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ORIGINAL RESEARCH

Management of Functional Seizures and Functional Movement Disorder: A Cross-Sectional Comparative Study

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Introduction: Functional neurological disorders (FND) are conditions that cause to alterations in nervous system functions. They are disabling and impair the quality of life of patients but that are potentially reversible provided they have specific management. Functional seizures (FS) and functional movement disorder (FMD) are among the most common subtypes. Studies suggest a strong overlap between FS and FMD; however, there are still no cross-sectional studies that compare the management between these two conditions. Thus, our focus was to carry out a research that compares how these two subtypes of FND are being managed, in addition to assessing rates of understanding and acceptance of a diagnosis of FND.

Methods: It is a cross-sectional study with data collected from medical records and interviews with two patients' groups (FS and FMD) treated from a FND clinic of the public health system of Brazil.

Results: From 105 medical records of patients with FND analyzed, 60 participants were eligible and agreed to participate in this research, being FS (n = 31) and FMD (n = 29). Statistically significant differences ($p < 0.05$) were found in the use of antiseizure (FS > FMD), opioids (FMD > FS), multi-professional follow-up (FMD > FS) and rates of understanding and acceptance of an FND diagnosis (FMD > FS). Similarities were found in sociodemographic profiles, medical follow-up, psychiatric comorbidities and use of antidepressants, anxiolytics, antipsychotics and mood stabilizers between two conditions.

Conclusion: More similarities than differences in management were found between FS and FMD. Similarities may be related to overlaps in sociodemographic and clinical characteristics between the two groups. Differences may be related to specific issues of each patient and condition. Regardless of the group, patients who perform psychotherapeutic follow-up have higher rates of understanding and acceptance of an FND diagnosis.

Keywords: functional neurological disorder, functional movement disorder, functional seizures, management, multi-professional follow-up

Introduction

Functional Neurological Disorders (FND) are characterized by alterations in the functions of the nervous system and present similar symptoms to those found in neurological diseases. They are disabling, impair the quality of life of patients, have a heterogeneous biopsychosocial etiology and specific clinical features. They are potentially reversible provided they have specific management.[1,2] Recurrent in clinical practice, FND represent the second most common cause of the complaints of patients who seek neurological care.[3] In the United States, approximately $1.2 billion are spent per year with these conditions, which makes a relevant public health issue.[4] Nowadays, FND are subdivided based on the type of experience presented by the patient.[5] Among the most common subtypes, are Functional Seizures and Functional Movement Disorder.[6]

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Functional Seizures (FS) are described as paroxysmal events with behavior similar to epileptic seizures or syncope when considering the symptoms reported by the patient, however it has specific clinical characteristics, positive signs and are not caused by abnormal epileptiform neuronal activity.[7,8] Until these patients find care in specialized centers, it is common presumed to have epilepsy, taking an average 7.2 years to receive the correct diagnosis, which results in iatrogenic effects, such as the misuse of antiseizure medications.[9,10]

Functional Movement Disorder (FMD) are conditions in which patients present behaviors phenomenologically similar to the symptoms presented in neurological movement disorders, but no inflammatory or neuroinfectious disease, structural lesions or neurochemical disorders that could justify such conditions are found. The presence of positive signs such as incongruent and inconsistent phenomenology related to structural neurological disorders, as well as chronic pain, fatigue and secondary gain are also common.[11–13] The most common manifestations are tremor, dystonia, myoclonus, gait abnormality and parkinsonism.[14]

Comparative studies indicate that patients with FS and patients with FMD have similarities in several aspects, such as sociodemographic characteristics and psychiatric comorbidities.[6,9,15–18] Due to the similarities between the conditions, researchers are increasingly considering the hypothesis that FS and FMD are, in fact, two sides of the same coin, with only different ways of manifesting the symptoms of a single disorder.[6,9,15–18] Recently, Aybek & Perez published a great study that demonstrates the state of the art of FND, providing advances for diagnosis and treatment of patients with FS and FMD. The authors point to the results of several approaches to FND, including medical care combined with multiprofessional follow-up, in addition to mentioning approaches that are being researched and that have been showing promising results. In the end, the authors point out to the need for further research on the topic.[19] In this context, we developed a cross-sectional study with the aim of describing and comparing how patients with FS and FMD are being managed in a Functional Neurological Disorders ambulatory clinic of the public health system of Brazil, in addition to measuring the levels of understanding and acceptance of FND diagnosis in these two groups.

Materials and Methods

Study Type and Participants

This study is an excerpt of an observational, descriptive and cross-sectional research, in which quantitative and qualitative data were collected from the analysis of medical records and semi-structured interviews with patients treated from a Functional Neurological Disorders ambulatory clinic of the public health system of Brazil. Participants were divided in two groups, the first one corresponding to patients with Functional Seizures (FS), and the second one of participants with Functional Movement Disorder (FMD).

Eligibility and Exclusion Criteria

The eligibility criteria to participate of this research were: 1) minimum age of 18 years old; 2) have a documented or clinically established diagnosis for FS or FMD, these being understood while levels of diagnostic certainty confirmed from instruments, resources and technologies such as video-EEG and assessment with a professional specialist in FND;[9–12] 3) provide assent and consent to participate in the research; 4) sign the Free and Informed Consent Form (FICF); 5) have cognitive ability to adequately respond to the instruments applied during the interview for data collection.

The exclusion criteria were: 1) be in the diagnostic process or do not have a confirmed diagnosis of FND; 2) comorbid neurological disorders, such as epilepsy or movement disorders; 3) patients who met criteria for more than one category of FND; 4) being younger than 18 years old; 5) inability to answer the instruments applied during the interview due to any medical condition; 6) patients who had been free of typical symptoms of FS or FMD for at least 8 weeks. 7) patients unable to participate in the study due to substance use disorders;[5] 8) documented history of intellectual disability; 9) cases of active psychosis; 10) patients who refused to sign FICF or were unable to be contacted to participate in the study. All criteria were established to prevent an unproportionable comparison between the two groups.

Data Collection and Storage

Data collection had two stages: in the first, a preliminary survey of patients with the potential to participate in the research was carried out from the file of medical records of the outpatient clinic where cases of FND are treated. In the second stage, was organize an interview schedule for signing of the FICF and data collection. Participants were only interviewed for data collection after reading and signing the FICF.

As can be seen in the Supplementary Figure 1, a semi-structured questionnaire was prepared in which data were collected: 1) sociodemographic: gender, age, marital status, education, employment, number of children and governmental financial assistance programs; 2) objective: subtype of FND, medical and multiprofessional follow-up, psychiatric comorbidities and continuous use medicines; 3) subjective: rates of understanding and acceptance of the diagnosis of FND. To assess this last item, the interviewers were instructed to read to the participants a brief definition of the patient's FND subtype to be interviewed. Then, the participants were asked to openly answer about how much they understood and how much they accepted the diagnosis of FND. At the end, participants were asked to answer on a scale from zero to ten how much they understood about having a diagnosis of DNF. With "zero" corresponding to "I do not understand anything about my disease" and "ten" being "I have full understanding about my disease". Subsequently, using the same logic, they were asked how much they accepted this diagnosis.

Regarding the pharmacotherapy, for better presentation of data it was decided to list the medications in categories instead of active ingredients. Regarding psychiatric comorbidities, cases in which the comorbidity had been previously diagnosed by a physician and recorded in medical records were considered. Two categories were analyzed: (i) mood disorders, comprising the diagnoses of major depression and bipolar, and (ii) anxiety disorders, including generalized anxiety disorders, panic syndrome, specific phobias, among others.[5,20,21] It is worth mentioning that all patients underwent psychiatric evaluation of the DSM-V by a psychiatrist when they were referred and started follow-up at the outpatient clinic of these study, thus, all participants already had this evaluation recorded in their medical records at the time of interview, serving as the basis for the collection of data regarding psychiatric comorbidities.

For medical follow-up, medical follow-up were considered at least monthly, with follow-up starting at least 3 months ago. Regarding multiprofessional follow-up, at least one therapy session was considered every 15 days, with therapy starting at least 3 months ago.

All instruments were applied by the researchers who conducted the interviews. The average time for data collection was approximately 60 minutes for each participant. There was no incentive for patients to participate in the research. There was also no remuneration for the participants.

Statistical Analysis

The results of quantitative variables were described by mean, standard deviation (SD), minimum, maximum, median and interquartile range and categorical variables by frequency and percentage. For comparison of the two groups (FS and FMD), regarding quantitative variables, Student's *t*-test for independent was used. Categorical variables were analyzed using Chi-squared test and Fisher's exact test. Values of $p<0.05$ indicated statistical significance. Data were analyzed with the SPSS Statistics 28.0.1.0 computer program.

Research Ethics Committee

This cross-sectional comparative study complies with the Declaration of Helsinki and was approved by the Ethics Committee of the Hospital of Clinics Complex of the Federal University of Paraná, and can be consulted at online portal (plataformabrasil.saude.gov.br) under the number IRB#: 23336819.8.0000.0096.

Results

Data Analysis

Data was collected between November 2019 and April 2022. As shown in Figure 1, the medical records of 105 patients were previously analyzed. From this portion, considering the eligibility and exclusion criteria, data was collected from 60

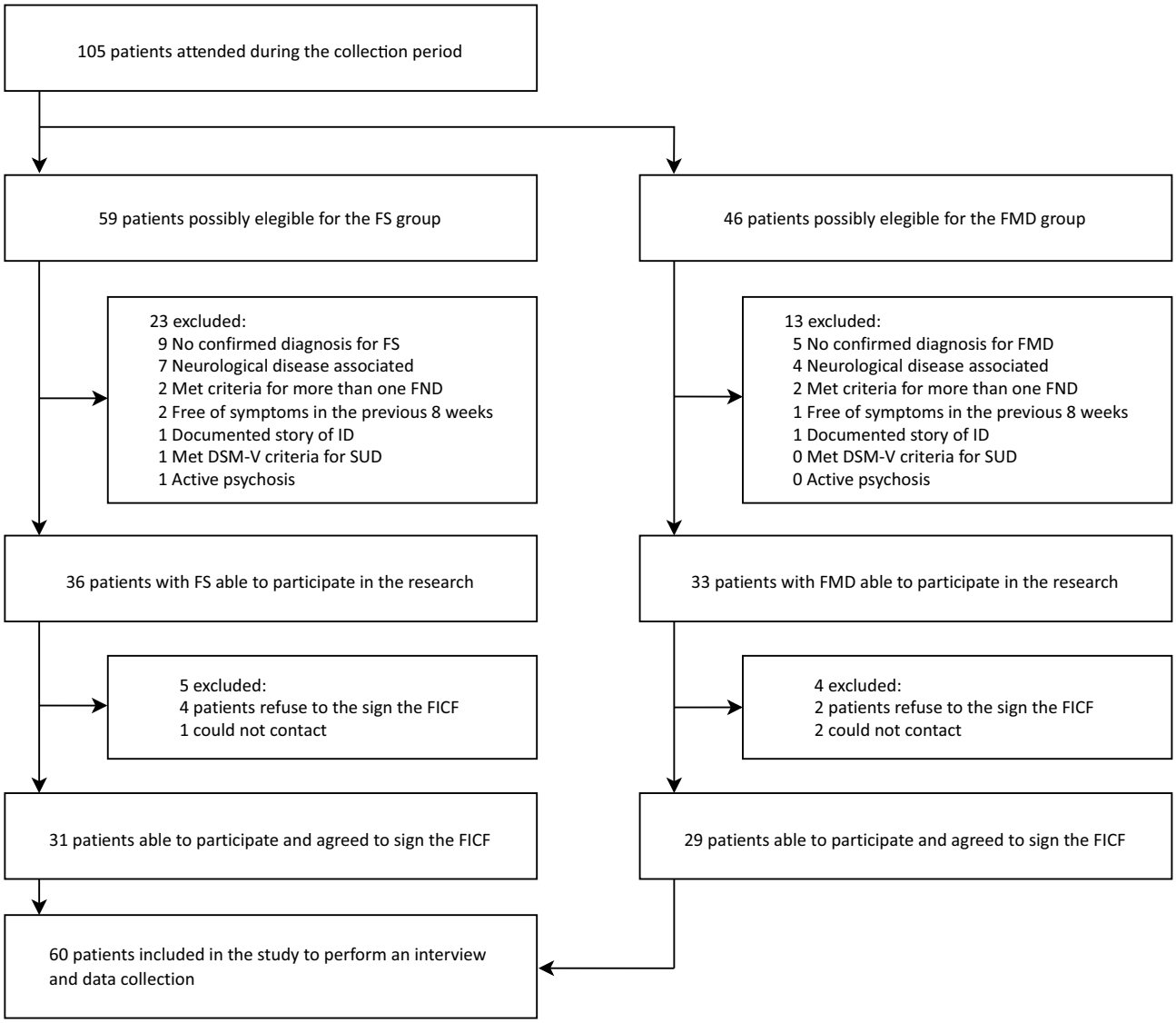

Figure 1 Stratified sample for functional seizures and functional movement disorder groups.
Abbreviations: FS, functional seizures; FMD, functional movement disorders; FND, functional neurological disorder; ID, intellectual disability; SUD, substance use disorder; FICF, Free and Informed Consent Form.

participants, being 31 diagnosed with FS and 29 diagnosed with FMD. Table 1 presents the stratification of patients according to their respective groups and subtypes of FND.

Sociodemographic Characteristics

It was found that most part the participants were female (72%), with average ages from the fourth decade of life [range 21–50], were single or divorced, had at least one child [range 0–5], had only the first years of education [range 0–14], were unemployed and had receiving government financial assistance aid (national income transfer programs such as *Auxílio Brazil* and *Auxílio Doença)* for not being able to work due to FND diagnosis. Detailed information on the sociodemographic characteristics is presented in Table 2

Clinical and Pharmacotherapeutic Characteristics

Considering both groups, it was found that at least 80% of participants have a diagnosis of mood disorders and at least 60% have some type of anxiety disorders. As for medications, similar results were found in the use of antidepressants,

Table 1 Subtypes of Functional Neurological Disorders Stratified By Symptoms

Type of Symptoms	FS, n = 31 n (%)	FMD, n = 29 n (%)
Seizure		
Tonic-clonic	22 (71)	–
Atonic	7 (23)	–
Akinetic	2 (6)	–
Motor		
Mixed	–	8 (28)
Tremor	–	7 (24)
Weakness	–	4 (17)
Dystonia	–	4 (14)
Gait	–	2 (7)
Myoclonus	–	2 (7)
Parkinsonism	–	1 (3)

Note: n (%), number of conversions reported by the group from each category listed, followed by the number of conversions calculated in percentage.
Abbreviations: FND, functional neurological disorder; FS, functional seizures; FMD, functional movement disorder; n, number of participants in the indicated group.

Table 2 Characterization of the Functional Seizures and Functional Movement Disorder Sample

Sociodemographic Characteristics	FS, n = 31	FMD, n = 29	x^2 /t[b]	p[c]
Gender				
Female, n (%)	22 (71)	21 (72)	0.015	0.901
Male, n (%)	9 (29)	8 (28)		
Age, mean [SD]	42 [3]	43 [11]	−0.191	0.850
Children, median [IQR]	1 [3]	2 [2.5]	−0.110	0.912
Years of Education, mean[a] [SD]	7 [4]	8 [4]	−0.513	0.610
Marital status				
Single, divorcee or widower, n (%)	18 (58)	17 (59)	0.002	0.965
Married or living with a partner, n (%)	13 (42)	12 (41)		
Employment				
Exert paid activity, n (%)	8 (26)	7 (24)	0.022	0.881
Unemployed, n (%)	23 (72)	22 (76)		
Government financial support programs				
Receive, n (%)	25 (81)	24 (83)	0.045	0.833
Do not receive, n (%)	6 (19)	5 (17)		

Notes: [a]The average number of years studied in Brazil in 2018 was 9.5 years. The average was 9.5 in the state of Paraná;[45] [b]statistic values of Chi-squared test and Student's *t*-test; [c] statistical value of p considered <0.05; n (%), number of conversions reported by the group from each category listed, followed by the number of conversions calculated as a percentage.
Abbreviations: FS, functional seizures; FMD, functional movement disorder; n, number of participants in the indicated group; SD, standard deviation; IQR, interquartile range.

mood stabilizers, antipsychotics and anxiolytics in both groups. Differences were also found: patients in the FS group showed a greater use of antiseizures, while patients in the FMD group showed a greater use of opioids (Table 3).

Medical and Multi-Professional Follow-Up

Regarding medical follow-up, similar results were found in both groups, being that the majority of the participants are followed only by neurologists. About multi-professional follow-up, the group with FMD presents a greater number of referrals to psychologists, physiotherapists, occupational therapists and speech therapists (Table 3).

Understanding and Acceptance Rates of a FND Diagnosis

The FMD group, when compared to the FS group, presented higher averages in the understanding and acceptance rates of a FND diagnosis (Figure 2 Panel A). Considering that psychological follow-up is the only one recommended for both groups,[1,19] comparisons were made between subgroups, in which the following results were obtained: 1) Patients with FS who perform psychological follow-up had higher averages in the rates of understanding and acceptance rates of a FND diagnosis than participants with FS who do not perform psychologic follow-up, as shown in Figure 2 Panel B. The same can be seen for patients with FMD, as shown in Figure 2 Panel C; 2)

Table 3 Psychiatric Comorbidities, Medications, Medical and Multi-Professional Follow-Up in FS and FMD Groups

Variables	FS, n = 31 n (%)	FMD, n = 29 n (%)	x^2 / t^a	p^b
Psychiatric comorbidities				
Mood Disorders	25 (81)	23 (79)	0.017	0.897
Anxiety Disorders	19 (61)	18 (62)	0.004	0.951
Continuous use medications				
Antidepressants	18 (58)	16 (55)	0.051	0.821
Antipsychotics	15 (48)	18 (62)	1.133	0.287
Anxiolytics	16 (52)	11 (38)	1.133	0.287
Mood stabilizers	12 (39)	10 (34)	0.155	0.734
Opioids	3 (10)	14 (48)	10.993	<0.001**
Antiseizure	15 (48)	2 (7)	12.703	<0.001**
Medical follow-up				
Only Neurological	17 (55)	15 (52)	0.058	0.809
Neurological and Psychiatric	14 (45)	14 (48)		
Multi-professional follow-up				
Psychological follow-up	7 (23)	18 (62)	9.613	0.002*
Physical therapy	0.0	11 (38)	14.398	<0.001*
Occupational therapy	0.0	9 (31)	11.318	<0.001*
Speech therapy	0.0	7 (24)	8.471	0.004*

Notes: [a]Statistic values of Chi-squared test and Student's *t*-test; [b]statistical value of p considered <0.05; *Statistically significant difference; n (%), number of conversions reported by the group from each category listed, followed by the number of conversions calculated as a percentage.

Abbreviations: FS, functional seizures; FMD, functional movement disorder; n, number of participants in the indicated group.

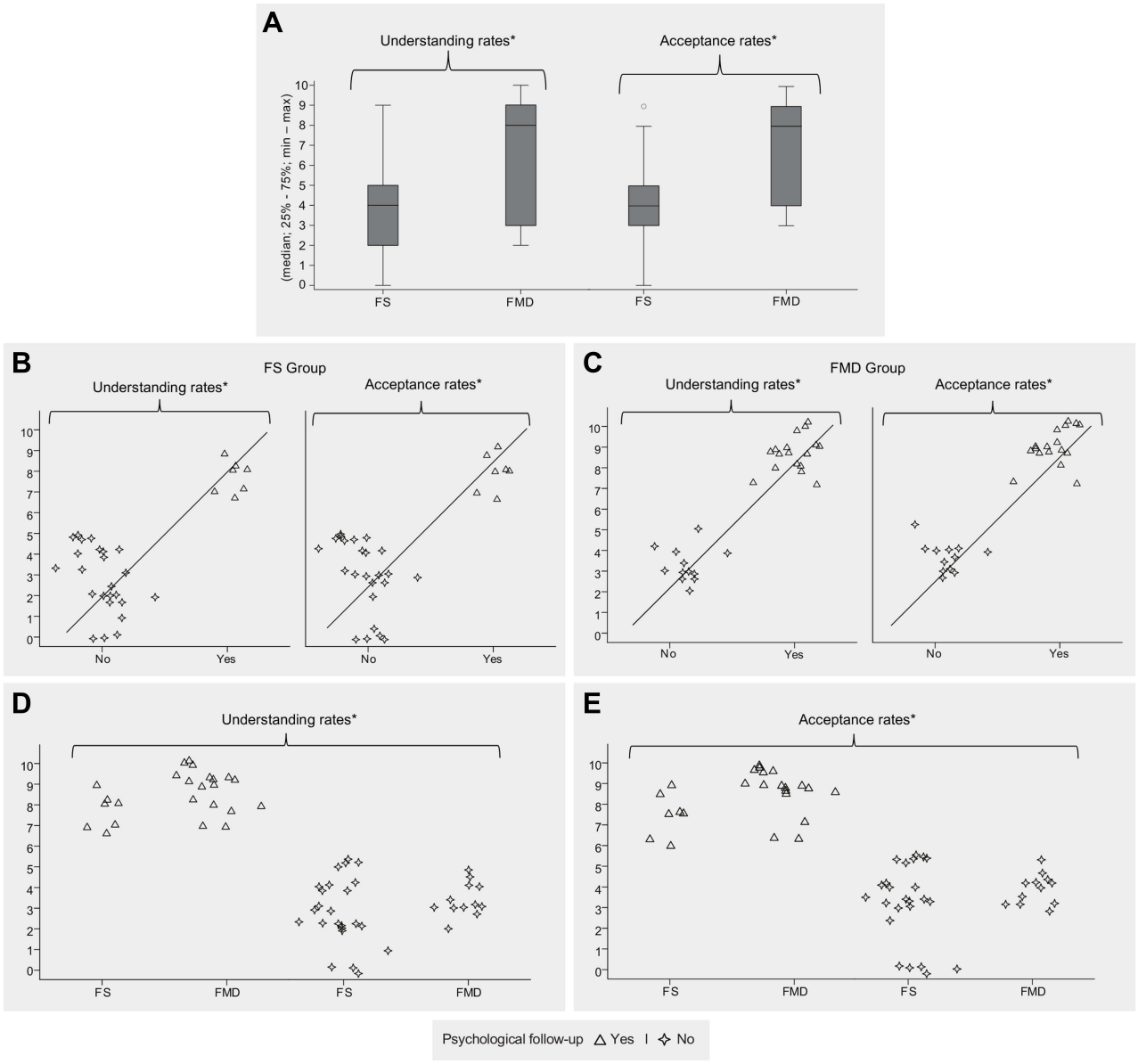

Figure 2 Understanding and acceptance rates of the diagnosis of functional neurological disorder in functional seizures and functional movement disorder groups and relationship with psychological follow-up.

Notes: (**A**) shows mean response for understanding and acceptance rates of a FND diagnosis between the two groups, being: Understanding = FS: 3.9 [n: 31, SD 2.6, range: 0–9] vs FMD: 6.5 [n:29, SD: 2.8, range: 2–10]. Acceptance = FS: 4.1 [n:31, SD: 2.7, range: 0–9] vs FMD: 6.8 [n: 29, SD: 2.8, range: 3–10]. (**B**) shows the relationship between psychological follow-up and rates of understanding and acceptance of diagnosis of DNF in the FS group, being: understanding average without psychotherapy = 2.8 [n: 24, SD 1.6, range 0–5] vs understanding average with psychotherapy = 7.7 [n: 7, SD 0.8, range 7–9]. Acceptance average without psychotherapy = 3.0 [n: 24, SD 1.8, range 0–5] vs acceptance average with psychotherapy = 8.0 [n: 7, SD 0.8, range 7–9]. (**C**) shows the relationship between psychological follow-up and rates of understanding and acceptance of diagnosis of DNF in the FMD group, being: understanding average without psychotherapy = 3.3 [n: 12, SD 0.8, range 2–5] vs understanding average with psychotherapy = 8.7 [n: 17, SD 0.9, range 7–10]. Acceptance average without psychotherapy = 3.7 [n: 12, SD 0.7, range 3–5] vs acceptance average with psychotherapy = 9.0 [n: 17, SD 0.9, range 7–10]. (**D**) demonstrates the similarities in the responses regarding the understanding of the diagnosis of FND between the two groups when considering psychological follow-up, as follows: Understanding average without psychotherapy = 3.1 [n: 36, SD 1.2, range 0–5] vs understanding average with psychotherapy = 8.2 [n: 24, SD 0.9, range 0–10]. (**E**) demonstrates the similarities in the responses regarding the acceptance of the diagnosis of FND between the two groups when considering psychological follow-up, as follows: Acceptance average without psychotherapy = 3.4 [n: 36, SD 1.3, range 0–5] vs acceptance average with psychotherapy = 8.5 [n: 24, SD 0.9, range 7–10]. * Student's *t* test for independent samples with statistically significant differences ($p<0.001$).

Abbreviations: FS, functional seizures; FMD, functional movement disorders.

Regardless of the group, patients who perform psychological follow-up presented higher averages in the indices of understanding and acceptance of FND diagnosis. Lower averages were also found in the same rates among those patients who do not perform psychological follow-up (Figure 2 Panel D and E).

Discussion

In our findings, the data on sociodemographic characteristics corroborate previous research findings, demonstrate profile similarities between the two groups and reinforce the hypothesis that there are strong overlaps between patients with FS and patients with FMD.[6,9,15–18,22]

Regarding psychiatric comorbidities, we found practically the same results between the two groups. These are also similar to the results of previous studies: Grimaldi et al compared patients with FS and FMD and through scales, they found similar indices to ours in the levels of anxiety and depression between the two groups.[18] Huepe-Artigas et al found mood and anxiety disorders in approximately 80% of FS and FMD cases, a number very close to that found in our sample, which also reinforces the consistency of clinical characteristics between FS and FMD.[23]

It is also important to highlight that the parity between among the results obtained and the data present in the current literature reinforce a cross-cultural character of the FND, since the cited studies present data from countries from continents such as North America, Europe, Asia, Oceania and Africa, while our study was carried out in a South American country.[7,18,23]

We also verify that both groups show strong similarity in the use of several classes of psychiatric medications, such as in the use of antidepressants, anxiolytics, mood stabilizers and antipsychotics, demonstrating yet another point of overlap between these two populations. These findings are unprecedented, as until now, no research had pointed out the pharmacotherapeutic similarity between the two groups. However, is noteworthy the use of these medications is probably associated with their own psychiatric comorbidities and not specifically with FND, as there is still no evidence of effective drugs in the treatment of FND.[19,24]

On the other hand, it was found that participants in the FS group have a slightly higher use of antiseizure medications, while participants in the FMD group use more opiates drugs. This may be wrongly related to the type of symptom manifested by each condition, since patients with FS present paroxysmal symptoms and patients with FMD commonly present complaints of fatigue and chronic pain.[1,6–9,11–14,19,24] Considering that in our sample there are only pure cases of FND, it was not expected that these medications are still being used to treat these patients. Several studies are increasingly discouraging the use of antiseizure for FS and opioids for FMD, as there is no evidence of benefits of these medications for pure cases of FND, in addition to the various side effects that result in losses in quality of life.[1,9,10,19,24] This demonstrates that in practice treatment recommendations are still not being fully adopted, which implies the need for to increase the visibility of this problem.

Regarding the type of medical assistance provided, previous studies on FMD had already pointed that most patients being assisted exclusively by neurologists.[25] We found that this fact also extends to FS patients, being another characteristic in which the two populations resemble each other. Several studies have demonstrated the benefits of patients with FND being assisted by neurologists, psychiatrists and psychologists, because this can directly influence issues such as faster diagnosis and a more promising prognosis, in addition to a more optimized management of psychiatric comorbidities.[1,19,26,27] Evidence is also found in possible approaches to be used by physicians for patients with FND: psychoeducational techniques reveal a higher rate of understanding and acceptance of the diagnosis, in addition to improving treatment adherence.[28,29]

Regarding the differences in the follow-up of physical-based therapies, as in pharmacotherapy, part of this can be wrongly justified by the symptoms presented by each condition, since it is already established that FMD patients benefit from physical-based therapies, while that the results of these therapies for FS are not yet fully understood and widespread.[1,30–34]

It is worth noting that significant advances are emerging in relation to physical-based therapies for FS: the Retraining and Control Therapy (ReACT) has been shown to be effective in treating pediatric FS. The treatment uses habit reversal, in which patients perform a competing response to FS symptoms to prevent or interrupt the episodes, and results showed significant improvement in FS compared to supportive therapy. Additionally, 57% continued to be FS-free at 1-year follow-up, with FS frequency overall averaging less than one per month. This suggests that physically based therapy can be effective for FS, and FS symptoms can be physically retrained.[34,35]

Specifically, on the differences in psychological follow-up, A possible explanation may be related to the fact that over the last decade several researchers have sought to present consensual management recommendations for patients with FND. For instance, there are consensual recommendations for physical therapy, occupational therapy and speech therapy for patients with FMD, while the psychological follow-up is recommended for both groups.[1,19,31–33,36,37] Once these recommendations are being increasingly recognized and adopted, this fact may also influence in the difference found in multi-professional follow-up between FS and FMD.

On the other hand, although there is a consensus about the psychotherapeutic treatment for FS, what we found in practice was a small number of patients being followed-up with that specialty.[19,37] This finding is especially interesting because, as mentioned above, patients with FMD have at least two consolidated lines of treatment (physical and psychological therapies), while patients with FS have only the consensual recommendation of psychotherapeutic treatment, which leads to think that such therapy should already be more widespread for this last group.

Possible explanations might be related to issues such as the difficulty in accessing psychological and psychiatric care in the public health system and the loss of psychotherapeutic follow-up due to delays for remission of symptoms and difficulties in adherence.[38] Previous research has also indicated that part of the patients who received the diagnosis of FS had risk factors for non-adherence to psychotherapy, such as self-identified minority status, a history of childhood abuse, in addition to fear of suffering stigma when seeking help in mental health services, a fact that can reduce adherence to psychotherapeutic proposals.[39,40]

Another hypothesis for the low adherence to psychological follow-up is that patients usually seek this specialty to deal with relationship problems, mood, stress or trauma, not targeting physical symptoms. Because patients with FND often seek treatments that directly target their physical symptoms of FND, they may not follow psychotherapy recommendations or may discontinue treatment quickly.[41]

This can be understood as a major obstacle, because it is precisely the psychotherapeutic follow-up that can help patients to elaborate and resignify traumas and de-crystallize fears and stigmas in the face of their illness, bringing improvements to their quality of life and also helping to reduce or even stop symptoms.[1,19,25,29,37] One of the possible impacts of this question becomes evident when we verify the differences found in the rates of understanding and acceptance of the diagnosis of FND between the two groups. Considering that in our findings patients in the FMD group are assisted 3 times more often by psychologists than patients with FS, we also found that patients with FMD had better scores in understanding and acceptance rates, respectively, than the group of patients with FS. In addition, when we made comparisons between patients within their respective clusters, the results showed that, regardless of the group, patients who perform psychological follow-up scored better on the scales of understanding and acceptance than patients who did not undergo psychotherapy.

It is worth remembering that the functional etiology is the main link between FS and FMD, and it is also one of the main factors that supports a hypothesis of overlap between the two conditions.[9,15,16] Since both the literature and our findings demonstrate the benefits of patients with FMD performing psychological follow-up, it is also important to highlight and disseminate the importance and benefits of psychotherapy for patients with FS.[13,19,24,37]

Recently examples are: Goldstein et al released a multicenter randomized clinical trial results, involving 27 research centers in different countries, with a sample of 368 patients. At 12 months after treatment, the authors demonstrated increased quality of life for patients with FS who completed cognitive behavioral therapy and standardized medical care, despite having no significant improvement in FS compared to those who received standardized medical care alone.[42] In another study, researchers submitted a group of 37 patients with FS to psychodynamic psychotherapy, lasting one year in a weekly frequency, getting more than 80% efficacy between remission and cessation of symptoms.[43] In a third study, a meta-analysis of psychotherapeutic lines for patients with FS was done, demonstrating that several approaches have promising results in this population.[44]

However, it is necessary to highlight that such studies point to promising results in patients who have managed to adhere to psychotherapy, being that many studies exclude participants who were not able to adhere to that approach. To circumvent this issue, strategies that seek to increase the adherence of these patients to the aforementioned specialty are also found: Tolchin et al recently published a study in which he demonstrates the benefits of combining Motivational Interviewing (MI) + psychotherapy for patients with FS. When compared with a control group, the use of MI increased

patients' adherence to psychotherapeutic follow-up by 65.4%, demonstrating that MI is a powerful strategy to increase the adherence of patients with FND to psychotherapy.[40]

Among other resources, it is worth mentioning the outstanding initiatives of associations and societies of professionals and patients that have online portals and forums to promote understanding and awareness of FND for both lay people and health professionals. Prominent examples are FND Hope (fndhope.org), FND Society (fndsociety.org), FND Guide (neurosymptoms.org) and FND Action (fndaction.org.uk). These forums and portals have information on diagnosis and treatment, in addition to promoting support groups and resources to be used by patients with FND, proving to be a great strategy that, among several benefits, also can help in adherence to therapies already established for this population.

Conclusion

This study provided evidence that there are more similarities than differences in the management between patients with FS and patients with FMD. The similarities can partly be justified by the sociodemographic and clinical overlaps presented by the two groups. The differences may be related to specific issues of each patient and condition, in this way, although there are similarities, management must always consider the particularities of each case. We have also concluded that patients who perform psychotherapeutic follow-up have higher rates of understanding and acceptance of a FND diagnosis.

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Disclosure

The authors report no conflicts of interest in this work.

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