Research Article

A Descriptive Study of Illness Characteristics in a Sample of Female Patients with Borderline Personality Disorder in Minia Governorate

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Abstract
Background: According to DSM-٥**,** the prevalence of borderline personality disorder (BPD) is ٢٪ of the general population, more common in female, with mean age ٢٦.٩, more prevalent with lower education**.** ٧٤٪ of patients with BPD had at least one concurrent other personality disorder (PD)**. Objectives:** the objective of the study is to give an overview about the severity and sociodemographics of BPD in a sample of patients in Minia Governorate. **Subjects and methods**: The study was done in Minia University Hospital, on ٦٠ female patients with BPD, with age (١٨–٥٠ years). The diagnosis of BPD and comorbid other PD and illness severity of BPD illness were assessed by the Structured Clinical Interview for DSM-IV Axis II PD (SCID-II) and Borderline Evaluation of Severity Overtime (BEST).**Results:** The overall sample was ٦٠ females, with mean age ٢٦.١٧ years, half of them were single, and ٤٨.٣٪ were unemployed. Regarding education, (٨.٣٪) were illiterate, ٥% completed only primary school level, ١٠٪ completed only secondary school level, and ٣٨.٣٪ completed technical school while ٣٨.٣٪ were university graduates. Regarding severity of BPD, we found that the majority of our patients had either ٧ or ٨ BPD criteria and total BEST score (٤٧.٣) which could be considered as high score (above ٣٠), and about ٢٣.٣٪ of patients had the diagnosis of BPD only, while the rest of the sample (٧٦.٧ %) had at least one comorbid other PD with BPD (range: ٢-٧ PDs).
Conclusions: Borderline personality disorder is a severe mental illness commonly to be comorbid with other personality disorders and affecting occupational function and marital state.
Keywords: Illness characteristics, Borderline Personality Disorder, Minia Governorate

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Introduction
The DSM-٥[١] defined borderline personality disorder as a pervasive pattern of instability of interpersonal relationships, self-image and affects, and marked impulsivity beginning by early adulthood and present in a variety of contexts.

BPD is a common clinical presentation in young adult populations, its symptoms usually remit by age ٤٠[٧,١٣]**.** In addition**,** Zanarini et al and Bleichmar[١٢] found the mean of first clinical presentation of BPD to be age ١٨, with a standard deviation of ٥–٦ years.

According to DSM-٥ [٢]**,** the prevalence of BPD is estimated to be around ٢٪ of the general population and as high as ٢٠٪ among the clinical population. The DSM-IV-TR [١]**,** found that female to male gender ratio was ٣:١. While, the DSM-٥ explains that although men can be diagnosed with BPD, patients are predominantly female [٢]**.** BPD has been connected in particular to low relationship satisfaction, marital distress, separation, and divorce. The association between BPD and marital interruption may be the outcome of the emotional lability, impulsivity and angry hostility[١١]. In addition, Grant et al.,[٩] found that BPD was more prevalent among those with lower education.

The indicators of severity of BPD as reported by Crawford et al.,[٤] included the number of comorbid Axis II diagnoses and the number of BPD criteria.

The presence of other comorbid personality disorders comorbid with BPD was reflected on the severity of BPD illness as Barrachina et al.,[٣] found that there was positive correlation between BPD severity and the number of concurrent axis II disorders.

Subjects and methods

The study was done on patients who had BPD and patient's interview was conducted in the outpatient psychiatric clinic of Minia University Hospital. The study was done on ٦٠ borderline female patients**,** age range (١٨–٥٠ years), with exclusion of patients who had current active depressive disorder, current active psychotic illness, serious somatic disease, psychiatric disorder due to general medical illness, and substance dependence. Data was collected regarding age, residence, occupation, marital status, educational level, family history of mental illnesses, and family history of epilepsy.

The diagnosis of BPD of patients was confirmed by the Structured Clinical Interview for DSM-IV Axis II Personality Disorders (SCID-II). SCID-II is an efficient, user-friendly instrument that helps researchers and clinicians make standardized, reliable, and accurate diagnoses of the ١٠ DSM-IV Axis II PDs as well as depressive PD, passive-aggressive PD, and PD not otherwise specified[٥]. In addition, diagnosis of comorbid other PDs and number of BPD criteria as parameters of BPD severity assessment were assessed by the same tool (SCID-II).

After confirmation of BPD diagnosis and severity assessment, we used the Borderline Evaluation of Severity over Time (BEST)[٩]**,** it is a ١٥-item measure used to test for BPD severity and consists of three subscales. The first two subscales (A and B) are based on the DSM-IV criteria for BPD. Subscale A (٨ items) addresses problematic thoughts and feelings that are characteristic of BPD (i.e., suicidal thoughts), while subscale B (٤ items) addresses problematic or negative behaviors (i.e., problems with impulsive behavior). The third subscale of the BEST, subscale C, consists of three items that assess the use of positive behaviors.

In this study, the BEST was used for assessment of BPD severity at a certain point of time not in successive times as it is used in other studies, as we are not aiming at follow up of changes of BPD illness severity over the time in the current study.

Data were analyzed using the statistical program for sciences-١٥ (SPSS-١٥). Frequencies and percentages were calculated for categorical variables while mean and standard deviation were calculated for continuous variables. T-tests were used to compare groups on continuous variables while Chi square tests were used on categorical variables. Cut off value of significance (p value) was considered at less than ٠.٠٥.

Results

Table (١): Demographic data of the total sample (*n*=٦٠)

Variable	N (%)
Age	
Range: ١٩-٤٥	
Mean ± SD: ٢٦.١٧± ٧	
Occupation	
Unemployed	٢٩ (٤٨.٣٪)
Employed	٢١ (٣٥٪)
Student	١٠ (١٦.٧٪)
Marital status	
Single	٣١ (٥١.٧٪)
Married	١٩ (٣١.٧٪)
Divorced	٩ (١٥٪)
Widow	١ (١.٧٪)
Educational level	
Illiterate	٥ (٨.٣٪)
Primary school	٣ (٥٪)
Secondary school	٦ (١٠٪)
Technical school	٢٣ (٣٨.٣%)
Highly graduated	٢٣ (٣٨.٣ %)
Education (number of years of completed education)	
Range: ٠ – ١٨	
Mean ± SD: ١١.٦٣ ± ٤.٧٧٦	
Residence	
Rural	٢٤ (٤٠٪)
Urban	٣٦ (٦٠٪)

Table (١) shows that the overall sample (n=٦٠) had age ranged from١٩ to ٤٥ years with mean and SD (٢٦.١٧ ± ٧), nearly half of them were single (٥١.٧٪), ٣١.٧٪ were married, ١٥٪ were divorced, and only one case was widow (١.٧٪). Regarding occupation it was found that nearly half of them were unemployed, while, ٨.٣٪ were illiterate and ٣٨.٣٪ were highly educated and ٤٠٪ of our sample cases came from rural area.

Table (٢): BPD illness severity according to the number of BPD criteria diagnosed by SCID-II

Number of Criteria	N (%)
٥	٥ (٨.٣٪)
٦	١٠ (١٦.٧٥٪)
٧	٢٠ (٣٣.٣٪)
٨	١٨ (٣٠ %)
٩	٧ (١١.٧٪)

Table (٢) shows that ٨.٣٪ of cases had ٥ criteria (which is the lowest percent), ١٦.٧٥٪ had ٦ criteria, ٣٣.٣٪ had ٧ criteria (which is the highest percent), ٣٠% had ٨ criteria, and ١١.٧٪ had ٩ BPD criteria.

Table (٣): Description of the study sample according to BEST

Variable	Range	Mean and SD
Subscale A	١٦ – ٤٠	٢٧.٢ ± ٥.٩٤
Subscale B	٨ – ٢٠	١٣.٧ ± ٢.٦٤
Subscale C	٤ – ١٢	٨.٢ ± ١.٨
Total score	٢٧ – ٦٥	٤٧.٣ ± ٨.٧

Total score = A+B- C+١٥

Table (٣) shows that BEST subscale A had a range of (١٦-٤٠) with mean and SD (٢٧.٢±٥.٩٤), subscale B, had range of (٨-٢٠) with mean and SD (١٣.٧±٢.٦٤), subscale C had a range of (٤-١٢) with mean and SD (٨.٢±١.٨), and the total score of BEST had a range of (٢٧-٦٥) with mean and SD (٤٧.٣±٨.٧).

Table (٤): Correlations of age and education in years with BPD number of SCID-II criteria and BEST total score

Variable	Age in years		Education in years	
	r	p	r	p
BPD- number of criteria	.٦٨٢	.٠٥٤	-.٧٨٠	.٠٣٧
BEST – total score	-.٥٤١	.٠٨١	-.١٤٥	.١٩٠

Table (٤) shows that the number of BPD criteria was positively correlated with the age in years and was negatively correlated with the number of years of completed education. While total score of BEST negatively correlated with both age in years and number of years of educations.

Table (٥): Comorbid other PDs with BPD in the study sample

Variable	N (%)
BPD only	١٤ (٢٣.٣٪)
BPD +١	١٩ (٣١.٧٪)
BPD+٢	١٨ (٣٠٪)
BPD+٣	٤ (٦.٧٪)
BPD+٤	٤ (٦.٧٪)
BPD+٧	١ (١.٧٪)

+١ = one comorbid other PD
+٢ = two comorbid other PDs
+٣= three comorbid other PDs
+٤ = four comorbid other PDs
+٧ = seven comorbid other PDs

As illustrated in table (٥), it was found that patients who had the diagnosis of BPD only were ٢٣.٣٪ while patients who had the diagnosis of BPD comorbid with one other PD were ٣١.٧٪ (the highest percent), and only one case (١.٧٪) had the diagnosis of BPD comorbid with seven other PDs, which was the lowest percent.

Table (٦): Overall personality pathology (total number of all personality criteria according to SCID-II)

Range	١١ – ٥٦
Mean and SD	٢٦.٣ ± ٨. ٤١٦

As shown in table (٦), it was found that the mean and SD of total number of all personality criteria according to SCID -II was ٢٦.٣ ± ٨. ٤١٦ with a range from ١١ to ٥٦.

Table (٧): Comparing BEST total and subscales between BPD with and co morbid other PDs

Variable	BPD only (N = ١٤)	BPD Comorbid with other PDs (N = ٤٦)	*p* value
Subscale A	٢٥ ± ٦.٠٢٦	٢٧.٨٩ ± ٥.٨٠٩	.١٢٨
Subscale B	١٣.١٤ ± ٢.٥٠٧	١٣.٨٩ ± ٢.٦٧٧	.٣٤٦
Subscale C	٨.٥٧ ± ١.٦٠٤	٨.٠٤ ± ١.٨٣٧	.٣٠٨
Total score	٤٤.٣٨٢ ± ٨.٣٨٢	٤٨.١٧ ± ٨.٧٥٢	.١٧٧

Table (٧) shows that mean and SD of subscale A, B, and total score of BEST of patients who had the diagnosis of BPD only, were lower than those who had the diagnosis of BPD comorbid with other PDs while the reverse was the case for subscale C. But these results were statistically insignificant.

Discussion

In this study, the mean age of patients who participated was ٢٦.١٧ years which is very similar to the mean age (٢٦.٩) of borderline patients in a large study done by Morey and Zanarini [٨] on of ٢٩٢ borderline patients. As all our patients were females and their mean age was ٢٦.١٧ years, the presence of ٣١ single among them (٥١.٧٪) could be considered as a large percent regarding our cultural norms. Females usually get married at a younger age than this. However, this rate is lower than its corresponding one in another study (٧٦.٢٪)[٨], and this difference may be attributed to differences in cultures and samples size between the two studies.

In addition, ١٥٪ of our cases of BPD patients were divorced and this could be considered as a high figure in our culture and it might be explained by factors related to nature of pathology of personality disorders (PDs) generally and BPD specifically. It was found that PDs and BPD were associated with impairment in function across a variety of interpersonal domains including marital relationships[٢].

In addition, BPD has been connected in particular to low relationship satisfaction, marital distress, separation, and divorce. The association between BPD and marital interruption may be the outcome of the emotional lability, impulsivity and angry hostility[١١].

As regards educational level we noticed that there was a hierarchical arrangement of borderline patients of this study according to level of education they reached from illiterate (the lowest percent; ٨.٣) up to highly educated (the highest percent; ٣٨) with mean and SD of number of years of education (١١.٦٣ ± ٤.٧٧). This means that BPD patients of our sample were reasonably educated, taking in consideration the fact that they are all females living in Upper Egypt, where the rate of female education is relatively low. In contrast, Grant et al.,[٦] found that BPD was more prevalent among those with lower education.

As regards residence of borderline patients, it was found that our patients tended to come from rural areas (٦٠٪) rather than urban areas (٤٠%). This study took place in

Minia University Hospital; it is a tertiary referring center, the usual distribution of cases coming to which is compatible with this figure.

The assessment of BPD diagnosis was confirmed by SCID-II[٥]. In addition, BPD pathology and severity was also assessed using SCID-II. The other comorbid PDs were also assessed by the same tool.

The indicators of severity of BPD as reported by Crawford et al.,[٤] included the number of comorbid Axis I diagnoses and the number of BPD criteria. They also included the number of comorbid Axis II diagnoses and the severity of symptom distress. In this study, severity of BPD was assessed by number of BPD criteria measured by SCID-II and the number of comorbid Axis II diagnoses. In addition, the total number of personality disorder criteria was another measure of general personality disorder illness severity.

Another way of measuring BPD illness severity in this study was by using BEST, which in addition to the assessment of the emotional and thinking domains of borderline illness, it also addresses both the negative and positive aspects of borderline patients' behavior.

Regarding the assessment of BPD number of criteria by SCID-II, we found that the majority of our patients had either ٧ or ٨ BPD criteria, and the final representation of our sample is concordant with the usual bell curve. Our sample included only outpatients with BPD, and this may explain the relative scarcity of the very severe cases of borderline personality illness.

The other way of assessment of BPD illness severity in our study was the BEST tool. It was found that total BEST score had a range from ٢٧ to ٦٥ with mean and SD (٤٧.٣ ± ٨.٧) which could be considered high as the BEST total score usually ranges from ١٢ (best) to ٧٢ (worst) and above ٣٠ is considered high[٩].

As regard the correlations of BPD number of criteria measured by SCID-II and BEST total score as a way of assessment of BPD severity with age in years, it was found that the number of BPD criteria positively correlated with age in years which is inconsistent with what displayed in some studies from the United States which showed that the long-term course of BPD seems better than previously assumed as the number of people with BPD who will no longer meet the criteria for the disorder increases by age[١٤].

In addition, Zanarini et al.,[١٤], in a large study of ٢٩٠ female patients with BPD who received psychotherapeutic treatment, found that the psychopathology reduces clearly over the years, with at least ٥٠٪ of people improving sufficiently to not meet the criteria for borderline personality disorder ٥ to ١٠ years after first diagnosis. The difference in results may be due to difference in sample size, cultures and difference in tools and methodology, also the previous study participants received psychotherapeutic treatment.

As regard correlation of BEST total score with age in years, we found that total score of BEST negatively correlated with age in years which is consistent with results of the studies discussed previously but these correlations were statistically insignificant[١٤].

It was found that borderline patients who had the diagnosis of BPD only were ٢٣.٣٪, while the rest of the sample (٧٦.٧ %) had at least one comorbid other PD with BPD (range: ٢-٧ PDs).These findings are consistent with what was found in a study done by Barrachina et al.,[٣] who found that approximately ٧٤٪ of their patients with BPD had at least one concurrent other PDs. In addition, it was previously reported that BPD overlaps considerably with other categories of PD, with 'pure' borderline personality disorder only occurring in ٣ to ١٠٪ of cases[١٠].

The presence of other PDS comorbid with BPD was reflected on the severity of BPD illness measured by BEST, as it was found that patients who were diagnosed BPD only had lower scores on subscale A, B, and total of BEST than patients who had the diagnosis of BPD comorbid with other PDs.

On the other hand, patients with BPD only scored higher on subscale C (subscale of positive behavior) than patients who had the diagnosis of BPD comorbid with other PDs. However, these findings were not statistically significant.

It could be argued that the presence of other PDs comorbid with BPD increases the likelihood of having more BPD illness's severity as part of an increased load of overall personality pathology. The results reported by Barrachina et al.,[٣] are in line of this argument, as they found that there was positive correlation between BPD severity and the number of concurrent axis II disorders.

Conclusions

١- Patients with BPD frequently have at least another comorbid PD in addition to BPD.
٢- In BPD the presence of other comorbid PD with BPD could affect illness severity.
٣- The assessment of the severity of BPD with BEST tool added benefits rather than the number of BPD criteria assessed by SCID-II.

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