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The Relationship between Co morbid Psychiatric Illnesses and Psychopathy Levels on Male Individuals with Antisocial Personality Disorder in the Turkish Community

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Abstract

Objective: The studies investigating antisocial personality disorder are mostly applied to subjects in prison. In this study, we aimed to investigate comorbid disorders in a Turkish patient sample with the diagnosis of antisocial personality disorder (ASPD) who are not in prison and we investigated its relationship with psychopathy levels.

Method: 140 male subjects were included in the study. None of them had been in the prison on admission. They all had the diagnoses of ASPD according to DSM-IV (Diagnostic and Statistical Manual of Mental Disorders-IV) diagnostic criteria. Socio-demographic data form, Structured Clinical Interview for DSM- Axis 1 Disorders and Axis 2 Disorders (SCID-I, SCID-II), and Hare Psychopathy Checklist-Revised (PCL-R) were applied.

Results: Most commonly seen comorbid disorders were as follows: substance use disorders (66,9%), alcohol use disorders (65,4%) and adjustment disorders (36,4%). In the high psychopathy group "Current and Lifetime Alcohol and Substance Use Disorder" and "Generalized Anxiety Disorder" were detected significantly more than those of the low psychopathy group.

Conclusion: This study supplies important epidemiological data about ASPD comorbidity. Of note, none of the subjects were in the prison during the study. Psychopathy also seems like a predictor in comorbid situations.

Keywords: Antisocial personality disorder; Psychopathy; Comorbidity

Introduction

Antisocial Personality Disorder (ASPD) is a developmental disorder with heterogenous etiology. There are many vulnerability factors. Biological, psychological and social factors all play an important role. Symptoms are observed in early childhood and can continue into adulthood by interacting multiple factors. Psychopathy is another aspect of antisocial personality disorder, characterized by a diminished capacity for empathy or remorse, and poor behavioral controls or fearless dominance. Pschopathy scales can measure the psychopathy levels. High psychopathy points lead us to a severe form of ASPD [1]. In the literature, it is shown that 50% - 75 % of the prisoners are diagnosed as ASPD, and only 15% -25% of the patients can be defined "psychopathic" [2- 4]. A close interaction was found between ASPD and criminal adult life style and it was highly associated especially with psychopathic features [7-11].

As ASPD related acts and psycopathic behaviors may differ between cultures comorbidity rates may also change in different populations [12]. According to the results obtained from a study conducted among prisoners in Turkey, comorbidity rate of psychiatric disorders was found significantly lower than rates obtained in European countries [13]. Furthermore, there are some evidences demonstrating that the treatment of psychiatric disorders are much more complicated in psychopathic patients [16]. Consequently, psychopathy may trigger heavier loads to the psychiatry services. Prognosis and treatment of ASPD has been quite affected in the presence of comorbid conditions. Treatment of accompanying disorders may prevent the devastating effects of ASPD [13]. It is also known that physicians may have negative attitudes about those patients and they do not often seek for psychiatric treatment, their treatment attempts should be well understood [14,15]. In addition, with the help of psychiatric treatment, some signs and symptoms, including violent behavior, can be overcome. In this study, we aimed to investigate comorbid disorders in a Turkish patient sample with the diagnosis of antisocial personality disorder (ASPD) who are not in prison and we investigated its relationship with psychopathy levels.

Materials and Methods

140 male subjects who were admitted to psychiatry before and during recruitment, between 18-45 years of age, were included in the study. All patients were examined by two different psychiatrists and received the diagnosis of ASPD according to DSM-IV TR diagnostic criteria. Informed consent was obtained and local ethics committee approval was taken. Exclusion criteria were as follows: "neurological diseases that affect cognitive functions or those with hearing or visual disorders, substance intoxication and abstinence during the interview, mental retardation, psychomotor agitation and heavy psychotic symptoms.

Socio-demographic data form, Structured Clinical Interview for DSM-IV (SCID-I), Structured Clinical Interview form for DSM-III-R Axis II Disorders (SCID-II) , The Hare Psychopathy Checklist Revised (PCL-R) were applied by the physician during a face-to-face interview.

Socio-demographic form: It is an interview form, prepared by the investigators focusing on the characteristics of patients.

SCID-I (Structured Clinical Interview for DSM-IV): It is a structured clinical interview applied by the interviewer to investigate the diagnosis of Axis I psychiatric disorders according to DSM-IV. It consists of questions and sections in order to determine a total of seven diagnosis groups. These diagnostic groups are: mood disorders, psychotic disorders, substance abuse, anxiety disorders, somatoform disorders, eating disorders and adjustment disorders. [17,18] The validity and reliability studies of SCID-I for the Turkish community were made by Çorapçıoğlu et al. [19].

SCID-II (Structured Clinical Interview form for DSM-III-R Axis II Disorders): It is a form prepared in accordance with the diagnostic criteria for personality disorders within the DSM-III-R classification system. The definitive diagnosis depends on the assessment of the clinician following the interview. Its reliability and validity studies were also made in Turkish population [20]. It is used in clinical interviews in addition to the assessment of Axis II personality disorders [21].

The Hare Psychopathy Checklist Revised, (PCL-R): The scale, developed by Hare in1991, is a semi-structured clinical interview form of 20 questions, for grading psychopathy, applied by the interviewer to investigate the diagnosis of Axis I psychiatric disorder [22]. All questions were graded basing on a three point scale (0-1-2) considering data obtained at the end of semi-structured interview. Total score obtained from Hare PCL-R ranged between 0 and 40. The ones scoring over a certain point on the PCL-R were identified as high level of psychopathy. Although the cut-off point was considered to be 30 for Canadian and North American prisoners, psychopathy cut-off point was accepted to be 25 for European prisoners due to less number of patients in the studies performed in Europe [23]. Validity and reliability studies were not performed in Turkey. Consequently, we primarily use the leveling system to degree the severity of patient's symptoms. According to the leveling system: 33-40 points (Level 5): very high psychopathy, 25-32 points(Level 4): high psychopathy, 17-24 points (Level 3): moderate psychopathy, 9-16 points (Level 2): low psychopathy, 0-8 points (Level 1): very low psychopathy [23]. In our study, patients accumulated at level 3 and, so cut-off score was considered to be 25 to determine “high and low” levels of psychopathy.

Cross tabulations was constructed for qualitative data and Chi-square test was used to analyze. Differences between high and low psychopathy levels were compared with the student's t test. Correlations between parameters were assessed with Pearson's coefficient correlation. Error level was determined as p=0.05.

Results

The mean age of subjects was calculated as 21.7 ± 2.81. Other socio-demographic characteristics are summarized in Table 1.

Substance use disorders were observed as the most common comorbid disorder (66.9%). The co morbidity rates were as follows: Alcohol use disorders 65.4%, adjustment disorders 36.4%, anxiety disorders 27.9%, depressive disorders 22.1% and psychotic disorders 2.1%. Lifetime alcohol use disorder was 72.1% and lifetime substance use disorder was found 78.6%.At least one psychiatric disorder co-morbidity was found in 54.3% of the study sample. In terms of psychopathy levels, 52.9% of subjects (n=74) were determined to constitute the “the Low Psychopathy Group” by getting low scores at the Hare Psychopathy Checklist-Revised (PCL-R).

		n/mean	%/SD
Age		21,76	2,81
Duration of Education		7,89	2,68
Marital Status	Unmarried/Widow	134	95.7
	Married	6	4.3
Employment Status	Often changes	54	38.6
	Never worked	24	17.1
	Regular work	62	44.3
Place of Living	City Center	33	23.6
	Suburb	83	59.3
	Village	24	17.1
Economic Status	Low	66	47.1
	Mid-low	69	49.3
	Mid-high	3	2.1
	High	2	1.4
Academic Level	Low	68	48.6
	Intermediate	61	43.6
	High	11	7.9
Social Life	Poor	49	35
	Moderate	69	49.3
	Good	22	15.7
Family History of Psychiatric Disorders	No	70	50.0
	Yes	70	50.0

Table 1: Socio-demographic Characteristics of Patients, SD: Standard Deviation

Alcohol use disorder and substance use disorder was detected significantly more in high psychopathy group (p<0.05). Similarly, Generalized Anxiety Disorder was detected significantly more in high psychopathy group (p=0,000). However no significant differences were found according to psychiatric disorder comorbidity between groups. (Table 2). Personality disorder comorbidities between low and high psychopathy groups are compared in Table 3. It was found that paranoid personality disorder, borderline personality disorder and passive-aggressive personality disorder comorbidities were significantly higher (p <0.05) in high psychopathy group.

Family history of the patients revealed ASPD (45.7%) was the most common diagnosis. Schizophrenia was second with 15.7% followed by unipolar depression with 11.4%. Positive family psychiatric disorder history was 34.8% in the low psychopathy group and 68.2 % in the high psychopathy group.

Discussion

According to our knowledge, this is the first study conducted in a Turkish community focusing on the comorbid psychiatric disorders of ASPD patients. It is known that psychiatric disorders may occur due to multiple etiological factors. Environmental factors, cultural norms are all may be influential. In Turkey, parents and also even relatives are very strong social support systems. But mostly ASPD patients do not seek for psychiatric help. Furthermore illegal substance trade from Asia to Europe takes place due to geopolitical localization of the country.

Axis I Disorders	Low Psychopathy		High Psychopathy		χ2	P
	(n=74)	%	(n=66)	%		
Current Substance Use Disorder	34	45.9	59	90.8	31.40	0.000
Lifetime Substance Use Disorder	48	64.9	62	93.9	17.51	0.000
	39	52.7	50	80.6	11.64	0.001
Current Alcohol Use Disorder	47	63.5	54	81.8	5.81	0.016
Lifetime Alcohol Use Disorder	22	29,7	29	43,9	3,042	0,081
Adjustment Disorder						
Generalized Anxiety Disorder	9	12,2	30	45,5	19,240	0,000
Current Depressive Episode	17	23	15	22,7	0,001	0,972
Lifetime Depression	17	23	14	21,2	0,063	0,802
BTA Anxiety Disorder	13	17,6	7	10,6	1,381	0,240
Dysthymic Disorder	4	5,4	3	4,5	*	0,816
Mood Disorder	3	4,1	2	3,0	*	0,745
Conversion Disorder	3	4,1	1	1,5	*	0,368
Posttraumatic Stress Disorder (PTSD)	2	2,7	1	1,5	*	0,628
Psychotic Disorder	2	2,7	1	1,5	*	0,628
Current Hypomanic Episode	2	2,7	0	0	*	0,172
Schizoaffective Disorder	2	2,7	0	0	*	0,179
Social Phobia	2	0	0	0	*	0,179
Obsessive Compulsive Disorder	0	0	1	1,5	*	0,288
Current Manic Episode	0	0	1	1,5	*	0,288
Specific Phobia	0	0	0	0	*	-

Table 2: Comparison of the Axis I Disorder Comorbidities between Low and High Psychopathy Groups, χ2: Chi-Square Test, * : Fischer's Exact Test

Substance use disorders were the most frequently seen comorbid psychiatric disorder. In the high psychopathy group, current and lifetime Alcohol and Substance Use Disorder, Generalized Anxiety Disorder, Paranoid Personality Disorder, Borderline Personality Disorder and Passive Aggressive Personality Disorder diagnoses were significantly higher. In another study performed among prisoners, mood disorder, anxiety disorder, substance use disorder, somatoform disorder, psychotic disorder, borderline personality disorder and attention deficit-hyperactivity disorder were observed to be more commonly seen in ASPD [24]. Even though our study was not conducted in a prison environment, psychopathy and personality disorder rates were similar to previous study results [25,26]. High psychopathy scores were found with substance use disorder comorbidity.

Axis II Disorders	Low Psychopathy		High Psychopathy		χ2	P
	N	%	N	%		
Paranoid Personality Disorder	24	32.4	42	63.6	13,63	0,000
Borderline Personality Disorder	14	18.9	26	39.4	7,16	0,009
Passive-Aggressive Personality Dis.	8	10.8	17	25.8	5,31	0,027
Schizoid Personality Disorder	10	13.5	9	13.6	0,00	0,983
Avoidant Personality Disorder	9	12.2	8	12.1	0,00	0,994
Narcissistic Personality Disorder	2	2.7	6	9.1	*	0,104
Histrionic Personality Disorder	3	4.1	4	6.1	*	0,587
Schizotypal Personality Disorder	1	1.4	1	1.5	*	0,935
Obsessive Compulsive Personality Disorder	1	1.4	0	0	*	0,343
Selt mutilation (masochistic) Personality Disorder	0	0	1	1.5	*	0,288
Dependent Personality Disorder	0	0	0	0	-	-

Table 3: Comparison of the Axis II Disorder Comorbidities between Low and High Psychopathy Groups, χ2: Chi-Square Test, * : Fischer's Exact Test

In our study, comorbidity of "Generalized Anxiety Disorder" in patients with "high psychopathy" (45.5%) was determined rather higher than in patients with "low psychopathy" (12.2%). Besides, socio economic status of most of the subjects enrolled was in the low and mid-low groups (96.4%). It is known that in the general population the incidence of anxiety disorders decreases with the increase in the socio-economic levels [28]. Furthermore, anxiety disorder rates are observed lower in men and anxiety disorder comorbidity rates go up to 25.2% in men with ASPD [27]. This finding is close to the rate we observed in our study (27.9%). Major depressive disorder is more frequently seen in people lack of confiding relationships, low income, single, divorced, separate or young. Major depressive disorder occurs more commonly in urban than rural dwellers. Lifetime prevalence rate of major depression is 5-12% in males [27] In our study comorbid current depressive episode rate was determined as 22.9%. Rate of dysthymic disorder was found to be 5%. Antisocial personality disorder is an enduring pattern behavior that deviates from social norms. Impairments in personality (self and interpersonal) functioning and the presence of pathological personality traits are prominent. As a consequence social support and economical status are lower in ASPD

and they are more prone to depression. Majority of our study subjects had low socioeconomic status, 95.7% were single and aged a mean of 21,76 years. These findings are consistent with sociodemographic data of depressive disorders in the literature. It is striking that rates of depressive disorders in our study are higher than the studies conducted in the European Community and similar to those of the Iranian studies [29] This condition may be due to the similar cultural structures of both communities. Additionally, in the literature lower values were found related with "low psychopathy" in depressive disorder comorbidity similar to our results [30,31].

In our study, the prevalence of paranoid, borderline and passive-aggressive personality disorders observed in individuals with ASPD in the "high psychopathy" group was observed significantly higher than that of the "low psychopathy" group. Consequently, despite a few number of individuals with ASPD diagnosis alone, combination of, especially, both axis I and axis II comorbidities in high rates were reported to increase psychopathy rates [32,33]. In our study, a total of 4 patients were diagnosed only with ASPD and they had low rates of psychopathy (PCL-R<25). The presence of multidiagnosis was determined to increase severity of psychopathology as well as to reduce the treatment response rates. In the present study, at least one comorbid psychiatric illness was diagnosed in 97.1% of subjects with ASPD. This condition may result in treatment resistance, relapse and recommitting an offense by a high rate. Consequently, the significance of holistic approaches to treatment has been understood once more.

ASPD was reported to be characterized by low academic achievement, constant business change and marital problems in epidemic studies [34] In our study most of the patients were in the age of21,76 ± 2,81 years, unmarried, primary school graduate or less educated (duration of education 7,89 ± 2,68), working at unqualified jobs or unoccupied. Marriage has been normally considered to have stabilizing effects on the behavior of men and protective effects from antisocial behaviors [35].

Family studies reveal that all psychiatric disorders including ASPD and substance use may have a familial transition [36] In this study, the episode of psychiatric illness in first-degree relatives of patients was found to be 50%. When low and high psychopathy groups were compared; the episode of psychiatric illness history within the family was significantly higher in the high psychopathy group than that of the low group. When the disorders seen within the family were investigated, ASPD was found to be diagnosed most frequent in both groups. Similarly, in many studies more relatives with ASPD were detected in antisocial adults than in the control group [37,38]

There are also some limitations in our study. The sample size is relatively small. Validity and reliability of PCL-R has not studied yet to assess psychopathy in Turkey. Psychiatric epidemiological information is specific to men.

Conclusions

We consider that this study is epidemiologically important because the study population consists of a general hospital population, including subjects coming from different regions of Turkey instead of a prison population. Remarkably higher comorbid illnesses have been diagnosed in subjects with ASPD. Requirement for diagnosis and treatment of ASPD individuals with mental illness is an important international public health problem. Since comorbid conditions are usually pretty much in individuals with ASPD, these people require careful assessment in clinical practice. Due to the negative attitudes of physicians towards antisocial patients, comorbid conditions are inevitable to be missed. Treatments may cause an increase in the patients to remain social and individual problems.Patients remaining untreated can lead to an increase in social and individual problems. The presence of comorbid diagnoses has been once more emphasizing the importance of holistic approaches. As a result of this research, much information on the development of new rehabilitation programs may be established to increase social adjustment of individuals diagnosed with ASPD, who have numerous legal and social problems. The comparison of psychiatric morbidity rates of individuals with ASPD with the general population of our country will be helpful for the future investigations. Besides, conducting studies with criminal patients and their sub-criminal types in other hospitals and performing studies on larger samples and comparing these rates with the total population will be useful in studies scheduled for later periods.

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