Clinical and Demographical Profiles of the Patients with Delusional Disorder: a Retrospective Study

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Öz

Sanrılı Bozukluğu Olan Hastaların Klinik ve Demografik Özellikleri: Retrospektif Bir Çalışma

Amaç: Sanrılı bozukluk tanısı olan bir grup hastanın demografik, çevresel, psikososyal ve klinik özelliklerini araştırmayı amaçladık.
Yöntem: Retrospektif tanımlayıcı bir çalışma tasarımında, Adıyaman Üniversitesi Araştırma Hastanesi Psikiyatri Kliniğinde kayıtlı sanrılı bozukluğu olan hastalar üzerinde çalışıldı. DSM-IV tanı kriterlerini karşılayan 320 sanrılı bozukluk hastasını örneklem olarak alındı. Sosyodemografik ve genel veriler, risk faktörleri, klinik tablo ve tanıları elde edildi.
Bulgular: Erkeklerin kadınlara göre oranı 1.12 idi. Hastaların sadece %31.25'i okuma yazma bilmiyordu. Hastaların %56,56'sı evli, yaklaşık yarısı bir evi paylaşmaktaydı. Hastaların yaklaşık %16,9'unda geçmişte alkol kullanım öyküsü vardı ve %2,3'ü başka uyuşturucu madde kullanıyordu. En sık 158 olgu (%49.38) ile kötülük görme alt tipi idi. Referans ve kötülük görme düşünceleri sırasıyla %83.75 ve %81.88 olarak bulunmuştur.
Sonuç: Sanrılı bozukluk örneğimizde dördüncü on yılda ortalama başlangıç yaşı ile erkeklerin ve kötülük görme alt tipinin çoğunlukta olduğunu bulduk. Eğitim düzeyi çoğu hastada orta ve düşüktü. Hasta grubunda en sık, referans ve kötülük görme sanrıları ile işitsel varsanı mevcuttu.

Anahtar Kelimeler: sanrı, sanrılı bozukluk, demografik faktörler

Abstract

Delusional Disorder: A Retrospective Study

Objective: We aimed to investigate demographic, environmental, psychosocial and clinical characteristics in a group of patients with delusional disorder (DD).
Method: In a retrospective descriptive study design, cases with DD registered at Psychiatry Clinic of Adıyaman University Research Hospital was conducted. We obtained a sample of 320 DD patients who met the inclusion criteria according to DSM-IV. Socio-demographic and general data, risk factors, clinical table and diagnosis were collected.
Results: Proportion of males versus females was 1.12:1. Only 31.25% of patients were illiterate. Patients 56.56% were married and about half of them shared the same home. About 16,9% of patients had a past history of alcohol consumption and 2,3% consumed other drugs. One hundred fifty eight cases (49.38%), the most frequent subtype, was the persecutory. Ideas of reference and of persecution were found in 83.75% and 81.88% respectively.
Conclusions: In our DD sample, we found a male preponderance and persecutory subtype with the onset mean age in the fourth decade. Education level was moderate and low in most of the patients. Reference and persecutory ideation and auditive hallucinations were the most prevalent delusional symptomatology in these patients' group.

Keywords: delusion, delusional disorder, demographic factors

1. INTRODUCTION

Delusional disorder (DD) is characterized by the presence of systematized delusions, with different contents, without prominent hallucinations, alterations in language or thinking, and no serious deterioration of the personality (1).

Although some progress has been made in DD nosology, a consensus on its etiology has not yet been reached. The main reason is the scarcity of studies since it is an uncommon pathology, patients usually do not consult for lack of disease awareness and, in many cases, do not cause serious behavioral alterations. The prevalence of DD throughout life is around 0.2% and the most frequent subtype is persecutory (2).

Patients do not regard themselves as mentally ill and actively object psychiatric referral, experience minor impairment and in the infrequent psychiatric confrontation may get labeled with a mood disorder or schizophrenia (3).

Six major causal factors were identified in the understanding of delusional ideas: a thinking style of concern, negative beliefs about oneself, interpersonal sensitivity,

sleep disorders, anomalous inner experience, and reasoning biases. Each has plausible mechanistic links in the occurrence of delusions (4). These factors may be influenced by a number of social circumstances, including adverse events, illegal drug use, and urban settings (5-8). Systematized case series studies on DD are scarce and the existing ones have not followed homogeneous criteria in a way that makes it difficult to compare (4).

Table 1. Demographic characteristics of patients with delusional disorder according to their subtypes

Variable		Total	Percent	Persecutive	Percent	Grandious	Percent	Jealousy	Percent	Somatic	Percent	Erotomanic	Percent	Mixed	Percent	p*
		320	100,00%	158	49,38%	37	11,56%	63	19,69%	22	6,88%	16	5,00%	24	7,50%	
	Man	169	52,81%	81	25,31%	26	8,13%	38	11,88%	7	2,19%	5	1,56%	12	3,75%	
	Woman	151	47,19%	77	24,06%	12	3,75%	25	7,81%	15	4,69%	11	3,44%	11	3,44%	0,091
	Age	46,55		49		43		50		47		44		44		
	SD	15,54		15		14		14		19		19		13		0,25
Region																
	Gölbaşı	49	15,31%	27	8,44%	3	0,94%	9	2,81%	3	0,94%	1	0,31%	6	1,88%	
	Gerger	39	12,19%	17	5,31%	5	1,56%	7	2,19%	3	0,94%	4	1,25%	3	0,94%	
	City Centre	130	40,63%	73	22,81%	19	5,94%	16	5,00%	8	2,50%	3	0,94%	11	3,44%	
	Besni	102	31,88%	41	12,81%	10	3,13%	31	9,69%	8	2,50%	8	2,50%	4	1,25%	0,124
Education																
	University	5	1,56%	3	0,94%	1	0,31%	1	0,31%	0	0,00%	0	0,00%	0	0,00%	
	High	5	1,56%	1	0,31%	1	0,31%	1	0,31%	1	0,31%	1	0,31%	0	0,00%	
	Incomplete High	37	11,56%	26	8,13%	3	0,94%	5	1,56%	0	0,00%	3	0,94%	0	0,00%	
	Secondary	117	36,56%	70	21,88%	15	4,69%	21	6,56%	3	0,94%	2	0,63%	6	1,88%	
	Primary	56	17,50%	11	3,44%	8	2,50%	9	2,81%	12	3,75%	5	1,56%	11	3,44%	
	Illiterate	100	31,25%	47	14,69%	9	2,81%	26	8,13%	6	1,88%	5	1,56%	7	2,19%	0,000*
Labor																
	Unemployed	132	41,25%	64	20,00%	13	4,06%	25	7,81%	12	3,75%	7	2,19%	11	3,44%	
	Employed	111	34,69%	49	15,31%	20	6,25%	22	6,88%	7	2,19%	4	1,25%	9	2,81%	
	Retired	77	24,06%	45	14,06%	4	1,25%	16	5,00%	3	0,94%	5	1,56%	4	1,25%	0,28
Marital Status							0						0			
	Single	96	30,00%	50	15,63%	17	5,31%	4	1,25%	10	3,13%	12	3,75%	3	0,94%	
	Married	181	56,56%	73	22,81%	17	5,31%	56	17,50%	10	3,13%	4	1,25%	21	6,56%	
	Separate	43	13,44%	35	10,94%	3	0,94%	3	0,94%	2	0,63%	0	0,00%	0	0,00%	0,000*
	No of children	1,74		1,65		1		2,59		1,44		0.77		2,16		
	SD	2,08		2,21		1,69		2,07		2,03		1,48		1,38		0,005*
Home																
	Origin family	62	19,38%	33	10,31%	8	2,50%	4	1,25%	9	2,81%	5	1,56%	3	0,94%	
	Own family	187	58,44%	79	24,69%	17	5,31%	55	17,19%	11	3,44%	5	1,56%	20	6,25%	
	Host family	39	12,19%	24	7,50%	10	3,13%	0	0,00%	1	0,31%	3	0,94%	1	0,31%	
	Residence home	11	3,44%	6	1,88%	0	0,00%	4	1,25%	0	0,00%	1	0,31%	0	0,00%	
	Alone	21	6,56%	16	5,00%	2	0,63%	0	0,00%	1	0,31%	2	0,63%	0	0,00%	0,000*

* Statistically significant. ** ANOVA test for quantitative variables and X2 for qualitative variables.

Table 2. Psychotic delusional symptomatology of patients with delusional disorder

Variable		Total	Percent	Persecutive	Percent	Grandious	Percent	Jealousy	Percent	Somatic	Percent	Erotomanic	Percent	Mixed	Percent	p**
		320	100,00%	158	49,38%	39	12,19%	62	19,38%	22	6,88%	16	5,00%	23	7,19%	
Ideas																
	Reference	268	83,75%	156	48,75%	17	5,31%	46	14,38%	11	3,44%	16	5,00%	22	6,88%	0,000*
	Persecutive	262	81,88%	157	49,06%	16	5,00%	42	13,13%	11	3,44%	13	4,06%	23	7,19%	0,000*
	Grandious	54	16,88%	7	2,19%	35	10,94%	0	0,00%	2	0,63%	3	0,94%	7	2,19%	0,000*
	Somatic	42	13,13%	9	2,81%	4	1,25%	3	0,94%	22	6,88%	2	0,63%	2	0,63%	0,000*
	Other	122	38,13%	9	2,81%	10	3,13%	56	17,50%	12	3,75%	12	3,75%	23	7,19%	0,000*
Halucinations																
	Auditory	114	35,63%	62	19,38%	16	5,00%	10	3,13%	1	0,31%	12	3,75%	13	4,06%	0,000*
	Visual	40	12,50%	22	6,88%	3	0,94%	1	0,31%	6	1,88%	2	0,63%	6	1,88%	0,018*
	Tactile	3	0,94%	0	0,00%	0	0,00%	0	0,00%	3	0,94%	0	0,00%	0	0,00%	0,000*
	Other	11	3,44%	5	1,56%	0	0,00%	1	0,31%	4	1,25%	1	0,31%	0	0,00%	0,031*

*Statistically significant. ** X2 Test for qualitative variables.

The objective of the this study was to undertake an investigation of the frequency of subtypes of delusional disorder, and to define whether or not the subtypes of delusional disorder diagnosed by DSM-IV show differences in age at onset and sex distribution, in order to explain further the characteristics of delusional disorder in Adıyaman and to provide the fundamental data for comparison between countries. This study shows the results of an outpatient psychiatric unit.

Table 3. Consumption of health resources of patients with delusional disorder and its types

Variable		Total	Percent	Persecutive	Percent	Grandious	Percent	Jealousy	Percent	Somatic	Percent	Erotomanic	Percent	Mixed	Percent	p**
		320	100,00%	158	49,38%	38	11,88%	63	19,69%	22	6,88%	16	5,00%	23	7,19%	
Social Assistance		28	8,75%	11	3,44%	3	0,94%	5	1,56%	6	1,88%	3	0,94%	0	0,00%	0,016
Total Consultations		7,95		6,97		7,39		6,8		13,5		17,08		11,21		0,001*
	SD	8,82		8,59		8,59		7,7		15,51		15,93		8,52		
Psy Emergency App		0,13		0,12		0,1		0,14		0,11		0		0,26		0,710
	SD	0,45		0,52		0,3		0,4		0,32		0		0,56		
Psychiatric App		31	9,69%	12	3,75%	4	1,25%	7	2,19%	3	0,94%	0	0,00%	5	1,56%	0,405
Total Hospitalizations		1,2		1,23		1,55		0,84		0,89		1,15		1,74		0,469
	SD	1,96		2,15		2,45		1,63		1,18		1,41		1,19		
Psy Hospitalizations		157	49,06%	78	24,38%	20	6,25%	22	6,88%	10	3,13%	9	2,81%	18	5,63%	0,051

*Statistically significant ** ANOVA test for quantitative variables.

2. METHODS

This is a retrospective descriptive epidemiological study of case records on 320 DD patients according to DSM-IV (9).

Patients with a diagnoses of DD according to DSM-IV who applied to the Department of Psychiatry in Adıyaman University during a 6-year period (between 1 January 2010 and 31 December 2015) constituted our cases. This study was approved by the Ethics Committee of Adıyaman University.

Sociodemographic and clinical features were obtained by the help of the form. This form included age, gender, education level, the region where the patient come from, labor, marital status, the family or place that the patient lives, types of delusional ideas and hallucinations, and consumption of health sources (consultations, hospitalizations, psychiatric and emergency applications). Patients' data were taken from the hospital records and from the family members where available.

Patients were grouped into 4 according to the regions that they come from; Adıyaman city center, Gölbaşı, Gerger, and Besni. Study variables included patients' sociodemographical, clinical and general medical data.

Patients diagnosed and registered with DD were applied the following inclusion criteria to participate in our study: to reside in Southeast region; make at least one visit to Department of Psychiatry in Adıyaman University; age of 18 years or over; meet the diagnostic criteria of DD according to DSM-IV.

Patients who met the inclusion criteria were assigned to one of the six DD types of DSM-IV (9). In this study, patients' psychiatric disorders (Axis I) and social and environmental problems (Axis IV) were evaluated. In regard with stressful life events (immigration, sensory deficts, and history of schizophrenia in family members) three months before the age at onset of illness were evaluated by the help of records and taken from the family members. During systematical evaluation of records; patients with a lifetime history of schizophrenia, organic brain syndrome, mental retardation, alcohol or substance abuse, traumatic medical, neurological illnesses were excluded. The number of cases that met defined inclusion criteria was 320, which constituted our sample.

2.1. Statistical Analysis

A descriptive statistical analysis was performed, with the calculation of measures of central tendency and dispersion, and calculations of frequencies. percentages, odds ratios (OR), 95% confidence intervals and levels of significance ($p<0.05$) were obtained. Statistical analysis was performed with SPSS version 22.0.

3. RESULTS

We found a male preponderance and persecutory subtype with the mean age at onset in fourth decade in our DD sample. Education level was moderate and low in most of

the patients. Reference and persecutory ideation and auditive hallucinations were the most prevalent delusional symptomatology in patients groups.

In our study, the male/female ratio was 1,12:1 (169 males:151 females). The mean age of the patients at evaluation 46.55 (SD=15.54) years. Most of the patients (n=130, 40.63%) come from Adıyaman city centre. The age at onset of DD was 41.48 (SD=12.67) years (not shown). One-hundred-seventeen (36.56%) patients completed secondary education, and 31.25% (n=100) of the total sample were illiterate. High school and university degrees were very low (each of them were by 1.56%) Regarding the labor status unemployment was 41.4%. Over the half of patients (n=187, 58.44%) own a family. Of the 320 patients diagnosed with DD according to DSM-IV criteria, the most numerous subtype was the persecutory with 158 cases (49.38%), followed by jealousy type with 63 cases (19.69%), grandiosity with 37 cases (11.56%), mixed with 24 cases (7.50%), somatic with 22 cases (6.88%) and erotomaniac with 16 cases (5.00%). The mean number of children was 1.74 (SD=2.08), the erotomaniac subtype had the least (0.77, SD=1.48) and the jealousy subtype had the most (2.59, SD=2.07). Table 1 shows demographic characteristics of patients with DD.

Table 2 shows the delusional symtomatology of patient groups in the study. The ideas of reference and persecution were presented in 83.75% and in 81.88% of cases, respectively. The ideas of grandiosity (16.88%) and somatic (13.13%) were less frequent. Most of the hallucinations were auditive type with the frequency of 35.63%, visual hallucinations follow by 12.50%.

Table 3 addresses the health care system applications/consumptions by types of DD. The mean of total hospitalizations was 1.20 (SD=1.96), and grandiose type was the most hopitalized (1.55, SD=2.45). In regard with consultations erotomanic type needed the most by 17.08 (SD=15.93), the total number of consultations performed by the patients was 7.95 (SD=8.82). On the contrary, psychiatric emergency appplications was the least by erotomanic (0.00, SD=0.00). Psychiatric emergency application was highest in jealousy type (0.14, SD=,40).

Although not mentioned in tables, but taken from records, some important points for patients were as follows: i) Only 11.9% had a psychiatric family history up to a second degree, ii) Personal psychiatric history was 21.9%, of which psychotic episodes (13.8%) were present in all clinical subtypes, iii) A 18.2% presented antecedents of organic pathology, iv) Sensory deficit, such as deafness or premorbid blindness were present in 5.4%, v) Only 18,1% previously alcohol and only 2.7% other substances, vi) The suicide attempt reached 10%, vii) Stress episodes three months before the onset of DD were found in 24.5%, viii) The results of Axis IV identified that the main problems described by the family or primary support group were the death of a family member (12.1%), family health problems (9.3%) and change of home (9.2%), and ix) Labor problems were present at 44.4% and unemployment at 26.8%. The economic problems present in one third (30.3%) of cases and 57.9% had psychosocial and environmental problems. The request for treatment for the patient was based on a medical referral in 49.3%, and from the family of origin and in 27.4%, and in 11.9% spontaneous, and marital problems accounted for 30.3%.

4. DISCUSSION

Our study presents the sociodemographic, personal, family and clinical characteristics of series of diagnosed cases of DD with DSM-IV criteria. The study was conducted with 522 patients coming from 4 regions of Adıyaman city, including city center. Patients represented a slight male predominance (male/female ratio 1,12:1). Of the 320 patients diagnosed with DD according to DSM-IV criteria, the most numerous subtype was persecutory with 158 cases (49.38%). Although the absence of records for these criteria in our study (not shown in tables); the mean age at onset of DD was 41.48 (SD=12.67) years, and the peak age for the first admission for the DD is between 40-49 years (10) followed by age at first presentation is 30-39 years (11).

Persecutory subtype is the most frequent by 49.4% and are consistent with studies by de Portugal et al. (70.9%) (12), Someya et al. (64%) (13), Yamada et al. (51%) (14), Hsiao et al. (70.9%) (15), Maina et al. (54.4%) (16), de Portugal et al. (39.3%) (17), Jadhav et al. (22.64%) (18), and González-Rodríguez et al. (74.2%) (19).

Rudden et al. reported no significant difference in delusional contents, including grandiose, jealous and somatic delusions between the sexes, except for erotomanic delusion (20). Grover et al. found no significant difference in the frequency of subtypes of delusional disorder between the sexes (21).

One-third of the patients (31.25%) were illiterate in our study. The DD cases were reported to be more poorly educated than cases with affective illness (12). The marital status at the time of the first psychiatric consultation was married in 56.38%. Both results coincide with those of de Portugal et al.(12). Hsiao et al. reported that 66% of DD patients were married at the time of diagnosis (15). Nearly half of the patients were single and separate (40.44%) of registered patients lived together. Previously, the trend towards isolation of these patients has been pointed out (12), however, in our study, only 13.44% lived separately, which could be attributed to the sociocultural and demographic characteristics of the sample.

In our study, the psychiatric family history was very low (12.6%) and less than a quarter of the patients had a medical (17.6%) and psychiatric (23%) history. It was reported an 8.7% family history of schizophrenia over 174 cases (19), and 20.9% in another study of 86 cases (17). However, we did not find any cases, which could be due to the sociocultural and demographic characteristics of the samples.

Sex ratio was found different in various studies; as in our study, some of them reported male predominance (15, 22), some others defined the opposite (4, 10, 11, 23).

The considered risk factors cited in the literature related to DD include a history of sensory deficits such as deafness or premorbid blindness (2, 5), which in our study obtained irrelevant values (5.4%). We agree on the presence of a history of immigration (22.3%) with de Portugal et al. which account for 24.4% (12).

The history of substance use (2.7%) was not frequent in the study. However, approximately one-sixth (18.1%) of the patients had alcohol, which coincides with other studies (2, 12, 17, 19, 24, 25). The persecutory subtype was the maximum consumer in our study.

Our results suggest that stressful episodes three months before the start of DD do not represent an important risk factor, having in that 3 of 4 patients did not suffer any stressful episode three months before the first symptoms. However, found stressful episodes were found in 32.5% of 51 cases, that is, it accounts in almost a third of cases (17).

At the onset of illness, the DD cases are older than the schizophrenics: the commonest age at onset being 34-45 years. In regard with age onset of illness, there was not any difference between genders. The mean age of onset was 41.48 (SD=12.67), in an age range coinciding with the 39 years was found in the DELIREMP study on 86 cases of DD (17). In our study, the insidious presentation was more frequent in the persecutory subtype (40.2%) than in the DELIREMP study (44.1%) (17). Yamada et al. reported the youngest for the somatic type and the oldest age at onset for the persecutory type (14).

The ideas of reference and persecution were found in almost all patients studied (>81%); while the ideas of grandiosity, somatic and other types were less frequent (<38.13%). Presence of the ideas of reference and persecution in more than 81% of the persecutory subtype suggest that they are key in their diagnosis. Non-prominent auditory hallucinations were found in less than half of the patients (35.63%). De Portugal et al. reported self-referenced ideas in 48.6% and 7.8% non-prominent auditory hallucinations (10). These differences could be attributed to the time of delay in receiving psychiatric care, which could facilitate the manifestation of the clinical symptomatology. In our study, the maximum delay to receive psychiatric care from the age of onset of the onset of the illness was jealousy type, with almost 68 months, which also suggests the existence of a high cultural tolerance in the social and familiar environment towards the clinical patterns characteristic of this subtype. The somatic type presented the minimum value with 26 months of delay and the mean values were 42.91 months. It was reported that the maximum time for grandiosity and the minimum for the mixed subtype (17) which could also be attributed to the tolerance levels in the socio-familial environment of their study towards the symptomatology of these clinical subtypes.

The number of consultations for patients was 7.95 and almost half of the patients (49.06%) were hospitalized. Table 3 shows the consumption of health resources (consultations and admissions). De Portugal et al. found similar hospitalization figures (48%), (24.5% vs. 25.5%), although this could be due to the different systems of organization of mental health care that governed each study and the standards used (17).

Opjordsmoen and Retterstol reported 79% and 74% of the DD cases respectively to be self-supporting and with no major time without work compared to 31% and 30% respectively of the cases with schizophrenia (26). DD cases are reported to have a favorable work history compared to the cases suffering from schizophrenia (22) and to be more poorly educated than cases with affective illness (11).

The presence of prescription antidepressant medication was detected in 41.0% of the DD patients, and the persecutory subtype with 21.8% was the more prevalent. In a study, using the Montgomery-Asberg Depression Rating Scale (MADRS), it was reported that 45% of patients with depression (12), however, in another study reported 27% (17). González-Rodríguez et al. reported 37.1% (19), Wustmann et al. of 39.5% (27), and Román et al. (44.8%) and 59.4% at the beginning of the study (28). These differences may be attributable to the sample sizes and study types, but they seem to suggest the presence of a comorbid depressive disorder. According to Vorontsova et al. the improvement of depressive symptoms reduces persecutory symptomatology (29).

In this patient group, a retrospective study was conducted in our country in order to evaluate patients with DD (n=466) in regard to clinical characteristics and treatment modalities. However, this study was different from our study in that it was not limited to one city, but it was the results of patients who came from many provinces and received inpatient treatment in Bakırköy Mental State Hospital between 1997-2007. The study revealed that most of the patients were males (ratio: 4.29:1), married (67.2%), lived with family (71.9%), and most of them graduated primary school (61.8%). Social support was partial or insufficient (49.6%), and 38.5% of the patients were working regular-

ly. Most of them were in the upper intermediate economic level (58.5%). Only 28.4% of the patients had a history of family psychiatric disorder and the most common psychiatric disorder was psychotic disorder. Of the patients, 45.9% had delusions of persecution, 43.6% had jealousy delusions, 4.7% had mixed types, 2.1% had erotomanic delusions, and 1.9% grandiose delusions and 1.7% somatic delusions. Traumatic life event was found in 18.4% of the patients. Homicide history was found in 7.5% of first or second degree relatives of the patients. It was found that most of the patients (83.3%) were not followed up with another psychiatric diagnosis before being diagnosed with DD. This study found that 85.4% of patients had been prescribed an antipsychotic medication as first-line treatment: while 83.3% of these were found to be first-generation antipsychotics, 33.7% of them were second generation. Haloperidol and pimozide were the most prescribed first-generation antipsychotics with a percentage of 50% and 19.5% respectively (30).

In 93,2% of cases, the evolution of the topic of delusion was monothematic. Consistent with previous studies, de Portugal et al. and Badá et al. delusions maintained a chronic evolution in 61.3% of the cases, and the remainder had remission phases (12, 31). However, until the publication of the DSM-5 that has provided "evolutionary specifications" as a standardized criterion, existing studies have used expressions such as "lasting remission", "partial relapses", "relapse", "attenuation" to time periods defined or not by each author, which makes statistical comparison difficult. The authors consulted the expressions that the Delusional Disorder presents "a very variable evolution" towards chronic forms and/or that "present periods of remission" (12, 17-19, 27, 29). The existing studies on outcome/diagnostic stability in DD using sample sizes of 9-163, different diagnostic criteria, and up to 20 years follow-up have shown the re-diagnosis of 3-28% as schizophrenia and 3-8% as an affective disorder; in another study, the diagnosis was stable (32). Erben et al. found 0.2%, 0.9% and 10.5% for schizophrenia, bipolar disorder and depression diagnoses before the accurate diagnosis of DD (30).

Limitations and strengths

There were not any comparative groups, standardized rating scales (certain validation parameters) and data was taken from medical records. The main strength of this study is to provide a clinical description of DD based on criteria contained in DSM-IV. Axis I and IV were evaluated according to standardized protocols. A generalization can not be made with the findings of our work with the reason that our work was carried out in a single center. Yet, in our study, the comparison of delusional disorder subtypes in different societies is a guide to work in this area.

5. CONCLUSIONS

As a result, physicians have difficulty in diagnosing and treating delusional disorders during clinical practice. Early detection and treatment of this disease, which can lead to significant losses in functionality and interpersonal relationships, is clinically important. Therefore, more studies are needed to investigate demographic and clinical features in patients with different clinical features. For a better understanding of the causes of delusional disorder and treatment responses, there is a need for prospective, large-sample studies to better understand demographic, psychosocial and biological factors.

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