

Mixed-method Service Evaluation of an Inpatient Programme for FND & NEAD

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Background

Functional Neurological Disorder (FND) and Non-epileptic Attack Disorder (NEAD) cause neurological symptoms that are not explained by structural pathology. They are common, and can be stigmatising and disabling. Evidence regarding optimal management is limited, and services vary widely by location.

The Rosa Burden Centre offers a unique treatment model for FND / NEAD, giving patients access to multiple specialist therapists and doctors during a 3-week inpatient programme.

Aim

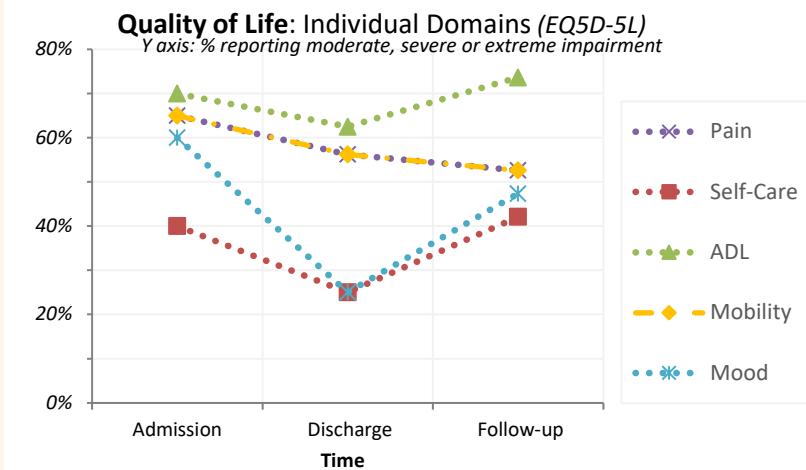
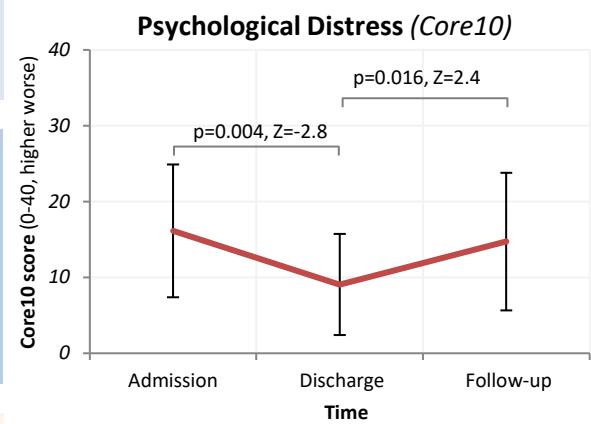
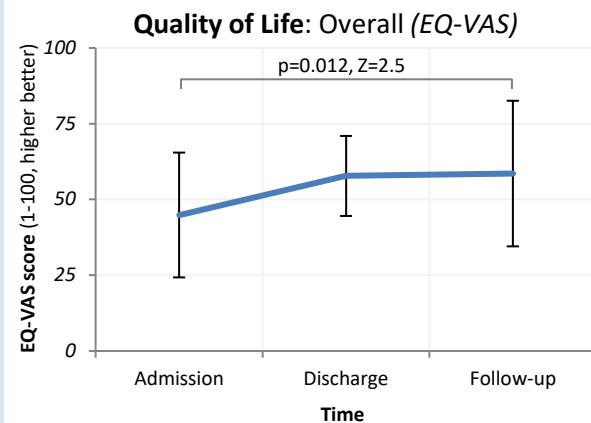
Evaluate outcomes of the service using qualitative and quantitative measures. Compare quantitative measures across time.

Methods

- All inpatients discharged December 2019 – March 2020 were Contacted by telephone in September 2020.
- Quantitative outcomes on quality of life (Euro-QoL) and psychological distress (Core10) gathered at admission, discharge and follow-up.¹ These were compared using Wilcoxon's test for ranked pairs.
- Qualitative feedback was gathered using open-ended prompts, and thematic analysis was conducted.²

Quantitative Outcomes¹

22 patients were contacted and 19 participated. There was an improvement in overall quality of life following admission, which was statistically significant at follow-up ($p=0.012$, $Z=2.5$). There was a reduction in psychological distress by discharge ($p=0.004$, $Z=-2.8$), and increase at follow-up ($p=0.016$, $Z=2.4$). Quality of life in each domain improved by discharge, changes afterward were mixed; none of these changes were statistically significant at the $p<0.05$ level.



Quality of Routine Data Collection – The Core10 and EuroQoL measures are collected routinely at admission and discharge from the Rosa Burden Centre. These were completed and documented fully in 13/22 patients (59%). In a further 5 patients (23%), data was recorded at admission and discharge, but was incomplete. In the other 4 patients (18%), no data was recorded at discharge.

Qualitative Findings² Themes, with number reporting (n)

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| <ul style="list-style-type: none"> ✓ Value of individual therapies - psychological (11), physical (8) and occupational (4) ✓ Improved my understanding of diagnosis and management strategies (9) ✓ Turning point in managing my illness (9) ✓ Supportive environment, safe space (7) ✓ Wouldn't change anything (7) ✓ Expertise of staff (5) ✓ Respite from normal life (4) ✓ Value of multiple approaches (3) ✓ Peer support (2) | <ul style="list-style-type: none"> ✗ Not enough psychological therapies (4) ✗ Not enough follow-up (4) ✗ Disliked ward round format (4) ✗ Slow, too much down-time (3) ✗ Lack of privacy in ward (3) ✗ Prefer day-unit model (1) |
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"it was pretty life-changing really"

"I finally got a proper diagnosis... to get that was huge"

"The useful bit for me was to have the time and space to deal with 'me' and get to grips with the diagnosis, and get away from real life. I think if I got all the information on an outpatient basis it wouldn't have been as useful"

"I was basically in a wheelchair then, but now I can walk most of the time... I don't think I would have improved at all without the Rosa Burden Centre"

"Now, months later, the experience has helped me far more."

"3 weeks is not enough, you need more. I'm still doing some of the exercises, but it's hard on my own"

Conclusions

- Positive qualitative findings suggest value of inpatient model
- Mixed pattern in long-term quantitative outcomes – sustained benefits in some measures but regression in others – larger sample needed to replicate findings, assess effect sizes, and analyse how effects vary by domain / severity / symptom

Limitations

Small, heterogenous sample; incomplete data.

Recommendations

- **Service Development:** increase provision of psychological therapies and follow-up; education sessions for non-specialists.
- **Evaluation:** routine collection of follow-up data and replication this evaluation
- **Research:** efficacy trial using waiting list / comparative design; alternate outcomes e.g. patient understanding of illness.

⁽¹⁾ EuroQoL EQ-5D-5L, euroqol.org. Core10, coresystemtrust.org.uk.

⁽²⁾: Prompts: "what did you find most useful about the service?"; "What could be improved?". Thematic analysis conducted independently by two researchers (PD and SS)