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Frequency of Borderline and Histrionic Personality Traits in Patients of Conversion Disorder in Psychiatry Units of Tertiary Care Hospitals at Peshawar

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Article Details

ABSTRACT

Keywords: Functional Neurological Disorder, Borderline, Histrionic, Personality Disorder, IPDE, Traits

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Objective: To measure the frequency borderline & histrionic personality traits in individuals with Conversion Disorder and its associations with demographic variables of the patient. **Methodology:** This descriptive cross-sectional study used a sample of 270 diagnosed patients with conversion disorder (Functional Neurological Disorders, FNDs) at psychiatric hospitals in Peshawar, Pakistan. Non-probability convenience sampling was used to select participants for the strict eligibility criteria set for inclusion/exclusion in order to eliminate bias in the results. The modified form of IPDE screened Personality traits, that is, Borderline personality traits and Histrionic personality traits. The researchers collected information about public understanding through qualitative evaluations and recorded several demographic elements, including age, marital status, education level, and gender. They then statistically evaluated the data using SPSS version 22. **Result:** Personality disorder traits among conversion disorder patients, 28.1% (n=76) exhibited borderline traits, 15.9% (n=43) displayed histrionic traits, 26.7% (n=72) had both borderline and histrionic traits, and 29.3% (n=79) showed neither trait. Histrionic traits were most common in the 19–40-year age group, followed by 12–18 years and 41–65 years. Borderline traits were also prevalent in this age group. Married individuals had a higher frequency of both traits than unmarried individuals. Females had higher frequencies of histrionic and borderline traits. Secondary education level having the highest frequency of both traits. The middle-class SES had the highest frequency of both disorders' traits. Correlation analysis showed significant associations between some demographic variables and personality traits. The chi-square test indicated a significant association between age and histrionic traits ($\chi^2=13.649$, $p=0.0324$) and age and borderline traits ($\chi^2=19.255$, $p=0.0155$), with weak positive correlations. However, marital status did not show significant associations with either trait. Education level was significantly associated with borderline traits ($\chi^2=53.122$, $p=0.017$) but not with histrionic traits. **Conclusion:** Research findings established associations between these personality traits and eight demographic factors, although marital status did not produce meaningful correlations. The findings underscore the complexity of FND and its intersection with personality traits, emphasizing the need for targeted psychosocial interventions tailored to specific demographic profiles.

INTRODUCTION

Professional neurological manifestations persist as a key challenge that neuropsychiatrists face in their practice. The complex causes of conversion disorder enable researchers to better understand the source of this condition through personality trait analysis. The occurrence of personality disorders results in symptom manifestation complications and affects how personality traits interact with conversion disorder. Functional neurological symptom disorder (FND) appears under its other name, conversion disorder, as a psychiatric disorder that affects sensory or motor functions, which stand out differently from known neurologic diseases, thus creating functional disability (1). Statistical studies show that between 20 to 25 percent of hospital patients display conversion symptoms, while 5 percent of this population fulfills the criteria for the complete disorder (2). Adult women show a higher prevalence of FND than men based on ratios that span between 2 to 1 and 10 to 1. Increased risk factors of FNDs are linked to lower socioeconomic status and education levels. Research shows that race has no substantial impact on the development of FND. The occurrence of conversion disorder in young patients remains unusual before reaching five years of age yet increases during puberty and adolescence. Research from Germany suggests a 0.2% pediatric patient rate, while Australian studies demonstrate conversion disorder occurs between 2.3 to 4.2 times per 100,000 annually. The risk for girls older than ten years to get conversion disorder exceeds the risk level for boys by a factor of three (3).

Borderline personality disorder manifests through frantic behaviors to stop feeling abandoned together with unstable relationships and disturbed personality identities and impulsions, repeated self-injurious actions, reactive emotional states, persistent emotional voids, angry outbursts, and dissociative or psychotic symptoms that can appear briefly. The symptoms cause chronic episodes of self-harm while creating emotional instability along with substantial challenges in managing anger control, but they also induce multiple self-mutilation incidents (4).

People who have FND exhibit very high instances of psychiatric disorders alongside persistent and sudden stress factors. The manifestation of psychiatric disorders alongside FND results from insecure attachment, which develops into a fundamental risk factor for mental illness because of ineffective coping mechanisms. Specifically, insecure attachment in the context of certain psychosocial factors perpetuates FND and psychiatric disorders. The research indicates functional neurological symptoms could carry elevated frequencies of personality disorders among patients (5). Research indicates both positive and negative findings regarding psychiatric disorder rates among FNSD patients, although studies have shown no significant increase in comorbidities (6). Medical research shows that depression appears as the primary comorbid diagnosis in Non-epileptic seizure patients at a rate of 12% to 100%. The prevalence of anxiety disorders ranges between 11% and 80% in patients, with dissociative disorders appearing in 90% of cases, with additional somatoform disorders present in 42% to 93%, and personality disorders identified in 33% to 66% of patients (7).

The research indicates that FND leads to psychiatric disorders in adult patients ranging from 51% to 95%. Adults with Psychogenic Non-Epileptic Seizures (PNES) experience a prevalence of depression between 30% and 48%, and they also show generalized anxiety disorder rates between 21% and 29%, as well as post-traumatic stress disorder at 23%. Medical research indicates that suicidal thoughts exist in 63% of patients diagnosed with PNES. The psychiatric disorder rates for Functional Movement Disorders (FMD) include anxiety at 38%

to 75%, frequency depression from 19% to 49%, and post-traumatic stress disorder at 24%. Pediatric FND patients demonstrate less psychiatric disorder occurrence than adult patients since 39% of PNES cases among children exhibit either adjustment disorder (17%) or neurodevelopmental disorders (11%). The prevalence rates of depression range from 9% to 38% among children with Pediatric FMD, and attention-deficit hyperactivity disorder exists in 9% to 17% of patients, and specific phobias are present in 15% of this population. Additionally, personality disorder affects more than 50% of both PNES and FMD patients (8).

The noticeable frequency of patients presenting psychogenic neurological symptoms at emergency departments requires an urgent development of multidisciplinary care protocols for these disorders (9). Neurologists should possess specialized knowledge for FND diagnosis followed by complete diagnostic explanation and treatment administration alongside long-term patient follow-up, which frequently enables them to coordinate multidisciplinary teams to manage the condition. Combined assessment and treatment of FND patients requires neurologists and psychiatrists to work together individually. The diverse nature of the patient group requires neurologists to comprehend all current therapeutic evidence for effective treatment (10). The clinical significance of conversion disorder has received minimal advances in understanding while other neurological and psychiatric conditions, especially borderline and histrionic, continue to advance at a more rapid rate (2). The relationship between Conversion Disorder and specific personality traits or disorders still needs further research to establish adequate understanding.

The research shows that certain personality traits make people prone to develop somatic symptoms when they face distress along with psychological conflicts (Jones et al., 2015; Stone, 2019). The prevalence of personality traits together with disorders in patients with Conversion Disorder matters for both practical diagnosis and treatment planning. The research design involves both standardized assessment instruments and structured clinical interviews to examine how frequently personality traits, as well as disorders, occur in patients who have Conversion Disorder. Medical professionals find it challenging to diagnose conversion disorder because there are no clear neurological root causes of patient symptoms. An addition of personality tests during diagnosis helps determine which factors lead to conversion symptom development (11). The identification of personality traits and disorders associated with conversion disorder would enable significant benefits for treatment decision-making. People who have Histrionic Personality Disorder frequently experience intense emotions, which might explain why Conversion Disorder develops simultaneously with this disorder. Successful treatment outcomes can be achieved by designing interventions that treat conversion symptoms and associated personality elements (12)(13).

Investigating personality disorders, especially Borderline and Histrionic PDs in patients with conversion disorder, serves multiple purposes, which include the identification of underlying causes, diagnostic procedures, and new treatment methods development. Adopting insights about personality along with conversion disorder helps scientists deepen their understanding of how psychological health combines with physical symptoms.

METHODOLOGY

The study is conducted in psychiatric hospitals at Peshawar region, Pakistan using descriptive cross-sectional study design. The data is collected from two different psychiatric setup, one private setting (Shafique Psychiatry Clinic, Peshawar) and other tertiary care hospital (Khyber Teaching Hospital, Peshawar). The sample size was given by $n = 270$ patients, given a

prevalence of 22% of PDs among FND patients with a 95% CI (14). Patients were recruited using a non-probability convenient sampling technique. Both inpatient and outpatient male and female patients confirmed with a DSM-5 diagnosis of conversion disorder for DSM-5 and individuals with primary psychiatric diagnoses, coexisting severe medical conditions, severe cognitive impairment, and active substance use disorders formed the study sample. Still, those who patient had primary psychiatric disorders other than conversion disorder were excluded from the study. These patients' written informed consent was obtained; they were also asked about their history, and clinical findings were assessed through basic systemic examination. To assess Personality traits to enhance practicality compared to its original setting, IPDE was slightly changed from personality disorder to personality traits oriented, compatible with DSM IV. The demographic variables included age, marital status, gender, and education level. Due to this, subjects with conditions that may influence the study's results were not considered when conducting the survey. Data was analyzed using the statistical tool of analysis called SPSS version 22. The number and percentage for the nominal-related variable, the interval/ratio-related variable, and the average and standard deviation were used. The prevalence of Patients with FND and H&B PT/PD, including Histrionic and Borderline Personality traits, was also estimated. The statistical test used to determine the correlation of Conversion Disorder with Personality traits is Chi-Square. Correlation analysis i.e. Pearson's correlation was also tested for strength and direction of association between FNDs and personality traits and demographic variables. All results were presented with in tables.

RESULTS

DEMOGRAPHIC DATA

Table:1 presents that among total sample of N=270, the mean age observed in the study was 32.05 ± 14.3 years. There were three age groups formulated for analysis, group one was of patients with age between 12 to 18 years with frequency of n=74 individuals and 27.4% of total sample, similarly age group of 19 to 40 years were n=121 (44.8%) and age group of 41 to 65 years old were n=75 with proportion of 27.8% of total sample.

In gender distribution, there were n=81 (30%) male and n=189 (70%) females individuals with percentages of married (48.5 %) and unmarried (51.5 %) or single individuals as well. Education status among demographic variables was also recorded where participants of the study were categorized as students of not formally educated, madrassa student, secondary educations, intermediate levels, under graduation, graduates and postgraduates. Maximum number of participants were of at least middle education, total of 62 out of 270 (23%), remaining 30 (11.1%), 50 (18.5%), and 23 (8.5%) were in madrassas, intermediate education level and graduate levels, respectively. Those with no education, or with undergrad education level or graduate levels were n=35 (13.0%) each. In socioeconomic levels, total of 120 participants were from middle class families, n=82 from low class, and n=68 from higher class. In all these N=270 Conversion Disorder patients, the traits found were borderline, histrionic, in some cases both were found and some didn't show any trait among the two. Total of n=76 (28.1%) was having Borderline Traits, n=43 (15.9%) with Histrionic Traits, n=72 (26.7%) with both borderline and histrionic traits and n=79 (29.3%) had none of these two traits in them as per their self-responses on the questionnaire.

TABLE- 1: FREQUENCIES AND PERCENTAGES OF DEMOGRAPHICS, HPD AND BPD TRAITS

Variables	Categories/Groups	Frequencies	Percentages
Age	12 – 18 years	74	27.4 %
	19-40 Years	121	44.8 %
	41 to 65 Years	75	27.8 %
Gender	Male	81	30 %
	Females	189	70 %
Marital Status	Married	131	48.5 %
	Unmarried	139	51.5 %
Education	Madrassas	30	11.1 %
	Middle	62	23.0 %
	Intermediate	50	18.5 %
	Undergraduate	35	13.0 %
	Graduate	35	13.0 %
	Postgraduate	23	8.5 %
	Not formally educated	35	13.0 %
Socioeconomic Status	Low	82	30.4 %
	Middle	120	44.4 %
	High	68	25.2 %
Personality Disorder Traits	Borderline	76	28.1 %
	Histrionic	43	15.9 %
	Both Borderline &Histrionic	72	26.7 %
	None	79	29.3 %
Total Sample		270	100 %

PERSONALITY TRAITS

Table:2 represent, N=270 of conversion disorder, among the traits of histrionic personality disorder, n=157 (58.1 %) agreed and marked as “true” to the statement “I give my general impression of things and don’t bother with details”. Participants who marked “true” were n=132(48%), and 138 (51.1%) marked “fall” to the statement “I show my feelings for everyone to see”. “I am too easily influenced by what goes on around me”, n=137 (50.7) responded as “True” and n=133 (49.3%) marked it “False” about themselves, whereas 151 (55.9%), 119 (44%) of the participants marked “true” and “false” respectively to the statement “My feelings are like weather they are always changing”, and n=136(50.4%) “like to dress so that I stand out in crowd” and n=134 (49.6%) didn’t like it.50% of the people having conversion disorder “ feel very close to people they have just met”, where as 100% of them think that they “would rather to be the center of attention”.

Among the traits of Borderline in the patients of FND, n=139 (51%) “can’t decide what kind of person they want to be” whereas 48.5% can. Only n=150 (55.6%) of them “get into very intense relationship that don’t last”, while 100 % of the participants “have never threatened suicide or injured their self on purpose” and 55.6 % about n=150 of the total patient “feel empty inside” whereas participants having “tantrums or angry outburst” were n=148 (54.8%). Total of n=139, (51.5%) marked “True” the statement “Giving into some of my urges get me into trouble”, whereas only n= 113 (41.9%) of the patient stated that “When I am under stress things around me don’t seem real”. Furthermore 42.2%, about n=114 of the total patient

included (N=270) “go to extremes to try to keep people from leaving them”.

TABLE 2: DESCRIPTIVE STATISTICS OF PERSONALITY TRAITS

Items	Response	Frequency	Percent	Valid Percent	Cumulative Percent
I show my feelings for everyone to see.	Yes	132	48.9	48.9	48.9
	No	138	51.1	51.1	100.0
I give my general impression of things and don't bother with details	Yes	157	58.1	58.1	58.1
	No	113	41.9	41.9	100.0
I like to dress so that I stand out in a crowd.	Yes	136	50.4	50.4	50.4
	No	134	49.6	49.6	100.0
I would rather not be the center of attention.	Yes	270	100.0	100.0	100.0
I can't decide what kind of person I want to be.	Yes	139	51.5	51.5	51.5
	No	131	48.5	48.5	100.0
I feel very close to people I have just met.	Yes	135	50.0	50.0	50.0
	No	135	50.0	50.0	100.0
Giving into some of my urges gets me into trouble.	Yes	139	51.5	51.5	51.5
	No	131	48.5	48.5	100.0
I get into very intense relationships that don't last.	Yes	150	55.6	55.6	55.6
	No	120	44.4	44.4	100.0
I have never threatened suicide or injured myself on purpose.	Yes	270	100.0	100.0	100.0
I often feel empty inside.	Yes	150	55.6	55.6	55.6
	No	120	44.4	44.4	100.0
I have tantrums or angry outbursts.	Yes	148	54.8	54.8	54.8
	No	122	45.2	45.2	100.0
When I am under stress, things around me don't seem real.	Yes	113	41.9	41.9	41.9
	No	157	58.1	58.1	100.0

CORRELATION ANALYSIS

From the cross tabulation of the traits as presented in Table:3 with the demographic variables Age, the highest frequency for Histrionic traits is seen in those within the age range of 41-65 years (n=121, 44. 8%), those within the age range of 12-18 years (Early adult) (n=49, 18.5%) and finally those within the range of 19-40 years (middle adult) (n=100, 37 %). Likewise, for Borderline traits, the frequency distribution pattern is similar to that of Histrionic traits where the 41-65 years age range (n=115, 42. 59%) had the highest frequency while the 12-18 years (N=60, 22.2%) the lowest and 19-40 years (n=95, 35. 9%) had the same frequency. Concerning Marital Status, the frequency distribution of Histrionic traits is higher in married people (151, 56.3%) than in unmarried people (119,46.7%). The same trend was also seen in Borderline symptoms where the frequency was also slightly higher in the married people (n=139, 51. 5) than the unmarried people (n=131, 48. 5). By Gender, females had higher frequency for both Histrionic (n=163,60.3%) and Borderline symptoms (n=147,54.4%) than males who had frequency of. For Education Level, the frequencies of Histrionic traits are different depending

on the level of education. The frequency distribution of Matric is the highest (n=62, 23.0%), the second is FSc or Diploma (n=50, 18.5%), then Undergraduate (n=35, 13.0%), Graduate (n=20, 7.41%), No Education (n=60, 22.2%), Postgraduate (n=10, 3.7%) and the last is Madrassa education (n=8, 3%). For the Borderline traits, the same distribution occurs across education level which is Matric (n = 62, 23.0%) brings the highest and Postgraduate (n = 23, 8.5%) the lowest. As per Socioeconomic Status, the highest frequency of both Histrionic (n = 82, 30.4%) and Borderline traits (n = 120, 44.4%), belong to the middle socioeconomic population, low socioeconomic status with (n= 120, 44.4%) for both traits, while that of the high socioeconomic had the lowest frequencies for Histrionic (n = 68, 25.2%) and Borderline traits (n = 68, 25.2%).

TABLE 3: CROSS-TABULATION OF DEMOGRAPHIC VARIABLES AND PERSONALITY DISORDERS TRAITS

Demographic Variable	Category	Histrionic (n, %)	Borderline (n, %)
Age	12–18 Years	74 (27.4%)	60, (22.2%)
	19–40 Years	121 (44.8%)	95, (35.9%)
	41–65 Years	n=121, 44	115, (42.5%)
Marital Status	Married	151 (56.3%)	139 (51.5%)
	Unmarried	119 (46.7%)	119 (48.5%)
Gender	Male	66 (39.6%)	76 (45.56%)
	Female	163 (60.3%)	147 (54.4%)
Education Level	Madrassa	8 (3%)	30 (11.1%)
	Matric	62 (23.0%)	62 (23.0%)
	FSc or Diploma	50 (18.5%)	50 (18.5%)
	Undergraduate	35 (13.0%)	35 (13.0%)
	Graduate	35 (13.0%)	35 (13.0%)
	Postgraduate	10 (3.7%)	23 (8.5%)
	No Education	60 (22.2%)	35 (13.0%)
Socioeconomic Status	Low	120 (44.4%)	120 (44.4%)
	Middle	82 (30.4%)	82 (30.4%)
	High	68 (25.2%)	68 (25.2%)

This is accomplished by computing the Chi-square, Pearson-R, and Spearman correlation tests to measure the relationship, strength, and direction between FND, BPD, and HPD. The comparisons between Age×Histrionic and the Pearson Chi-Square statistic were computed to be 13.649 with its respective df = 12 and p = 0.0324, indicating a significant relationship existed. The Pearson and Spearman correlation coefficients of 0.055 and 0.046 indicated weak positive significant correlations. The Age×Borderline comparison yielded also-significant result in the current analysis ($\chi^2 = 19.255$, df = 14, p = 0.0155); correlations were also strong (Pearson = 0.03, Spearman = 0.073). Gender×Histrionic revealed no significant relationship by analysis ($\chi^2 = 8.482$, df = 6, p = 0.205), with weak positive correlations (Pearson = 0.073, Spearman = 0.069). The results between Gender and Borderline also provided no significant relationship ($\chi^2 = 6.188$, df = 7, p = 0.509); however the correlations were significant (Pearson

= -0.04, Spearman = -0.3). A Chi-Square analysis gave the Marital Status×Histrionic value of 5.813, df = 6 (p = 0.444); the relationship was not significant. Weak correlations were found (Pearson = 0.067, Spearman = 0.078). For Marital Status×Borderline, a similar conclusion emerged where $\chi^2 = 7.374$, df = 7, p = 0.391; and Pearson = 0.056, Spearman = 0.089. For Education Level × Histrionic, the results ($\chi^2 = 39.651$, df = 36, p = 0.310; Pearson = 0.117, Spearman = 0.070) indicated no significant association but weak positive correlations. Conversely, Education Level × Borderline showed a significant association ($\chi^2 = 53.122$, df = 42, p = 0.017), with weak correlations (Pearson = 0.037, Spearman = 0.090). Finally, Socioeconomic Status × Histrionic was significant ($\chi^2 = 22.372$, df = 12, p = 0.034) but with weak correlations (Pearson = 0.031, Spearman = 0.035). Socioeconomic Status × Borderline also showed a significant association ($\chi^2 = 25.428$, df = 14, p = 0.031) with weak positive correlations (Pearson = 0.046, Spearman = 0.046).

TABLE 4: PEARSON CHI-SQUARE, PEARSON R AND SPEARMAN CORRELATION

Variables	Pearson Chi Square			Pearson R		Spearman Correlation Value
	Value	df	Asymp. Sig..	Value		
Age x Histrionic	13.649	12	0.0324	0.055		0.046
Age x Borderline	19.255	14	0.0155	0.03		0.033
Gender x Histrionic	8.482	6	0.205	0.073		0.069
Gender x Borderline	6.188	7	0.509	0.04		-0.03
Marital Status x Histrionic	5.813	6	0.444	0.067		0.078
Marital Status x Borderline	7.374	7	0.391	0.056		0.089
Education Level x Histrionic	39.651	36	0.310	0.117		0.07
Education Level x Borderline	53.122	42	0.017	0.037		0.09
Socioeconomic Status x Histrionic	22.372	12	0.034	0.031		0.035
Socioeconomic Status x Borderline	25.428	14	0.031	0.046		0.046

DISCUSSION

The analysis focused on the prevalence of personality traits characteristics (Histrionic and Borderline) among patients with functional neurological disorders (FND). A sample of 270 patients with FND revealed complex prevalence patterns. The results found that n=76 subjects (28.1%) had traits of borderline personality disorder, as indicated by their score; n=43 subjects (15.9%) showed traits of histrionic personality disorder. Thus, n=72 individuals shared the characteristics of both borderline and histrionic personality disorders (26.7%). This finding indicates that both conditions overlap considerably. In contrast, a total of 79 subjects (29.3%) did not show any traits of either personality disorder. These statistics depict the prevalence of traits of personality disorders among persons having FND, where it seems that the traits of

borderline personality disorder is the most common among such individuals, followed by a substantial number having mixed traits. Studies estimated 55% to 95% of people with FND have at least 1 comorbid psychiatric disorder (15).

Although there were clear associations between borderline traits (n=76) and histrionic traits (n=43) with variables like age, socioeconomic status, and education, their relation with gender and marriage was weaker. These converge into the multidimensionality of personality trait makeup by different demographic and psychosocial factors. There was much correlation with age for both borderline traits and histrionic traits. Histrionic traits occurrence peaked at 41-65 years (44.8%), followed closely by 19-40 years (37%). The same trend followed for borderline traits, which coincided with Widiger (2017) and Zanarini et al. (2011), who reported that personality traits peak during midlife owing to stressors accumulated over a lifetime and patterns for coping with them. (16)(17). However, contrary to some findings, which report a sharper decline in borderline traits with age (18), our study indicates persistence into midlife, suggesting variability in age-related trajectories across populations. Females were generally found to have higher frequencies of both traits, although the association was not significant. In accordance with this, Sansone and Sansone noted that heightened emotional expressivity might more likely be found among females due to cultural expectations. However, other studies have contradicted this and found that there were indeed statistically significant differences in borderline traits between both genders, with all the differences favoring females (19)(20). The insignificant result of our study may, thus, depend on the sample characteristics or on sociocultural variations related specifically to the population under study. The marital status showed a slight increase in the frequency of this character among married individuals, but without statistical significance. Past research has shown that the interpersonal factors in marriage can affect personality traits. However, there were inconsistent findings. For instance, some studies found statistically significant relationships between dissatisfaction and borderline traits, highlighting the importance of the relational stressors. The existence of such divergence in findings underlines why it is important to conduct context-specific investigations into how culture affects the nature of marriage and the psychological effects (21)(22). Significant associations between socioeconomic status (SES) and borderline and histrionic traits were established, with a higher frequency in low and middle-income groups. This aligns with Kahl and Gunderson's (2020) assertion that chronic stress and limited access to mental health resources in low SES populations exacerbate maladaptive personality patterns. Conversely, some studies, such as South and Jarnecke (2017), found weaker associations between SES and personality traits, suggesting that the strength of these relationships may vary across different socioeconomic and healthcare contexts (23). The level of education had a significant impact on borderline personality traits but had no such association with histrionic traits. Matric-level individuals scored highest on the scale for borderline personality traits. This, too, finds support from the literature.

Trull et al. (2018) stated that low educational qualifications would lead to an increase in the susceptibility of individual to mental disorders because in general those who attained lower educational qualifications are limited in terms of coping mechanisms and their mental health literacy(24). More contradictory to other studies which cited education as determining all personality traits, our results suggest selective association and warrant further inquiry. Our study converged and diverged from what has been researched so far.

Limitations:

Non-probability convenience sampling may have introduced some limitation to generalizability of findings. Moreover, self-response versus other-assessment of personality traits introduces subjective judgments. Findings are particular to Peshawar, which may not be a representative area as compared to other regions and cultures. Such exclusions were deemed as strict criteria; nevertheless, there remains a possibility that subtle confounders (for example, undiagnosed psychiatric comorbidities) may have contributed to the observed findings.

FUTURE RESEARCH RECOMMENDATIONS

Future studies, therefore, need to recruit a larger number of subjects from diverse psychiatric and general hospitals to improve the generalization of findings. It is recommended the use of probability sampling for better generalization. Longitudinal studies may provide insight into the temporal relationship between conversion disorders and personality traits. Such a comparative analysis with other disorders will confer uniqueness onto borderline and histrionic traits for exact contributions to conversion disorder. If some other personality disorders might be included with borderline or histrionic for good commission. Neuroscientific correlates, socioeconomic factors, treatment outcome, and gendered patterns should be further explored with the aid of advanced assessment tools. Cross-cultural comparisons will be able to highlight the contribution of socio-economic dynamics. The study will also analyze how psychotherapy impacts results.

CONCLUSION

Neuropsychiatric practitioners continuously face difficulties when dealing with functional neurological manifestations. Research shows that borderline and histrionic personality traits occur with high frequency in patients who have functional neurological disorders (FND). The study of 270 FND patients showed borderline personality traits in n=76 subjects (28.1%), histrionic personality traits in n=43 patients (15.9%), and n=72 participants (26.7%) exhibited traits from both disorder types. These personality traits demonstrated important relationships with age, gender, socioeconomic standing, and educational background, yet marital status failed to establish meaningful connections. The research results indicate that FND presents intricate features that merge with personal characteristics, which require intended psychosocial interventions adjusted to individual demographic characteristics.

REFERENCES

1. Ahmad O, Ahmad KE. Functional neurological disorders in outpatient practice: An Australian cohort. *J Clin Neurosci* [Internet]. 2016;28:93–6. Available from: <http://dx.doi.org/10.1016/j.jocn.2015.11.020>
2. Ali S, Jabeen S, Pate RJ, Shahid M, Chinala S, Nathani M, et al. Conversion Disorder-Mind versus Body: A Review. *Innov Clin Neurosci*. 2015;12(5–6):27–33.
3. Peeling JL, Muzio MR. Conversion Disorder. In *Treasure Island (FL)*; 2023.
4. Hall K, Moran P. Borderline personality disorder: An update for neurologists. *Pract Neurol*. 2019;19(6):483–91.
5. Ding JM, Kanaan RAA. Conversion disorder: A systematic review of current terminology. *Gen Hosp Psychiatry* [Internet]. 2017;45:51–5. Available from: <https://www.sciencedirect.com/science/article/pii/S0163834316303607>
6. Fobian AD, Elliott L. A review of functional neurological symptom disorder etiology and the integrated etiological summary model. *J Psychiatry Neurosci*. 2019 Jan;44(1):8–18.
7. Stonnington CM, Barry JJ, Fisher RS. Clinical Case Conference Conversion Disorder. *Am J Psychiatry*. 2006;163(9):1510–7.

8. Patron VG, Rustomji Y, Yip C, Jenkins LM. Psychiatric Comorbidities in Functional Neurologic Symptom Disorder. *Pract Neurol* (Fort Wash Pa) [Internet]. 2022;21(3):71. Available from: <https://pmc/articles/PMC9836030/%0A/pmc/articles/PMC9836030/?report=abstract%0Ahttps://www.ncbi.nlm.nih.gov/pmc/articles/PMC9836030/>
9. Ekanayake V, Kranick S, LaFaver K, Naz A, Frank Webb A, LaFrance WC, et al. Personality traits in psychogenic nonepileptic seizures (PNES) and psychogenic movement disorder (PMD): Neuroticism and perfectionism. *J Psychosom Res* [Internet]. 2017;97:23–9. Available from: <http://dx.doi.org/10.1016/j.jpsychores.2017.03.018>
10. Gilmour GS, Nielsen G, Teodoro T, Yogarajah M, Coebergh JA, Dilley MD, et al. Management of functional neurological disorder. *J Neurol*. 2020 Jul;267(7):2164–72.
11. Stone J, Carson A, Duncan R, Coleman R, Roberts R, Warlow C, et al. Symptoms “unexplained by organic disease” in 1144 new neurology out-patients: how often does the diagnosis change at follow-up? *Brain*. 2009 Oct;132(Pt 10):2878–88.
12. Brown RJ, Reuber M. Psychological and psychiatric aspects of psychogenic nonepileptic seizures (PNES): A systematic review. *Clin Psychol Rev*. 2016 Apr;45:157–82.
13. The Link Between Histrionic Personality and Conversion Disorder _ Psychology Today.
14. Schmalzing KB, Fales JL. The association between borderline personality disorder and somatoform disorders: A systematic review and meta-analysis. *Clin Psychol Sci Pract* [Internet]. 2018;25:\&NA; Available from: <https://api.semanticscholar.org/CorpusID:149883588>
15. Patron VG, Rustomji Y, Yip C, Jenkins LM. Psychiatric Comorbidities in Functional Neurologic Symptom Disorder. *Pract Neurol* (Fort Wash Pa). 2022;21(3):71–5.
16. Widiger TA, Crego C, Rojas SL, Oltmanns JR. Basic personality model. *Curr Opin Psychol*. 2018 Jun;21:18–22.
17. Zanarini MC, Horwood J, Wolke D, Waylen A, Fitzmaurice G, Grant BF. Prevalence of DSM-IV borderline personality disorder in two community samples: 6,330 English 11-year-olds and 34,653 American adults. *J Pers Disord*. 2011 Oct;25(5):607–19.
18. Lenzenweger MF, Lane MC, Loranger AW, Kessler RC. DSM-IV personality disorders in the National Comorbidity Survey Replication. *Biol Psychiatry*. 2007 Sep;62(6):553–64.
19. Sansone R, Sansone L. Gender Patterns in Borderline Personality Disorder. *Innov Clin Neurosci*. 2011 May 1;8:16–20.
20. Bozzatello P, Blua C, Brandellero D, Baldassarri L, Brasso C, Rocca P, et al. Gender differences in borderline personality disorder: a narrative review. *Front psychiatry*. 2024;15:1320546.
21. Livesley W. Integrated Modular Treatment for Borderline Personality Disorder: A Practical Guide to Combining Effective Treatment Methods. 2017.
22. Kasalova P, Prasko J, Kantor K, Zatkova M, Holubova M, Sedlackova Z, et al. Personality disorder in marriage and partnership - a narrative review. *Neuro Endocrinol Lett*. 2018 Sep 1;39:159–71.
23. Tan K, Jarnecke AM, South SC. Impulsivity, communication, and marital satisfaction in newlywed couples. *Pers Relatsh*. 2017;24(2):423–39.
24. Trull TJ, Freeman LK, Vebares TJ, Choate AM, Helle AC, Wycoff AM. Borderline personality disorder and substance use disorders: an updated review. *Borderline Personal*

Disord Emot Dysregulation [Internet]. 2018;5(1):15. Available from:
<https://doi.org/10.1186/s40479-018-0093-9>