinic Service

Figure 2: Frequency of Symptoms documented in New Patient clinic letters for this cohort



- A full spectrum of neurological symptoms was reported by those with FND (mean of 5.9 per patient). The most commonly reported symptoms were: **weakness** (75.8%), **sensory disturbance** (68.0%), **fatigue** (64.9%), **pain** (60.3%), **cognitive disturbance** (55.7%) and **seizures** (46.9%). *See Figure 2.*
- 19 (9.2%) were given a new diagnosis of confirmed or probable **migraine** in addition to the 26 (13.4%) with an existing diagnosis of this disorder.
- Psychiatric co-morbidity in the FND cohort included **anxiety** (23.1%), **depression** (21.3%), **post-traumatic stress disorder** (12.9%) and **personality disorder** (6.2%).
- Other co-morbidities included: **other functional disorder** (29.9%); **neurodevelopmental disorder** (8.2%, including 5.7% with **diagnosed autism spectrum disorder**); and **physical medical disorder** (65.5%, comprising a broad range of body systems).

Conclusion

- The **majority of patients seen in this clinic were diagnosed with FND**.
- The **data corroborates many of the known risk factors**, such as female sex, being of working age, and co-morbid psychiatric disorder.
- Our **data may support an association with deprivation of living**. Further study is required to explore whether this accurately reflects those with FND in our local population, or rather highlights barriers to accessing tertiary healthcare.
- There is a particularly **high prevalence of migraine, with over one-fifth of patients seen in clinic having a pre-existing or new diagnosis**. This highlights a potential area for treatment, as well as the interface between these two conditions.
- The **predominance of functional weakness and cognitive symptoms** compels emphasis on physiotherapy and cognitive therapy in service planning.
- There is a **burden of physical medical health co-morbidity**, emphasising that patients with FND often have potentially treatable symptoms that should not be discounted by assuming they are functional.
- The **data may also reinforce growing evidence of an association with autism spectrum disorders**.

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