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Phenomenology of Delusions among Schizophrenics in Istanbul Anatolian Region

İstanbul Anadolu Bölgesindeki Şizofreni Hastalarında Sanrıların Fenomenolojisi

Haydeh Faraji¹, Haluk Usta², Ahmet Ertan Tezcan³

Abstract:

This study aimed to analyze the delusion types of schizophrenic patients in Istanbul's Anatolian/Asian Region. The content of 397 delusions found in 228 schizophrenic patients was classified using the classification system of Huber and Gross. Persecution and reference were the most frequent themes of delusion in men and women. Persecutory delusions were observed in 71.9% of patients (59.6% of women and 82.3% of men), and reference delusions were observed in 43.1% of patients (39.4% of women and 46.8% of men), followed by grandiosity (22.6%) and religion (16.9%) in men and erotomania (11.5%) and guilt/sin (7.7.%) in women. None of the men or women exhibited homosexual or erotomanic delusions. Physical/mental injury (62.8%) and being followed (39.6%) were the most common kinds of persecution content in persecutory delusions. When it came to persecutors, married women showed a tendency to have persecutory delusions about their husband's relatives (12.8%). Persecutors also include anonymous individuals, neighbors, friends, family members, and, more recently, cameras. Delusions of hypochondria (5.7%), poisoning (2.6%), and nobility (3.9%) were encountered at lower rates, as observed in previous studies. Like previous studies, our study affirms that gender, education level, cultural and sociopolitical structures, geography, and globalization affect the content of delusions, as well as technological innovations.

Keywords: Phenomenology, Delusions, Schizophrenia.

¹Assoc. Prof., Istanbul Aydin University, Faculty of Sciences and Literature, Department of Psychology, Istanbul-Türkiye, E-mail: haydehfaraji@aydin.edu.tr, Orcid Id: 0000-0001-5306-6546

²Dr., Erenköy Mental and Nervous Diseases Training and Research Hospital, Istanbul, Türkiye, E-mail: ustahaluk@gmail.com Orcid Id: 0000-0001-8965-1608

³Prof. Dr., İstanbul Aydın University, Faculty of Sciences and Literature, Department of Psychology, Istanbul-Türkiye, E-mail: ahmetetezcan@gmail.com Orcid Id: 0000-0002-1868-1655

Address of Correpondence/Yazışma Adresi: Haydeh Faraji, Erenkoy mah. Fahrettin kerim gökay Street, mormin building, no272, floor 1, apartment 7, Kadıköy/İstanbul, E-mail: haydehfaraji1@gmail.com

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Öz:

Bu çalışmada İstanbul Anadolu Bölgesi'ndeki şizofreni hastalarının sanrılarının içerik açısından incelenmesi amaçlanmıştır. Bu doğrultuda 228 şizofreni hastasında bulunan 397 sanrı içeriği Huber ve Gross'un sınıflandırma sistemi kullanılarak sınıflandırılmıştır. Hastaların %71,9'unda (kadınların %59,6'sı ve erkeklerin %82,3'ü) perseküsyon sanrıları, %43,1'inde (kadınların %39,4'ü ve erkeklerin %46,8'i) referans sanrıları görülürken, bunları erkeklerde büyüklenmecilik (%22,6) ve din (%16,9), kadınlarda ise erotomani (%11,5) ve suçluluk/günah (%7,7) sanrıları takip etmiştir. Kadınların ya da erkeklerin hiçbiri erotomanik ya da eşcinsel sanrılar sergilememiştir. Perseküsyon sanrılarında fiziksel/zihinsel yaralanma (%62.8) ve takip edilme (%39.6) daha sık karşılaşılan perseküsyon türleri olmuştur. Evli kadınların bir kısmı (%12.8), kocalarının akrabalarının en az biri hakkında perseküsyon sanrıları yaşama eğilimi göstermişlerdir. Persekütörler; kim olduğu belli olmayan kişiler, komşular, arkadaşlar, aile üyeleri ve son zamanlarda görülmeye başlanan bir tür olarak kameralardan oluşmaktadır. Hipokondri (%5,7), zehirlenme (%2,6) ve soyluluk (%3,9) hezeyanlarına ise bu çalışmada ve daha önceki çalışmalarda görülen oranlarda diğer türlere göre daha düşük düzeyde rastlanmıştır. Çalışmamız sonucunda daha önceki çalışmalarda da gösterildiği gibi teknolojik yeniliklerin yanı sıra cinsiyet, eğitim düzeyi, kültürel ve sosyopolitik yapı, coğrafya ve küreselleşmenin sanrı içeriğini etkilediği belirlenmiştir.

Anahtar Kelimeler: Fenomenoloji, Sanrı, Şizofreni.

Introduction

Delusions are untrue thoughts that are not adaptable to current society and cannot be changed through rational discussion. The expression of "no adjustment for current society" in the definition reflects the cultural aspect of the delusion. Accordingly, the individual's different cultural experiences can result in different delusion types and content (Sadock & Sadock, 2005).

Phenomenology refers to a rich tradition of inquiry into the nature of symptoms of mental disorders in psychiatry (Spitzer, 2013). Considering that different cultural lives, conditions, experiences, identification, and acceptance may affect the phenomenology of delusion in schizophrenia as a universal disorder, the phenomenology of delusion has been examined in cultural studies since the 1960s (Lucas et al., 1962). Transcultural studies since the 1980s have been carried out on the cultural reflections of delusion (Phiri et al., 2023; Ndetei, 1985; Collin et al., 2023; Ghanem et al., 2023; Murphy, 2020).

The phenomenology of delusion is a permanent document reflecting the time of social and cultural changes and the social and cultural structuring of such information in the future (Spitzer, 2013). It is recognized that societal institutions influence individual experiences, and the content of delusions is influenced by cultural perspectives (Rahimi, 2015; Ceylan & Alkar, 2023). The last study on the phenomenology of delusions of schizophrenic patients in Turkey was conducted in 2010 (Geçici et al., 2010). Since then, many changes, especially in technological improvements, have brought ease of access to information, globalization, and the transition to more individualistic lifestyles. Our study aims to make a more current contribution to these permanent documents.

Methods

Permission to start the study was first obtained from the chief physician of Erenköy Mental and Nervous Diseases Training and Research Hospital, after which study approval was received from the Ethics Committee of Istanbul Aydin University dated 26/01/2023 and numbered 23/01. The sampling method is convenience sampling. Convenience sampling has the drawback of potential bias, so we may not assume that convenience

sampling is representative of the population (Etikan et al., 2016). The study type is relational screening.

Participants

The study consists of 228 schizophrenic patients born and residing in Istanbul's Anatolian region for at least 20 years. Participants were reached via Erenköy Mental and Nervous Diseases Training and Research Hospital, the second-largest psychiatry hospital in Istanbul, with an inpatient bed capacity of 266. Five mental health centers affiliated with this hospital operate on the Anatolian side of Istanbul, including the Kadıköy Community Mental Health Center with 1,279 registered patients.

The study group's controls were carried out between February and November 2023 at the Kadıköy Community Mental Health Center, where they received inpatient treatment between June 2019 and June 2023. The patients were diagnosed using the DSM-5 Structured Interview Form for Axis I Disorders Clinical Version (SCID-I) (Elbir et al., 2019).

Patients and their relatives were informed about the study while hospitalized, and signed consent was obtained. The patients' follow-up files were examined; information recorded in their clinical files – such as the patient's age, gender, education, marital status, occupation, duration of illness, number of hospitalizations, and age of onset of the disease – was simultaneously transferred to information forms prepared for this study. For patients with moreo than one hospitalization, the last record of hospitalization was considered.

The content of delusions was classified using the delusion classification system developed by Huber and Gross (1977). According to this classification system, when more than one delusion type was determined in a patient, the delusion's contents were separated and counted in line with this classification system. All references to delusions were coded by the classification scheme developed for the Present State Examination (Wing et al., 1974). In patients with persecutory delusions, subtypes of persecutory delusions and persecutors were classified again according to the system of Huber and Gross (Huber & Gross, 1977).

Statistical Methods

SPSS 25 program was used for all statistical analyses. To compare demographic and clinical characteristics and gender, the Independent Sample t-test was applied for quantitative variables and the Chi-Square test for categorical variables. The Chi-Square test was also the preferred method to examine the relationships among the type of schizophrenic delusions, the detailed content of persecutory delusions, the frequency and type of persecutors, and gender.

Table 1. The sociodemographic characteristics of the sample

Results

Sociodemographic characteristics

The mean age on admission was 45.71 ± 9.99 (range 18-64 years): 46.64 ± 9.18 for females and 44.93 ± 10.60 for males. The demographic data of the patients is presented in Table 1.

	Female (N=104) 46.64±9.18		Mal	Male (N=124) 44.93±10.60		ıl	
			(N=1			(N=228)	
Mean age(years)			44.93±1			45.71±9.99	
		<i>t=1</i>	30 p=0.197	7			
	N	%	N	%	N	- %	
Marital status							
Married	27	25.9	11	8.9	28	12.4	
Single	59	56.8	107	86.2	166	72.8	
Widowed	10	9.6	2	1.6	12	52.6	
Divorced	8	7.7	4	3.2	12	52.6	
		$X^2 = 2$					
Education							
Illiterate	4	3.8	2	1.6	6	2.6	
Primary school	25	24	23	18.6	48	21.4	
Secondary school	56	53.8	65	52.4	121	53	
University	19	18.2	34	27.4	53	23	
		$X^2 = 3$.94 p=0.26	8			
Occupation							
Unemployed	9	8.7	69	55.7	78	34.3	
Housewife/Unmarried women	53	51	0	0	53	23.3	
Government official	3	2.9	6	4.8	9	3.9	
Employee	9	8.7	9	7.3	18	7.9	
Trader	2	1.9	5	4	7	3	
Student	4	3.8	1	0.8	5	2.2	
Retired	24	23	34	27.4	58	25.4	
		$X^2 = 1$	04.01 p=0.	000*			

According to the table, there is a statistically significant relationship between the marital status of males and females (X^2 =25.73, p=0.000), between the occupation of males and females (X^2 =104.01, p=0.000), and between the perceived family income of males and females (X^2 =8.90, p=0.012).

Clinical features

The mean age at onset was 24.81 ± 6.92 years: 26.63 ± 7.24 years for females and 23.93 ± 6.78 for males. The patients had a history of at least one hospitalization, and 20 of them (8.8%) had a history of more than ten hospitalizations. The average number of hospitalizations was 3.87 ± 1.34 , and the disease duration was 20.61 ± 10.00 years. (Table 2).

26.63±7.24	23.93±6.78	24.81 ±6.92		
	t=1.50 p=0.141			
19.54±9.80	21.50±10.13	20.61±10.00		
	t=1.50 p=0.141			
4.16 ± 1.45	3.76 ± 1.28	3.87±1.34		
	<i>t=2.21 p=0.028</i>			
69 (66.3%)	78 (60.9%)	147(64.5%)		
16 (15.4%)	23 (18.5%)	39 (17.1%)		
8 (7.7%)	11 (8.9%)	19(8.3%)		
11 (10.6%)	11 (10.6%) 12 (9.7%)			
	X ² =0.58 p=0.902			
	19.54±9.80 4.16 ± 1.45 69 (66.3%) 16 (15.4%) 8 (7.7%)	$t=1.50$ $p=0.141$ 19.54±9.80 21.50 ± 10.13 $t=1.50$ $p=0.141$ 4.16 ± 1.45 3.76 ± 1.28 $t=2.21$ $p=0.028$ 69 (66.3%) 78 (60.9%) 16 (15.4%) 23 (18.5%) 8 (7.7%) 11 (8.9%) 11 (10.6%) 12 (9.7%)		

 Table 2. Clinical features of the sample

(71.9%) patients had persecutory delusions, 99 (43.4%) had reference delusions, 36 (15.8%) had grandiosity delusions, and 26 (11.4%) had religious delusions. There was a statistically significant relationship between erotomania delusions and gender in female patients

gender and grandiosity (X2=9.43, p=0.002); and gender and delusions of guilt/sin (X2=6.11, p=0.013). There is also a statistically significant difference between gender and religious delusions (X2=8.23, p=0. 004) and gender and homosexual delusions (X2=5.17, p=0.023) (Table 3).

Table 3. Frequency and type of schizophrenic delusions

	Female (N=104)		Male(1	Male(N=124)		Total (N=228)		
	Ν	%	Ν	%	Ν	%	X ²	р
Persecutory	62	59.6	102	82.3	164	71.9	14.36	0.000
Reference	41	39.4	58	46.8	99	43.1	1.24	0.265
Grandiosity	8	7.6	28	22.6	36	15.8	9.43	0.002
Religious	5	4.8	21	16.9	26	11.4	8.23	0.004
Hypochondria	6	5.7	7	5.6	13	5.7	0.00	0.968
Guilty/Sin	9	7.7	2	1.6	11	4.8	6.11	0.013
Nobility	5	4.8	4	3.2	9	3.9	0.37	0.541
Denial	4	3.8	5	4.0	9	3.9	0.01	0.943
Erotomania	8	11.5	0	0.0	8	3.5	9.89	0.002
Jealousy	5	4.8	2	1.6	7	3.1	1.94	0.164
Poisoning	3	2.9	3	2.4	6	2.6	0.05	0.827
Homosexual	0	0	6	5.8	6	2.6	5.17	0.023
Other	1	0.9	2	1.6	3	2.6	0.19	0.667

Kind of persecution

The delusion of persecution was further divided into subclasses using the classification system of Huber and Gross, as shown in Table 4. Accordingly, physical/mental injury was the most frequently encountered content (103

Table 4. Detailed content of persecutory delusions

patients, 62.8%), then being followed (39.6%) and being watched (11.5%). The content of being watched and wire-tapped was found to have a significantly higher prevalence in males than females (X^2 =4.43, p=0.035). (Table 4)

	Fer	nale (N=62)	Male	(N=102)	Total (N=164)		
	Ν	%	Ν	%	Ν	%	X ²	р
Physical/mental injury	42	67.7	61	59.8	103	62.8	1.04	0.308
Being followed	24	38.7	41	40.1	65	39.6	0.04	0.850
Being Watched	3	4.8	16	15.7	19	11.5	4.43	0.035
Being killed	6	9.6	4	3.9	10	6.1	2.23	0.135
Being wire-tapped	1	1.6	8	7.8	9	5.5	2.89	0.089
Being photographed	5	8.1	3	2.9	8	4.9	2.18	0.140
Being bewitched	2	3.2	6	5.8	8	4.9	0.59	0.444
Being caught by the devil	2	3.2	4	3.9	6	3.6	0.53	0.818
Being caught by jinn	2	3.2	3	2.9	5	3.0	0.01	0.918
Being attacked	2	3.2	1	0.9	3	1.8	1.08	0.298
Being slandered	1	1.6	2	1.8	3	1.8	0.03	0.872
Other	3	4.8	2	1.8	5	3.0	1.08	0.299

Type of persecutor

Regarding the type of persecutor in persecutory delusions, the non-specific type was the most prevalent one in both sexes. Although of 21 married female patients with persecutory delusions, eight (12.8%) mentioned their partner's relatives as persecutors, whereas of 11 married males, only one (0.9%) mentioned their partner's relatives as persecutors. Males exhibited a smaller proportion of partners' family members as persecutors than females $(X^2=10.57, p=0.001)$. The police, army, and state were the persecutors more common in men $(X^2=4.83, p=0.028)$. (Table 5).

Table 5. Frequency and type of persecutors

	Female (N=62)		Male(N=102)		Total (N=164)			
	Ν	%	Ν	%	Ν	%	X ²	р
Non-specific	16	25.8	23	22.5	49	29.9	0.23	0.635
Family members	4	6.4	14	13.7	18	10.9	2.09	0.148
Neighbors	10	16.1	7	6.8	17	10.4	3.56	0.059
Police, army	2	3.2	14	13.7	16	9.8	4.83	0.028*
State	2	3.2	11	10.8	13	7.9	3.02	0.082
Humans	6	9.6	5	4.9	11	6.7	1.41	0.236
Foreign countries	3	4.8	7	6.9	10	6.1	0.28	0.599
Organ mafia	3	4.8	6	5.9	9	5.5	0.08	0.776
Family of partner	8	12.8	1	0.9	9	5.5	10.57	0.001*
Cameras	4	6.4	5	4.9	9	5.5	0.18	0.673
Spys	3	4.8	5	4.9	8	4.9	0.00	0.985

Friends	3	4.8	4	3.9	7	4.3	0.08	0.778
Jinns	2	3.2	3	2.9	5	3.0	0.01	0.918
TV announcer	2	3.2	2	1.9	4	2.4	0.26	0.611
Males	2	3.2	2	1.9	4	2.4	0.26	0.611
Political authorities	0	0.0	4	3.8	4	2.4	2.49	0.114
Germans	1	1.6	2	1.9	3	1.8	0.03	0.872
Sects	1	1.6	2	1.9	3	1.8	0.03	0.872
Internet	1	1.6	2	1.9	3	1.8	0.03	0.872
Chinese	1	1.6	2	1.9	3	1.8	0.03	0.872
Devil	1	1.6	2	1.9	3	1.8	0.03	0.872
Aliens	1	1.6	1	0.9	2	1.2	0.13	0.720
Russians	0	0	2	1.9	2	1.2	1.23	0.267
Insects	1	1.6	0	0.0	1	0.6	1.66	0.198

Discussion

In our study, all schizophrenia patients had at least one type of delusion, with persecutory delusions (71.9 %,) being the most common and reference delusions the second most common (43.1 %). Persecutory delusions were present in 102 male patients (82.3%) and 62 female patients (59.6%,), totaling 164 of 228 patients. The most frequently observed delusion type has been chiefly persecutory delusions (Mazumder et al., 2015; Abdelkefi et al., 2023). Delusions of persecution were reported at a rate of 79.4% in Austria and 81.5% in Pakistan (Stompte et al., 1999), 64.4% in China and 78.1% in Korea (Kim et al., 1993), and 74.7% in Lithuania (Rudalevičienė et al., 2010). The rate of 71.9% that we found in our study is compatible with previous studies conducted in other regions in Turkey, such as 68.9% in Elazığ (Tezcan et al., 2003) and 78.8% in Istanbul (Geçici et al., 2010). Our study also supports studies that explain the high prevalence of persecutory delusions, especially since the most common type of schizophrenia is paranoid schizophrenia (Tezcan et al., 2003; Geçici et al., 2010; Mathew et al., 2020). We believe persecutory delusions rank first because the most basic instinct of humans is to survive, and it creates a tendency to search for possible persecutors nearby.

Unlike previous studies, we found that the fear of being watched is higher in men than women (Tezcan et al., 2003; Geçici et al., 2010). It is possibly due to exposure to news and social media, where video images, especially of business people and bureaucrats, often reveal problems or secrets in people's lives. Also, we did not encounter some persecutors reported in previous studies, such as supernatural forces, teachers, spies, dogs, or people with AIDS (Kim et al., 1993; Geçici et al., 2010; Weiner, 2023). Instead, we encountered new persecutors like foreign countries and organ mafia. Although we encountered a

small number of foreign persecutors like Germans, Russians, and Chinese, we did not encounter any Americans as reported in previous studies (Kim et al., 1993; Geçici et al., 2010; Weiner, 2023). The internet and cameras, which did not appear in previous studies, appeared as accessories in delusions, similar to current studies, although they were few (Shafti, 2021; Feyaerts & Sass, 2023; Uludağ, 2023). We believe that security cameras installed by police forces and many workplaces in recent years and reporting around the trackable features of phones have caused surveillance fears.

When looking at the persecutory types, the primary delusion area of interest was non-specific people. We found that the prevalence order ofnon-specific people, family members, and neighbors was the same in previous studies (Tezcan et al., 2003; Geçici et al., 2010; Shafti, 2021). Family members and neighbors were the pursuers who followed. Neighbors as persecutors were more prominent among women. Similar to previous studies (Kim et al., 1993; Feyaerts & Sass, 2023), family members were more prominent among men, while family members or relatives of partners were more prevalent among women in this study. We explain this prevalence with the patriarchal culture of Turkey: while men are exposed to social pressures to please their families, women are exposed to social pressures to please their husbands' families more frequently and intensely. Kim et al. (1993) reported that in China, where there is a change towards the nuclear family, family-oriented delusions are less common than in Korea, where the extended family structure is dominant. In Austrian patients, the combination of ambiguous persecutors and the feeling of "they all seem to know" is more prominent (Suhail & Cochrane, 2002). Similarly, in our study, the primary persecutors are ambiguous people. The prevalence of male patients describing persecutory types that reflect masculine authority, such as the police and the army, was evaluated as a reflection of a male-dominated culture. That all four patients who saw politicians as persecutors were male suggests the belief that only men can have political persecution in Eastern societies, as the impact of the two genders is not seen as equal in social life. The results of Kim et al. (1993) and Tezcan et al. (2003) support this dynamic.

Similar to Collin et al.'s findings (2023) about reference delusions rate as 39.7%, the reference delusions that we found to be the second most common type with a rate of 46.8% seem to be lower than the 63.8% rate found by Geçici et al. (2010). Ghanem et al. (2023) stated that persecutory and grandiose delusions occurred at higher rates in African, Pakistani, and Latino patients, while delusions of reference were most prevalent in White-British groups (50%). This indicates that the importance of self-thinking may increase with the level of education. Turkey, as a politicized society, may prompt more political reflections from the youngest to the oldest.

We found delusions of grandeur to be the third most common in our study, with a rate of 15.8%. Similar to us, Hall et al. (2023), in their meta-analysis study, state that grandiose delusions are the third most common delusion category. The rates from previous studies conducted in Turkey are 13.3% and 14.5% (Tezcan et al., 2003; Geçici et al., 2010), which are compatible with rates of 15-25% reported in male patients with low socioeconomic status (Suhail & Cochrane, 2002; Hall et al., 2023). The most striking note from our study regarding delusions of grandeur is that 14 of 28 male patients (50%) had grandiose delusions related to our political leaders. While some of the patients have delusions that they are political leaders, some of them have delusions that they are important relatives of political leaders. Ghanem et al. (2023) stated that grandiose delusions occurred at higher rates in African, Pakistani, and Latino patients who belong to developing countries. In this regard, grandiose delusions are a reflection of compensating for being at a lower socioeconomic status. Grandiose delusions could represent the universal need to believe that one's existence has a unique significance (Hall et al., 2023). In addition, it is thought that women's erotomanic delusions could be evaluated in terms of feminine grandiosity. In patriarchal communities, women are generally evaluated by their partner and his power in all aspects of life, like income and status. In parallel, we observed that the frequency of erotomanic delusions in women was higher; actually, men in our study showed no erotomanic delusions.

Religious delusions were the fourth most common in our study and were significantly more common in men, similar to Geçici et al.'s study (2010). In male patients with religious delusions, mystical and grandiose delusions were also intertwined with religious delusions. Three patients (one woman and two men) stated they had a direct connection with God. We encountered dozens of patients who interpreted their delusional experiences religiously and, therefore, delayed their treatment. Almost all of the patients with such religious delusions seek treatment with traditional treatment methods called hacı-hodja, thinking that their relatives "are under the control of the devil or jinn." Similarly, Uludağ (2024) indicates that religious delusions can cause a person to believe they are superhuman or that God has sent them to fulfill aims that might compromise their quality of life. In Ghanem et al.'s study (2023), Asian, Latino, Polish, and Māori patients (Australian native people) endorsed religious-spiritual explanatory models, while African patients opted for a bewitchment model. It is underlined that religious principles in various cultures, such as Islam or Christianity (Ghanem et al., 2023).

The notable finding in this study is the scarcity of jinn persecutors. Jinns are beings mentioned repeatedly in the Quran, the holy book of the Islamic faith (Öztek et al., 2003). In societies where Islamic belief exists, jinn persecutors are encountered relatively frequently, especially among socially isolated women (Tezcan et al., 2003). The low incidence of jinn persecutors (3.8%) contrasts with 22.6% in a prior Turkish study (Tezcan et al., 2003), possibly due to the regional differences of where the previous study was conducted and increased scientific thinking since that period.

Delusions of guilt (4.8%) were rare, consistent with prior findings (Picardi et al., 2018). In contrast to 15.5% of Roman Catholic patients, only 3.8% of Muslim patients reported on the sin theme in a study that included 1,006 schizophrenic subjects from Austria, Poland, Lithuania, Pakistan, Nigeria, and Ghana (Stompe et al., 2006). According to Islamic belief, if a person sins, he harms only himself, not Allah (Öztek et al., 2003). In contrast, Christianity sees sin as a personal crime against God (McKay & Ross, 2021). This may be the reason for the significant difference in delusions of guilt in schizophrenia patients.

Delusions of nobility, all of which included both religious and grandiose delusions at the same time, were seen in a total of nine patients. Our findings support Weiner's (2023) results, which state there was a decrease in the occurrence of nobility-related delusions. This observation was attributable to democratization, social popularization, and the decline in the power of large families.

Hypochondriac delusions (5.7%) declined, compared to previous studies (5%, 8.9%, and 6.2%), possibly due to medical advancements (Suhail & Cochrane, 2002; Weiner, 2023; Feyaerts & Sass, 2023).

Studies suggest erotomanic delusions are more common in women than men (McKay & Ross, 2021; Mirza et al., 2019). In our study, all eight patients with such delusions were single women. However, Arasappa et al. (2023) report encountering them primarily in married homemakers. We attribute the higher prevalence in single women to isolation and feelings of worthlessness, though homemakers may experience similar isolation. Enoch and Trethowan (1991) link erotomania to sexual frustration and delusional wish-fulfillment, often affecting those with little sexual experience. Kelly (2018) brings another point of view to discuss by indicating that the line separating love from delusions of love is not as clear-cut as one may think. Some stable partnerships may also exhibit milder delusional exaggeration of deep love, which may even be necessary for the relationships to endure.

Seeman (2016) indicates that jealousy delusions are seen among 2.5% of schizophrenic patients. Similarly, we identified delusions of jealousy in 7 patients (3.1%) in our study. Although delusions of jealousy appeared more common in women than men, they did not carry statistical significance. Building on previous studies where jealousy delusions were more common in male patients in England and female patients in India (Lucas et al., 1962; Arasappa et al., 2023), we interpreted these results as a trend that delusions of jealousy may be more common in men in countries where women live more freely, while they may be more common in women in countries where their freedom is restricted. Tateyama et al. (1993) revealed that jealousy delusions are more frequent in Germany than in Japan (6% vs. 1.9%). They argue that the two countries' distinct self-directed identities-the individually oriented self in Germany and the group-oriented self in Japanmay be the source of the variations in the substance of these delusions.

Delusions of poisoning ranked 11th in our study (2.6%), a much lower rate than the 17.2% reported in a previous national study (Gecici et al., 2010). Our finding also falls below rates observed in Japanese (8%), Austrian (7.1%), and Pakistani (13.9%) patients (Kim et al., 1993; Stompte et al., 1999). Tateyama et al. (1993) found poisoning delusions more frequent in Germans (18%) than in Japanese (8%). Rudalevičienė et al. (2010) reported notably higher rates in Lithuania (57.8%), attributing them to persecution fears stemming from the country's Soviet history. Both Rudalevičienė et al. (2010) and Rössler et al. (2019) noted a higher prevalence in women, but our study found no gender differences. Homosexual delusions were found only in male patients. This finding is consistent with the study of Mitropoulos et al. (2015), who stated that homosexual delusions are more common in male patients, while delusions about sexual immorality are more common in female patients. The results show that when talking about men, homosexual relationships are seen as more hazardous than infidelity in a social order manner, whereas homosexuality of women is seen as not serving a significant danger to society.

As a result of this study, it was observed that the phenomenology of delusion was more clearly affected by developments in zeitgeist, culture, and time, and at the same time, exhibited a more stable ratio in manner of time. This study and similar studies are essential for the correct evaluation and adequate understanding of schizophrenia patients, especially those who belong to a culture different from the mainstream. In their study, Suhail and Cochrane (2002) compared the delusions of Pakistani schizophrenic patients living in England and Pakistan with White British schizophrenic patients. They particularly emphasized the importance of the environment (geography) in forming delusions. The limitations of our study are the limited sample size and the convenience sampling method. We think that future studies to be carried out in our country will vary depending on the regional focus. We believe that conducting similar studies in different regions, even on the opposite coast of Istanbul, and with larger study groups, to determine the delusion profile of schizophrenia patients in our country may contribute to better diagnosis and treatment of the disease.

Declarations

Ethics Committee Approval

Before starting the study, following the permission obtained from the chief physician of Erenköy Mental and Nervous Diseases Training and Research Hospital, study approval was received from the Ethics Committee of Istanbul Aydin University dated 26/01/2023 and numbered 23/01.

Informed Consent

Patients and their relatives were informed about the study at the time of hospitalization, and signed consent was obtained.

Peer-review

Externally peer-reviewed.

Conflict of Interest

The authors declared no conflict of interest.

Financial Disclosure

No financial support was received.

Availability of Data and Materials

Not applicable.

Authors' Contributions

Concept design: AET, HF, and HU; data collection: HU, HF, AET; Data analysis: HF, AET, HU; article draft and critical revision: AET, HF, HU; final approval and responsibility: AET, HF, HU; technical and material support: HU; supervision: AET. All authors have read and approved the final article.

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