

SUPPLEMENTARY METHODS

Unpublished data sharing

Unpublished data was collected from experts in the field via an initial invitation to the Movement Disorders Society FMD Study Group. Invitations were also extended to any collaborators suggested by study group members. This formed the basis for the FMD GAP Study Group. We emailed invitation packages including the study protocol, data sharing instructions and a standardized form for data sharing. We requested original, non-published patient data from personal or research databases but also accepted data collected from retrospective chart reviews at the donating institution. All data provided was required to be de-identified prior to sharing. Contributors were required to confirm that their data was collected from participants who provided informed consent. Contributors were required to comply with their own institutional research ethics boards. An institutional data transfer agreement was arranged in most cases. Authors were asked to confirm that the diagnosis of FMD was made clinically using established criteria.^(1,2) All patients were all diagnosed by neurologists with movement disorder training and all cases were drawn from neurological settings. We did not request the time frame for data collection nor if cases were consecutive as we felt these requirements would have substantially reduced the size of the dataset.

Our instructions outlined that we were collecting 3 variables for each patient: gender, age at FMD onset, and FMD phenotype, if available. We asked that transgender patients be classified according to “gender at birth.” We specified that the age of FMD onset is defined as the age (in years) when the patient first developed their FMD chief complaint. It was emphasized that age at onset – and not the age at presentation for the initial evaluation – was of interest. We accepted as a proxy measure for age of onset the age at FMD diagnosis minus FMD symptom duration. Accurate diagnosis and age of onset were left to the judgement of the clinicians. In this IPD meta-analysis of a minimal demographic dataset, missing data was not a concern nor was reporting bias. No other variables were sought.

Phenotypic characterization

We requested the dominant phenotype at the onset of FMD and that it be labelled under one of the following: tremor, dystonia, gait, weakness, jerks/myoclonus, facial symptoms, parkinsonism, other, mixed and unknown/not documented. For patients with multiple presentations over time, we specified that the phenotype at their initial evaluation was to be included. For the “other” category, we included a column where other phenotypes could be specified. In cases where the phenotype was not documented, we only included age of onset and gender, and labeled the phenotype as “unknown.” We did not request identifying if the FMD was paroxysmal.

Inclusion criteria in published and unpublished datasets

Harmonizing unpublished data with published cases required careful consideration of the inclusion criteria. Using a minimal dataset of 3 variables aided with this, at least two of which were assumed to be extremely reliable and unlikely to vary whether published or not (gender and

age at onset). Harmonizing phenotype required parameters be given for unpublished data (categories above) which we assumed would have otherwise been grouped according to presentation and diagnosed using the same clinical criteria, and also not likely to change. The categories used were derived from phenotypes described in the published literature in a further effort to harmonize the data. Specifying an “unknown” category allowed including unpublished cases without a recorded phenotype which may not be published otherwise as a result. This was in keeping with the primary outcome of the study which was to assess the distribution of gender and age at onset.

Exclusion criteria were applied at the study level for published data, and at the patient level for the unpublished data. To maximize the yield of reliable, published FMD cases we restricted the search as described in the search strategy in the main manuscript. For unpublished cases, the exclusion criteria were specified to try to align the cases as much as possible with the published dataset to ensure as “pure” an FMD sample as possible.

Avoiding duplicate data

The invitation to participate in the study contained a bibliography of the results of our systematic review and hand-search. This enabled authors to ensure that their data were not already included. Upon sharing, all contributors were asked to confirm if their data were published, and if so, to provide the citation of the paper, enabling cross referencing with our database. Two study investigators independently conducted the search and the results were then cross-referenced and reviewed by two other investigators.

SUPPLEMENTARY RESULTS

Systematic review and data selection

The systematic review is presented in Supplementary Figure 1. The PubMed search yielded 3083 papers. After removing reviews, non-English papers, and papers not related to functional neurological disorder, 136 papers underwent full-text screening for eligibility. Papers were then removed if they were not related to FMD, they lacked the requisite quantitative FMD patient data, or there was comorbid neurological disease. After reference list searching, 98 sources continued to the data selection process. The results from the systematic review were compared to a secondary hand search by a separate author, which yielded 166 eligible records; 27 duplicates were removed. Each abstract was reviewed by 2-3 authors, and each full-text article was reviewed by two authors. Data extraction was conducted by two authors, and one author reviewed the data for accuracy.

The geographic distribution of the entire dataset is presented in the map in Supplementary Figure 2 and numerically by country in Supplementary Figure 5.

The entire dataset of all 4905 cases is presented in Supplementary Table 1, divided by phenotype and age. A significant association between age and phenotype was not seen, apart from a trend to significance for older age in gait disorders ($p=0.054$).

Published data characteristics

Supplementary Table 2 contains a summary of the published data sources. In addition to the main FMD phenotype categories, the following entries were included in the “Other” category: blepharospasm, chewing dystonia, coma, ophthalmologic FMD, palatal myoclonus, paroxysmal ballism, stereotypies, tics (6), toe movements, and tongue movements.

Unpublished data characteristics

Unpublished data were shared from 33 separate groups from 28 countries (Supplementary Table 3). The response rate for data sharing was estimated at 65%. In addition to the main FMD phenotype categories, 61 cases of alternate phenotypes were reported under the “Other” category (Supplementary Table 4).

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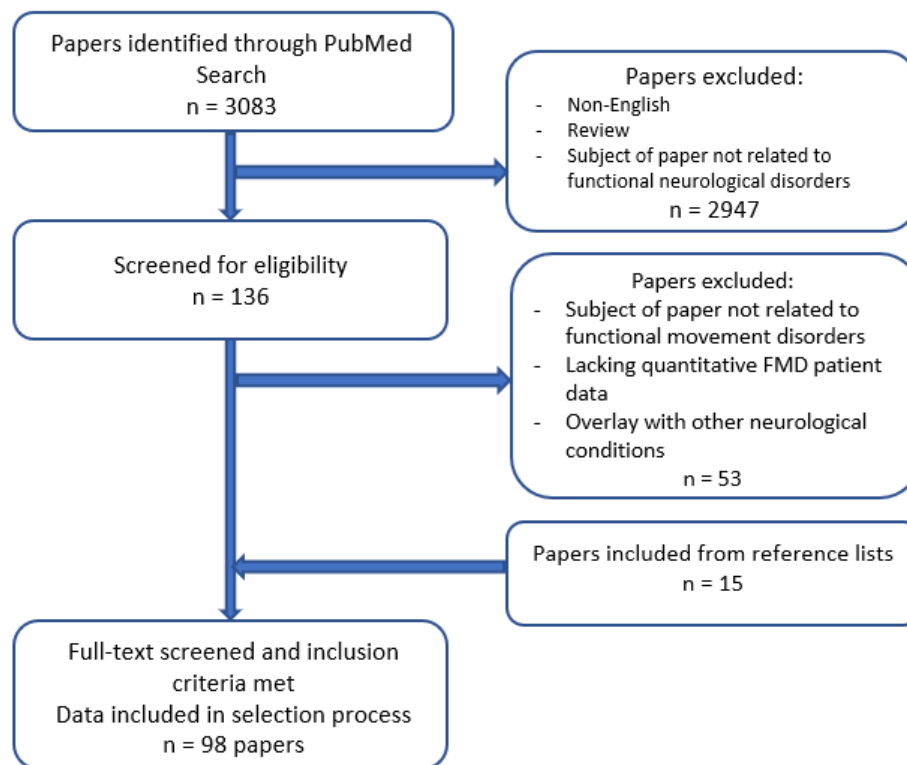
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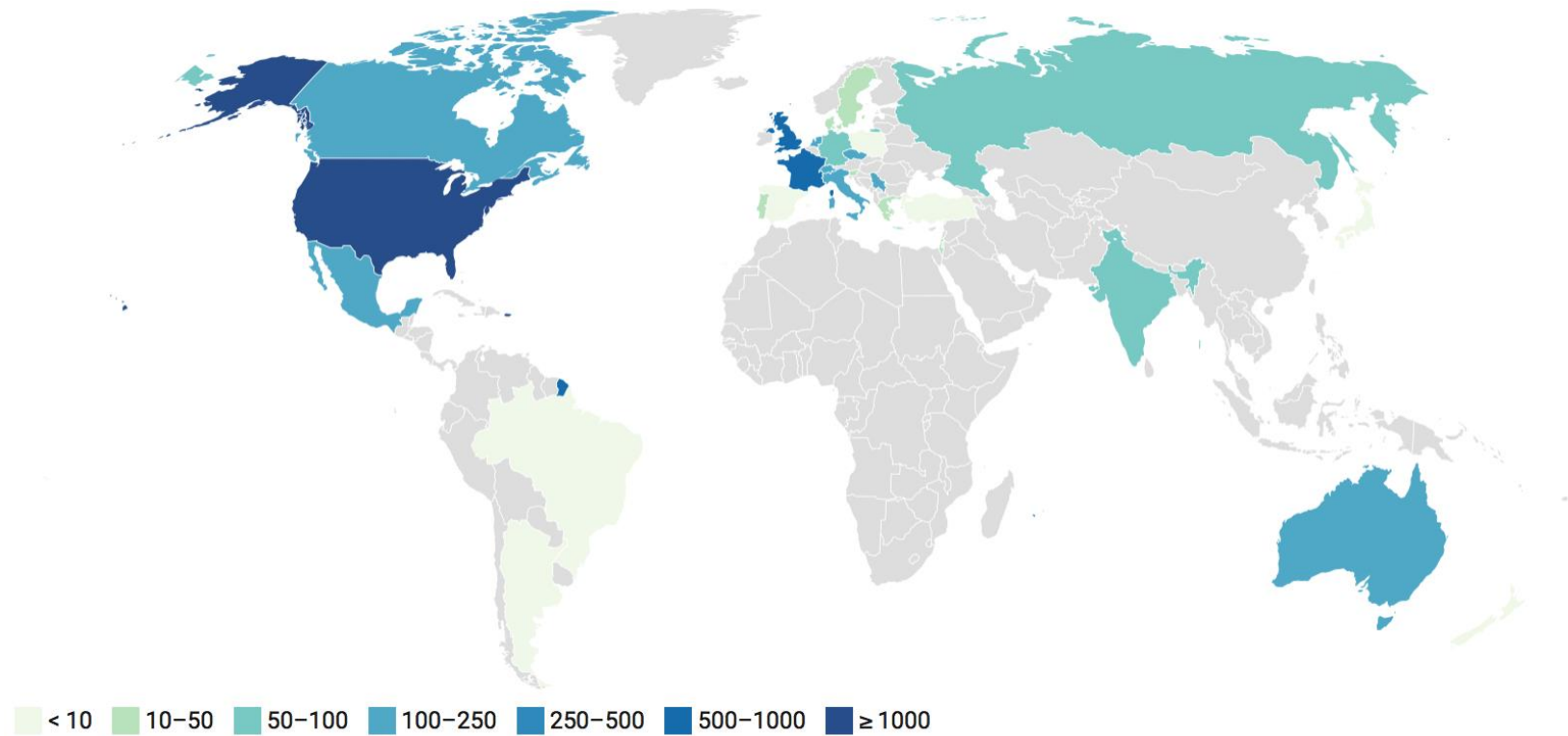
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Supplementary Figure 1: Systematic review flow diagram. FMD, functional movement disorder.



Supplementary Figure 2: Geographical distribution of the total dataset, published and unpublished cases.

Supplementary Table 1: Numbers (n(%)) of cases by phenotype in the whole sample, pediatric (16 and under), and older adults (60

	Whole sample		Age 16 or under onset			Age 60 or over onset			p-value*
	Women	Men	Women	Men	Overall	Women	Men	Overall	
Mixed	848 (75.2)	279 (24.8)	51 (77.3)	15 (22.7)	66 (17.2)	105 (67.3)	51 (32.7)	156 (29.7)	0.151
Tremor	752 (71.2)	304 (28.8)	64 (71.1)	26 (28.9)	90 (23.5)	93 (72.1)	36 (27.9)	129 (24.5)	0.880
Weakness	647 (72.9)	240 (27.1)	39 (67.2)	19 (32.8)	58 (15.1)	22 (68.8)	10 (31.2)	32 (6.1)	1.0
Dystonia	453 (78.4)	125 (21.6)	58 (78.4)	16 (21.6)	74 (19.3)	18 (62.1)	11 (37.9)	29 (5.5)	0.134
Gait	284 (70.1)	121 (29.9)	26 (78.8)	7 (21.2)	33 (8.6)	48 (59.3)	33 (40.7)	81 (15.4)	0.054
Jerks / myoclonus	142 (63.7)	81 (36.3)	14 (63.6)	8 (36.4)	22 (5.7)	25 (71.4)	10 (28.6)	35 (6.7)	0.570
Parkinsonism	43 (51.8)	40 (48.2)	-	2 (100.0)	2 (0.5)	9 (90.0)	1 (10.0)	10 (1.9)	-
Facial symptoms	56 (83.6)	11 (16.4)	1 (100.0)	-	1 (0.3)	1 (50.0)	1 (50.0)	2 (0.4)	-
Other / unknown	333 (69.5)	146 (30.5)	22 (59.5)	15 (40.5)	37 (9.7)	37 (71.2)	15 (28.8)	52 (9.9)	0.265
Total	3558 (72.5)	1347 (27.5)	275 (71.8)	108 (28.2)	383 (7.8)	358 (68.1)	168 (31.9)	526 (10.7)	-

and over).

*Fisher's exact test within phenotypes to assess association between gender and young onset (≤ 16) vs older onset (≥ 60)

Supplementary Table 2: Summary of published dataset

Country	Cases (n)	Reference
United States	27	Espay AJ, Maloney T, Vannest J, et al. Impaired emotion processing in functional (psychogenic) tremor: A functional magnetic resonance imaging study. <i>Neuroimage Clin.</i> 2017;17:179–187 (7)
United States	10	Espay AJ, Edwards MJ, Oggioni GD, et al. Tremor retraining as therapeutic strategy in psychogenic (functional) tremor. <i>Parkinsonism Relat Disord.</i> 2014;20(6):647–650 (8)
Canada	18	Lang, A. (1995). Psychogenic Dystonia: A Review of 18 Cases. <i>Canadian Journal of Neurological Sciences / Journal Canadien Des Sciences Neurologiques</i> , 22(2), 136-143.(9)
Italy	11	Tinazzi M, Fasano A, Peretti A, Bove F, Conte A, Dall'Occhio C, et al. (2014) Tactile and Proprioceptive Temporal Discrimination Are Impaired in Functional Tremor. <i>PLoS ONE</i> 9(7): e102328.(10)
Spain	8	Gaig C, Martí MJ, Tolosa E, Valldeoriola F, Paredes P, Lomeña FJ, et al. 123I-Ioflupane SPECT in the diagnosis of suspected psychogenic Parkinsonism. <i>Mov Disord.</i> 2006;21(11):1994–8.(11)
England	11	Demartini B, Ricciardi L, Parees I, Ganos C, Bhatia KP, Edwards MJ. A positive diagnosis of functional (psychogenic) tics. <i>Eur J Neurol.</i> 2015 Mar;22(3):527-e36.(12)
England	10	Quartarone A, Rizzo V, Terranova C, Morgante F, Schneider S, Ibrahim N, et al. Abnormal sensorimotor plasticity in organic but not in psychogenic dystonia. <i>Brain.</i> 2009 Oct 1;132(10):2871–7.(13)
Italy	14	Morgante F, Edwards MJ, Espay AJ, Fasano A, Mir P, Martino D. Diagnostic agreement in patients with psychogenic movement disorders. <i>Mov Disord.</i> 2012;27(4):548–52.(14)
Germany	25	Deuschl G, Köster B, Lücking CH, Scheidt C. Diagnostic and pathophysiological aspects of psychogenic tremors. <i>Mov Disord.</i> 1998;13(2):294–302.(15)
England	11	Pareés I, Kassavetis P, Saifee TA, Sadnicka A, Davare M, Bhatia KP, et al. Failure of explicit movement control in patients with functional motor symptoms. <i>Mov Disord.</i> 2013;28(4):517–23.(16)
England	13	Schwingenschuh P, Katschnig P, Seiler S, Saifee TA, Aguirregomez M, Cordivari C, et al. Moving toward “laboratory-supported” criteria for psychogenic tremor. <i>Mov Disord.</i> 2011;26(14):2509–15.(17)
United States	28	Factor SA, Podskalny GD, Molho ES. Psychogenic movement disorders: frequency, clinical profile, and characteristics. <i>J Neurol Neurosurg Psychiatry.</i> 1995 Oct;59(4):406–12.(18)
United States	9	Hinson VK, Weinstein S, Bernard B, Leurgans SE, Goetz CG. Single-blind clinical trial of psychotherapy for treatment of psychogenic movement disorders. <i>Parkinsonism Relat Disord.</i> 2006 Apr 1;12(3):177–80.(19)

United States	9	Baizabal-Carvallo JF, Jankovic J. The clinical features of psychogenic movement disorders resembling tics. <i>J Neurol Neurosurg Psychiatry</i> . 2014 May 1;85(5):573–5.(20)
Italy	16	Dalocchio C, Arbasino C, Klersy C, Marchioni E. The effects of physical activity on psychogenic movement disorders. <i>Mov Disord</i> . 2010;25(4):421–5.(21)
England	6	Schrag AE, Mehta AR, Bhatia KP, Brown RJ, Frackowiak RSJ, Trimble MR, et al. The functional neuroimaging correlates of psychogenic versus organic dystonia. <i>Brain</i> . 2013 Mar 1;136(3):770–81.(22)
England	37	Schrag A, Trimble M, Quinn N, Bhatia K. The syndrome of fixed dystonia: an evaluation of 103 patients. <i>Brain</i> . 2004 Oct 1;127(10):2360–72.(23)
Germany	13	Hassa T, de Jel E, Tüeschler O, Schmidt R, Schoenfeld MA. Functional networks of motor inhibition in conversion disorder patients and feigning subjects. <i>NeuroImage Clin</i> . 2016;11:719–27.(24)
United States	36	Epstein SA, Maurer CW, LaFaver K, Ameli R, Sinclair S, Hallett M. Insights into Chronic Functional Movement Disorders: The Value of Qualitative Psychiatric Interviews. <i>Psychosomatics</i> . 2016 Dec;57(6):566–75.(25)
England	5	Batla A, Pareés I, Edwards MJ, Stamelou M, Bhatia KP, Panicker JN. Lower urinary tract dysfunction in patients with functional movement disorders. <i>J Neurol Sci</i> . 2016 Feb 15;361:192–4.(26)
Switzerland	12	Frasca Polara G, Fleury V, Stone J, Barbey A, Burkhard PR, Vingerhoets F, et al. Prevalence of functional (psychogenic) parkinsonism in two Swiss movement disorders clinics and review of the literature. <i>J Neurol Sci</i> . 2018 Apr 15;387:37–45.(27)
United States	11	Baizabal-Carvallo JF, Jankovic J. Psychogenic Ophthalmologic Movement Disorders. <i>J Neuropsychiatry Clin Neurosci</i> . 2016 Jan 21;28(3):195–8.(3)
Scotland	11	Stone J, Hoeritzauer I, Brown K, Carson A. Therapeutic sedation for functional (psychogenic) neurological symptoms. <i>J Psychosom Res</i> . 2014 Feb 1;76(2):165–8.(28)
Scotland	10	McWhirter L, Ludwig L, Carson A, McIntosh RD, Stone J. Transcranial magnetic stimulation as a treatment for functional (psychogenic) upper limb weakness. <i>J Psychosom Res</i> . 2016 Oct 1;89:102–6.(29)
Scotland	107	Stone J, Warlow C, Sharpe M. The symptom of functional weakness: a controlled study of 107 patients, <i>Brain</i> 133 (5), May 2010, Pages 1537–1551.(30)
Scotland	41	Stone, J, Hoeritzauer I, Tesolin, L, Carson, A. (2018). Functional movement disorders of the face: A historical review and case series. <i>Journal of the Neurological Sciences</i> . 395-40 (31)
Sweden	30	Binzer M, Andersen PM, Kullgren G. Clinical characteristics of patients with motor disability due to conversion disorder: a prospective control group study. <i>J Neurol Neurosurg Psychiatry</i> . 1997;63(1):83–88.(32)
Scotland	7	Stone J, Gelauff J, Carson A. A “twist in the tale”: Altered perception of ankle position in psychogenic dystonia. <i>Mov Disord</i> . 2012;27(4):585–6.(33)
Germany	8	Liepert J, Hassa T, Tüeschler O, Schmidt R. Abnormal motor excitability in patients with psychogenic paresis. <i>J Neurol</i> . 2009 Jan 1;256(1):121–6.(34)

United States	6	Zeuner KE, Shoge RO, Goldstein SR, Dambrosia JM, Hallett M. Accelerometry to distinguish psychogenic from essential or parkinsonian tremor. <i>Neurology</i> . 2003 Aug 26;61(4):548–50.(35)
United States	20	Kranick SM, Moore JW, Yusuf N, Martinez VT, LaFaver K, Edwards MJ, et al. Action-effect binding is decreased in motor conversion disorder: implications for sense of agency. <i>Mov Disord Off J Mov Disord Soc</i> . 2013 Jul;28(8):1110–6.(36)
Brazil	3	Felicio AC, Godeiro-Junior C, Moriyama TS, Shih MC, Hoexter MQ, Borges V, et al. Degenerative parkinsonism in patients with psychogenic parkinsonism: A dopamine transporter imaging study. <i>Clin Neurol Neurosurg</i> . 2010 May 1;112(4):282–5.(37)
Scotland	4	Stone J, Zeman A, Simonotto E, Meyer M, Azuma R, Flett S, et al. fMRI in Patients With Motor Conversion Symptoms and Controls With Simulated Weakness. <i>Psychosom Med</i> . 2007 Dec;69(9):961–9.(38)
England	15	Aybek S, Nicholson TRJ, Draganski B, Daly E, Murphy DG, David AS, et al. Grey matter changes in motor conversion disorder. <i>J Neurol Neurosurg Psychiatry</i> . 2014 Feb 1;85(2):236–8.(39)
Netherlands	6	Roelofs K, de Bruijn ERA, Van Galen GP. Hyperactive action monitoring during motor-initiation in conversion paralysis: An event-related potential study. <i>Biol Psychol</i> . 2006 Mar;71(3):316–25.(40)
Netherlands	8	Delange F, Roelofs K, Toni I. Increased self-monitoring during imagined movements in conversion paralysis. <i>Neuropsychologia</i> . 2007;45(9):2051–8.(41)
Argentina	5	Merello M, Ballesteros D, Rossi M, Arena J, Crespo M, Cervio A, et al. Lack of maintenance of gait pattern as measured by instrumental methods suggests psychogenic gait. <i>Funct Neurol</i> . 2012 Dec;27(4):217–24.(42)
Germany	12	Liepert J, Hassa T, Tüscher O, Schmidt R. Motor excitability during movement imagination and movement observation in psychogenic lower limb paresis. <i>J Psychosom Res</i> . 2011 Jan 1;70(1):59–65.(43)
Netherlands	4	Roelofs K, van Galen GP, Keijsers GPJ, Hoogduin CAL. Motor initiation and execution in patients with conversion paralysis. <i>Acta Psychol (Amst)</i> . 2002 May;110(1):21–34.(44)
Italy	14	Canavese C, Ciano C, Zibordi F, Zorzi G, Cavallera V, Nardocci N. Phenomenology of psychogenic movement disorders in children. <i>Mov Disord Off J Mov Disord Soc</i> . 2012 Aug;27(9):1153–7.(45)
Italy	1	Bentivoglio AR, Loi M, Valente EM, Ialongo T, Tonali P, Albanese A. Phenotypic variability of DYT1-PTD: Does the clinical spectrum include psychogenic dystonia? <i>Mov Disord</i> . 2002;17(5):1058–63.(46)
Japan	6	Terada K, Ikeda A, Van Ness PC, Nagamine T, Kaji R, Kimura J, et al. Presence of Bereitschaftspotential preceding psychogenic myoclonus: clinical application of jerk-locked back averaging. <i>J Neurol Neurosurg Psychiatry</i> . 1995 Jun;58(6):745–7.(47)
England	15	Schwingenschuh P, Pont-Sunyer C, Surtees R, Edwards MJ, Bhatia KP. Psychogenic movement disorders in children: A report of 15 cases and a review of the literature. <i>Mov Disord</i> . 2008;23(13):1882–8.(48)

England	7	Stamelou M, Saifee TA, Edwards MJ, Bhatia KP. Psychogenic palatal tremor may be underrecognized: reappraisal of a large series of cases. <i>Mov Disord Off J Mov Disord Soc.</i> 2012 Aug;27(9):1164–8.(5)
France	3	Benaderette S, Fregonara PZ, Apartis E, Nguyen C, Trocello J-M, Remy P, et al. Psychogenic parkinsonism: A combination of clinical, electrophysiological, and [123I]-FP-CIT SPECT scan explorations improves diagnostic accuracy. <i>Mov Disord.</i> 2006;21(3):310–7.(49)
United States	23	Piboolnurak P, Rothey N, Ahmed A, Ford B, Yu Q, Xu D, et al. Psychogenic tremor disorders identified using tree-based statistical algorithms and quantitative tremor analysis. <i>Mov Disord.</i> 2005;20(12):1543–9.(50)
Netherlands	3	Moene FC, Hoogduin KAL, Dyck RV. The inpatient treatment of patients suffering from (motor) conversion symptoms: A description of eight cases. <i>Int J Clin Exp Hypn.</i> 1998 Apr;46(2):171–90.(51)
France	24	Garcin B, Roze E, Mesrati F, Cognat E, Fournier E, Vidailhet M, et al. Transcranial magnetic stimulation as an efficient treatment for psychogenic movement disorders. <i>J Neurol Neurosurg Psychiatry.</i> 2013 Sep 1;84(9):1043–6.(52)
Germany	15	Raethjen J, Kopper F, Govindan RB, Volkmann J, Deuschl G. Two different pathogenetic mechanisms in psychogenic tremor. <i>Neurology.</i> 2004 Sep 14;(63):812–5.(53)
Czech Republic	15	Sojka P, Losak, J, Lamoš, M et al. (2019). Processing of Emotions in Functional Movement Disorder: An Exploratory fMRI Study. <i>Frontiers in Neurology.</i> 10. 861-861 (54)
Israel	3	Shahar, E., Ravid, S., Hafner, H., Chistyakov, A., & Shcif, A. (2012). Diagnostic value of Hoover sign and motor-evoked potentials in acute somatoform unilateral weakness and sensory impairment mimicking vascular stroke. <i>J Clin Neurosci.</i> 2012 Jul;19(7):980–3.(55)
Denmark	13	Søgaard U et al. (2019). Personality and Psychopathology in Patients With Mixed Sensory-Motor Functional Neurological Disorder (Conversion Disorder) A Pilot Study. <i>Journal of Nervous and Mental Disease.</i> 207 (7) 546-554. (56)
Israel	6	Biran, I., & Shahar-Levy, Y. (2018). Patients with motor conversion disorder use early developmental motor patterns. <i>Journal of Bodywork and Movement Therapies.</i> 22(2), 366–373.(57)
New Zealand	6	Blakemore, R. L., Hyland, B. I., Hammond-Tooke, G. D., & Anson, J. G. (2013). Distinct Modulation of Event-Related Potentials during Motor Preparation in Patients with Motor Conversion Disorder. <i>PLoS ONE.</i> 8(4), 1–8.(58)
England	5	Ahmed, M. A., Martinez, A., Yee, A., Cahill, D., & Besag, F. M. (2008). Psychogenic and organic movement disorders in children. <i>Dev.Med.Child Neurol Apr;</i> 50(4):300–4. (59)
Australia	12	Dale, R. C., Singh, H., Troedson, C., Pillai, S., Gaikiwari, S., & Kozłowska, K. (2010). A prospective study of acute movement disorders in children. <i>Dev.Med.Child Neurol.</i> , Feb 12;52(8):739–48. (60)

Australia	12	Hayes, M. W., Graham, S., Heldorf, P., De Moore, G., Morris, J. G. L., De, M. G., & Morris, J. G. L. (1999). A video review of the diagnosis of psychogenic gait: appendix and commentary. <i>Mov Disord.</i> , 14(6) 914–921.(61)
England	7	Lader, M., & Sartorius, N. (1968). Anxiety in patients with hysterical conversion symptoms. <i>J.Neurol.Neurosurg.Psychiatry</i> , 31(5), 490–495.(62)
England	4	Majumdar, A., López-Casas, J., Poo, P., et al. (2009). Syndrome of fixed dystonia in adolescents-short term outcome in 4 cases. <i>European Journal of Paediatric Neurology : EJPN : Official Journal of the European Paediatric Neurology Society</i> , 13(5), 466–472.(63)
Turkey	5	Yazici, K. M., & Kostakoglu, L. (1998). Cerebral blood flow changes in patients with conversion disorder. <i>Psychiatry Res.</i> , 83(3) 163–168.(64)
England	8	Speed, J. (1996). Behavioral management of conversion disorder: retrospective study. <i>Archives of Physical Medicine and Rehabilitation</i> , 77(2), 147–154.(65)
England	9	Thomson, A. P., & Sills, J. A. (1988). Diagnosis of functional illness presenting with gait disorder. <i>Archives of Disease in Childhood</i> , 63(2), 148–153.(66)
Israel	1	Blinder, D., Rotenberg, L., & Taicher, S. (1996). Conversion disorder after maxillofacial trauma and surgery. <i>International Journal of Oral & Maxillofacial Surgery</i> , 25(2), 116–118.(67)
Poland	5	Janik, P., Milanowski, L., & Szejko, N. (2014). Psychogenic tics: Clinical characteristics and prevalence. <i>Psychiatria Polska</i> , 48(4), 835–845.(6)
Netherlands	3	Hop, J. W., Frijns, C. J. M., & van Gijn, J. (1997). Psychogenic pseudoptosis. <i>Journal of Neurology</i> , 244(10), 623–624.(4)
Italy	35	Defazio G, Pastore A, Pellicciari R, Pierri G, Gigante AF, Fabio G, Superbo M, Margari F. Personality disorders and somatization in functional and organic movement disorders. <i>Psychiatry Res.</i> 2017 Nov;257:227-229.(68) Pellicciari R, Superbo M, Gigante AF, Livrea P, Defazio G. Disease modeling in functional movement disorders. <i>Parkinsonism Relat Disord.</i> 2014 Nov;20(11):1287-9.(69)
United States	3	Pandey, S., Nahab, F., Aldred, J., Nutt, J. and Hallett, M. (2014), Post-Traumatic Shoulder Movement Disorders: A Challenging Differential Diagnosis Between Organic and Functional. <i>Mov Disord Clin Pract</i> , 1: 102-105.(70)
India	58	Pandey S, Koul A. Psychogenic Movement Disorders in Adults and Children: A Clinical and Video Profile of 58 Indian Patients. <i>Mov Disord Clin Pract.</i> 2017;4(5):763–767.(71)
India	18	Chouksey A, Pandey S. Functional Movement Disorders in Elderly. <i>Tremor Other Hyperkinet Mov (N Y)</i> . 2019;9:(72)
Mexico	196	Baizabal-Carvalho, J.F. and Jankovic, J. (2019), Gender Differences in Functional Movement Disorders. <i>Mov Disord Clin Pract.</i> 7(2) 182-187.(73)
Australia	66	Ahmad O, Ahmad KE. Functional neurological disorders in outpatient practice: An Australian cohort. <i>J Clin Neurosci.</i> 2016 Jun;28:93-6. (74)
France	51	Gendre T, Carle G, Mesrati F, Hubsch C, Mauras T, Roze E, Houot M, Degos B, Garcin B. Quality of life in functional movement disorders is as altered as in organic movement disorders. <i>J Psychosom Res.</i> 2019 Jan;116:10-16.(75)

France	33	Garcin B, Mesrati F, Hubsch C, Mauras T, Iliescu I, Naccache L, Vidailhet M, Roze E, Degos B. Impact of Transcranial Magnetic Stimulation on Functional Movement Disorders: Cortical Modulation or a Behavioral Effect? <i>Front Neurol.</i> 2017 Jul 19;8:338.(76)
Netherlands	9	Stins, J.F., Kempe, C.A. (Lianne), Hagens, M.A., Beek, P.J., & Roelofs, K. (2015). Attention and postural control in patients with conversion paresis. <i>Journal of Psychosomatic Research</i> , 78, 249-254.(77)
United States	65	McKeon A, Ahlskog JE, Bower JH, Josephs KA, Matsumoto JY. Psychogenic tremor: long-term prognosis in patients with electrophysiologically confirmed disease. <i>Mov Disord.</i> 2009 Jan 15;24(1):72-6.(78)
United States	30	de Gusmão CM, Guerriero RM, Bernson-Leung ME, Pier D, Ibeziako PI, Bujoreanu S, Maski KP, Urion DK, Waugh JL. Functional neurological symptom disorders in a pediatric emergency room: diagnostic accuracy, features, and outcome. <i>Pediatr Neurol.</i> 2014 Aug;51(2):233-8.(79)
United States	6	Guerriero RM, Pier DB, de Gusmão CM, Bernson-Leung ME, Maski KP, Urion DK, Waugh JL. Increased pediatric functional neurological symptom disorders after the Boston marathon bombings: a case series. <i>Pediatr Neurol.</i> 2014 Nov;51(5):619-23.(80)
Canada	14	Lang AE, Koller WC, Fahn S. Psychogenic Parkinsonism. <i>Archives of Neurology.</i> 1995;52(8):802-810.
Poland	2	Sławek J, Wichowicz HM, Cubała WJ, et al. Psychogenic axial myoclonus: report on two cases. <i>Neurol Sci.</i> 2010;31(2):219-222.
Total	1448	

Supplementary Table 3: Summary of unpublished dataset

Institution	City	# of cases
Northwestern University	Chicago	94
Toronto Western Hospital	Toronto	84
University Clinical Centre Ljubljana	Slovenia	23
St Georges University of London	London	200
University of Colorado	Aurora	356
Massachusetts General Hospital	Boston	98
Emory University	Atlanta	50
Stony Brook University	Stony Brook	45
University of Guanajuato	Leon	15
University of Melbourne	Heidelberg	120
Università degli Studi di Milano	Milano	31
Research Center of Neurology	Moscow	34
Hospital de Santa Maria	Lisbon	17
Charles University	Prague	206
University of Texas	Houston	67
Inselspital, Switzerland	Bern	140
University of California, Los Angeles	Los Angeles	44
IRCCS Fondazione Don Carlo Gnocchi Onlus	Milano	12
University of Belgrade	Serbia	102
Rush University	Chicago	236
University of Porto	Porto	11
Hygeia Hospital	Athens	20
University of Cincinnati	Cincinnati	164
University of Verona	Verona	24
Loginov Moscow Clinical Scientific Center	Moscow	28
Sechenov University	Moscow	6
Mayo Clinic	Rochester	48
IRCCS Humanitas Research Hospital	Milano	17
University of Cincinnati	Cincinnati	455
University of Groningen	Groningen	186
National Institute of Health	Bethesda	75
King's College London	London	45
Le Salpêtrière hospital	Paris	404
Total		3457

Supplementary Table 4: Alternate phenotypes of unpublished Functional Movement Disorders included in “Other” category

FMD phenotype	Cases (n)
Chorea	13
Tics	9
Speech	8
Dyskinesia	4
Benign fasciculations	3
Paroxysmal FMD	3
Shaking	3
Stiffness	3
Oculomotor	2
Palatal tremor	2
Spasticity	2
Abduction/adduction of legs while seated	1
Arms will point to one side and legs will "kick out"	1
Burping/retching - abdominal wall and pharyngeal involvement	1
Dysphagia	1
Blepharospasm	1
Hiccups	1
'Keyboard-type' movements in hands and feet	1
Orolingual dyskinesias	1
Trunk and neck stereotypies	1
Total	61

Supplementary Table 5: Geographic distribution of the total sample

Argentina	5
Australia	210
Brazil	3
Canada	116
Czech Republic	221
Denmark	13
England	408
France	515
Germany	73
Greece	20
India	76
Israel	10
Italy	175
Japan	6
Mexico	196
Netherlands	219
New Zealand	6
Poland	7
Portugal	28
Russia	68
Scotland	180
Serbia	102
Slovenia	23
Spain	8
Sweden	30
Switzerland	152
Turkey	5
United States	2030
Total cases	4905