

Araştırma / Original article**The search for traditional religious treatment amongst schizophrenic patients: the current situation****Esra YAZICI,¹ Ahmet Bülent YAZICI,¹ Mustafa İNCE,² Atila EROL,¹ Ayşe ERDOĞAN,¹ Hüsnü Selim İKİZ,¹ İsmet KIRPINAR³****ABSTRACT**

Objective: Societies have been searching for different traditional treatments for schizophrenia at different rates. Understanding the preferences and priorities of patients as they explore treatment is important for the proper management of this process. This study evaluated the frequency of patients' pursuit of traditional treatment for schizophrenia and the factors associated with this in western Turkey. **Methods:** The study involved 346 patients who were diagnosed with schizophrenia at inpatient psychiatry clinics and community mental health centres in Kocaeli and Sakarya. The patients were re-evaluated using the SCID-I-CV to confirm the diagnosis and were then asked to fill in a survey form to facilitate the evaluation of their search for traditional schizophrenia treatment. **Results:** Amongst the participants, 89.3% had consulted a traditional healer for schizophrenia treatment at least once in their lifetime. All of the traditional healers who were consulted were religious healers. Of all the participants, 39% consulted traditional healers for first aid treatment. Although the patients had not had any attack that required hospitalization in the past year, 27% continued to consult such healers and 26% continued to wear amulets. The results showed that the educational levels of the patients' relatives were a predictor of the tendency to consult traditional healers. **Conclusions:** Most schizophrenic patients have consulted traditional religious healers at least once in their lifetime (89.3%). This is a very high rate and should be considered by physicians as they evaluate patients' search for help. (*Anatolian Journal of Psychiatry* 2016; 17(3):174-180)

Keywords: schizophrenia, help seeking, traditional, religious, Turkey

Şizofreni hastalarında geleneksel dinsel tedavi arayışı: Güncel durum**ÖZ**

Amaç: Şizofreninin tedavisinde geleneksel tedavi arayışı toplumlarda farklı farklı oranlarda görülmektedir. Hastaların tedavi tercih ve önceliklerinin iyi anlaşılması tedavi sürecinin doğru yönetimi için önem taşımaktadır. Bu çalışmada Türkiye'nin batısında şizofreni hastalarının geleneksel tedaviye başvurma oranlarını ve ilişkili etmenleri sunmayı amaçlamaktadır. **Yöntem:** Çalışmaya Kocaeli ve Sakarya'da yataklı psikiyatri servisleri ve toplum ruh sağlığı merkezlerinde tedavisi yürütülen 346 şizofreni hastası katılmıştır. Hastalar tanının doğrulanması amacı ile SCID-I-CV ile yeniden değerlendirilmiş ve daha sonra şizofrenide geleneksel tedavi arayışını değerlendiren anket formu doldurulmuştur. **Bulgular:** Katılımcılardan %89.3'ü yaşamları boyunca en az bir kez geleneksel şifacıya başvurmuştu. Başvurulan tüm geleneksel şifacılar dinsel şifacı idi. Katılımcıların %39'u hastalığı başladığında ilk olarak geleneksel şifacıya başvurmuştu. Son bir yılda yatış gerektiren nöbeti olmayan hastaların %27'si bu tür şifacılara başvurmayı sürdürmüştü, %26'sı hala muska taşımaktaydı. Geleneksel tedavi anlayışında hasta yakınının eğitim

¹ Sakarya University Faculty of Medicine Department of Psychiatry, Sakarya

² Derince Education and Research Hospital, Kocaeli

³ Bezmialem Vakıf University Faculty of Medicine Department of Psychiatry, Istanbul

Yazışma Adresi / Correspondence address:

Assoc. Prof. Dr. Esra YAZICI, Sakarya University Faculty of Medicine Department of Psychiatry, Sakarya, Turkey

E-mail: esrayazici@yahoo.com

Geliş tarihi: 22.11.2014, Kabul tarihi: 01.07.2015, doi: 10.5455/apd.195417

Anatolian Journal of Psychiatry 2016; 17(3):174-180

düzeyinin bir negatif öngördürücü olduğu belirlendi. **Sonuç:** Şizofreni hastalarının çoğu yaşamları boyunca en az bir kez geleneksel şifacıya başvurmuşlardır. Bu yüksek oran hastaların tedavi arayışını değerlendirmede hekimlerce göz önünde bulundurulmalıdır. (*Anadolu Psikiyatri Derg* 2016; 17(3):174-180)

Anahtar sözcükler: Şizofreni, yardım arayışı, geleneksel, dinsel, Türkiye

INTRODUCTION

Schizophrenia is a disorder with biopsychosocial dimensions accompanied by hallucinations, delusions and bizarre behaviours. The symptoms of schizophrenia have been described in narratives and books since the beginning of humanity's history and have been associated with sources unknown to society; spiritual explanations such as the influence of spirits, devils, gins or fairies have been mentioned on occasion.¹ Today, schizophrenia is recognised as a brain disease which requires medical treatment.

Education about schizophrenia in schools has expanded, and society's level of awareness and consciousness regarding the disease is expected to increase given the role of the mass media -primarily television- in information dissemination. Despite improving awareness, communication and education, however, clinical experiences indicate that schizophrenic patients continue to seek non-medical treatment for their condition. In a 2007 study carried out by Ünal et al. in Malatya, 51.6% of the schizophrenic patients consulted religious healers for treatment purposes.²

The search for a resolution to a problem is associated with the logic used to explain the problem. Studies on the British, the Japanese and the Chinese have shown that cultural and social characteristics are important explanations for the incidence of schizophrenia.^{3,4} Many factors also shape a patient's search for treatment; these include cultural effects, disease diagnosis, causes, educational levels and accessibility of treatment options.^{1,5}

Across communities, causal explanations can be influenced by different cultural effects and different ways of searching for supplementary or alternative treatments (acupuncture, consultation with a medium, herbal treatment, consultation with religious healers). Research in the context of Turkey has indicated that supplementary traditional treatment mostly involves consultations with religious healers.^{2,6} Many other studies carried out in different countries have also reported on the pursuit of this type of treatment. In Cambodia, schizophrenia patients' search for first aid treatment involved consultation with

traditional healers (56.7%) and religious healers (20.2%).⁷ In Southeast Nigeria, 76% of patients primarily consulted traditional religious healers,⁸ while in China, 58.4% sought treatment by folk healers involving traditional medicine.⁹

The search for alternative treatments exerts a critical effect on early application, compliance with medication and the disease course. Patients' exploration of such types of health care can delay the early detection of schizophrenia and initiation of treatment. For schizophrenics, the period during which no appropriate treatment is administered negatively affects the prognosis of the disease.¹⁰ The application of treatment prescribed by traditional healers during the interval between treatment by traditional means and treatment by medical methods results in non-compliance with medication and gives rise to the risk of frequent attack recurrence. Despite the problems posed by this situation, the search for supplementary schizophrenia treatment is only occasionally discussed in the health agendas of Turkey and other countries. Another deterrent to the resolution of this problem is the limited number of studies devoted to the issue. Understanding patients' perspectives concerning treatment and the channels through which it can be accessed is important for fostering collaboration in treatment provision and developing suitable social policies.

Given this backdrop, the present study investigated the current conditions of patients diagnosed with schizophrenia in Kocaeli and Sakarya (two big cities in western Turkey) in relation to their search for religious traditional treatment. In the study, we hypothesised that patients with schizophrenia in Kocaeli and Sakarya may exhibit traditional help-seeking behaviour. We investigated whether they showed such behavior, its current rate and its correlation in patients with schizophrenia.

METHODS

The study included 364 patients who were diagnosed as schizophrenic in the psychiatric clinics and community mental health centres of the Sakarya University Faculty of Medicine Education and Research Hospital and Kocaeli Derince

Education and Research Hospital. The patients' relatives also participated in the research.

The patients, who were aged 18-69 years, were diagnosed with schizophrenia based on the DSM-IV. The subjects did not suffer from additional psychiatric or neurological diseases (epilepsy, mental retardation, multiple sclerosis, etc.).

The diagnoses of the patients were re-evaluated and confirmed by an experienced psychiatrist using the Structured Clinical Interview for DSM-IV, Axis-I psychiatric disorders (SCID-I). The Survey for the Evaluation of Attitudes towards Consulting Traditional Medical Treatments for Schizophrenic Patients was used in the discussion with the patients and their relatives.

SCID-I: The SCID-I is a semi-structured diagnostic interview chart, whose Turkish translation and validity-reliability were developed and determined by Çorapçıoğlu et al. The chart contains DSM-IV diagnoses. The SCID-I begins with a sociodemographic data guide and covers seven diagnostic groups, as follows: mood disorders, psychotic disorders, alcohol and substance-related disorders, anxiety disorders, somatoform disorders, eating disorders and adjustment disorders. The instrument is known to be a highly reliable tool for determining psychiatric disorders. It is used as a standard interview for affirming diagnoses in clinical studies.^{11,12}

Sociodemographic Data Form: This form was prepared by the study team and included population-related characteristics such as the age, sex, education and marital status of a patient and his/her relatives, as well as the patient's disease history.

Survey for the Evaluation of Attitudes towards Consulting Traditional Medical Treatments for Schizophrenic Patients: This instrument was prepared by the study team. It is a survey form which determines whether a patient previously consulted traditional healers, whom amongst them the patient consulted primarily,

whether the patient paid for the services and whether the patient had any consultations with a traditional healer in the past year. The questions on the form were directed to the patient and his/her relative to ensure that accurate information was obtained.

RESULTS

General information

Amongst the 346 schizophrenic patients, 236 (68.2%) were male and 110 (31.8%) were female. The patients' ages ranged from 18 to 69 years, with the average age being 39.52 ± 10.96 . General data on the patients are provided in Table 1.

Table 1. General information regarding the patients and their relatives

	Average (years)	Range (years)
Age (patient)	39.52 ± 10.96	18-69
Age (patient's relative)	39.52 ± 10.96	22-80
Education (patient)	7.86 ± 3.37	0-17
Education (patient's relative)	6.18 ± 3.90	0-15
Number of hospitalisations	3.14 ± 3.62	0-25
Duration of disease (years)	16.49 ± 10.58	0-40

Of the patients, 308 (89%) lived in the city centre; 305 (88.7%) had lived in the city centre at disease onset. A total of 254 (73.4%) of the patients sought follow-up medical treatment as outpatients in a polyclinic and 92 (26.2%) sought follow-up care as inpatients. The number of patients who had experienced attacks in the recent year was 131 (37.9%).

Patients' search for treatment

When the patients were asked whether they consulted religious healers or similar traditional

Table 2. Patients' rate of consultation with traditional healers

	n	%
Consultation with traditional healers during the course of the disease	309	89.3
Consultation at disease onset	256	74.0
Consultation in the residual period	235	67.9
Consultation in the past year	96	27.7
First consultation with traditional healers	135	39.0
Frequency of visits (traditional healers)	1-45	(6.53 ± 7.00)

healers, 309 (89.3%) reported that they did. The rates of consultation (i.e. frequency of visits) with religious healers at different periods are shown in Table 2.

When the patients were asked who they first consulted -a physician or a traditional healer- at disease onset, 39.0% of the general sample and 43.7% (n=135) of those who visited traditional healers reported that they sought help by traditional means.

When the patients who consulted traditional healers (n=309) were asked whether they benefited from the traditional route, 26.5% (n=282) said 'yes', 33.7% (n=104) said 'no', 36.2% (n=112) stated that they felt better and 3.6% (n=11) expressed reluctance about whether they benefited from the treatment. When asked whether they would go back to the traditional healers, 46.9% (n=145) said 'no', 28.2% (n=87) expressed reluctance and 24.9% (n=77) said 'yes'. Amongst the patients, 26% still wore amulets.

The patients had visited traditional healers 1 to 45 times, with the average frequency being 6.54 ± 7.0 visits. A total of 80.6% (n=249) stated that they paid for the services provided by the traditional healers.

Comparison of the groups

The comparison of the group which sought traditional treatment (n=309) and the group which did not (n=37) showed no significant difference in terms of the age of the patients, the age of the patients' relative or the educational level of the patients ($p > 0.05$). However, the educational levels of the relatives of the patients who did not consult traditional healers were significantly higher than those of the relatives of the patients who consulted such healers (9.30 ± 4.07 and 5.80 ± 3.71 , respectively; $p < 0.05$).

The total number of hospitalisations of the patients who visited traditional healers was higher than that of the patients who did not consult traditional healers ($p = 0.05$). Nevertheless, upon evaluation of the number of hospitalisations in the past year, it was found that the group which had consulted traditional healers in the previous year was less frequently hospitalised ($p < 0.05$).

The patients who were hospitalised in the past year (n=131) consulted traditional healers at a rate of 80.9% during their lifetime. The rate of consultation with traditional healers in the recent year was 16.8%; amongst these patients, 76.3% declared that they no longer had plans for repeat consultations with the traditional healers.

Patients who had not experienced attacks in the past year (n=203) had consulted traditional healers at a rate of 94.4% during their lifetime, and 34.4% in the previous year. Both of these rates were higher than those registered by the patients who had been hospitalised in the past year (80.9% and 16.8%, respectively; $p < 0.05$).

Seven patients suffered from first-attack psychosis, and one of them (14.2%) sought supplementary treatment. This figure was not statistically different from the rate of consultation in the group including patients who had experienced first-attack psychosis (28.0%) in the past year ($p > 0.05$).

Regression analysis

To determine the factors which enable the prediction of the tendency of patients to apply the treatments prescribed by traditional healers, we created a regression model including variables such as the patient's age, education and number of hospitalisations, as well as his/her relative's age and education. In this model, the only variable which predicted the application of traditional healer-prescribed treatment was the educational level of the patient's relative ($\beta = 0.283$, $t = 4.22$, $p = 0.001$, $R^2 = 0.084$).

DISCUSSION

Patients have sought traditional medicine schizophrenia treatment for years. In our clinical observations in Turkey, patients refer to audio-visual hallucinations that involve religious figures such as gins, the trilaterals, angels and devils, and tend to consult religious healers as they search for treatment. This study evaluated patients' and relatives' pursuit of religious treatment in a region within western Turkey.

We interviewed 346 patients, amongst whom 89.3% had consulted traditional religious healers at least once in their lifetime for schizophrenia treatment. This rate is considerably higher than that determined by Unal et al. (51.6%) in a similar study in Turkey.² In Kırpınar's study on patients who were hospitalised in a psychiatric clinic, almost all of the patients sought non-medical healers.⁶ The search for non-medical treatment has been a widespread health problem not only in Turkey, but also across the world; 77.3%, 50.3% and 76% of the patients in Cambodia,⁷ Southwest Ethiopia,¹³ and Nigeria⁸ respectively, were found to seek treatment by religious or traditional means.

The results of the current work show that 39% of

the general sample and 43.7% of the patients who sought traditional treatment first consulted traditional healers before visiting medical physicians. In older Turkish studies (published approximately 20-25 years ago), the levels of traditional-religious help-seeking behaviour for first aid were reported as 74% and 14% in Erzurum,^{14,15} 46% in Antalya,¹⁶ and 34% in İzmir.¹⁷ The current rates presented in this study are still high -even higher than in some previous studies- despite the advancement in the opportunities of modern life, such as communication and information systems technology like the internet, TV and so on. The high rates in this study were not investigated in terms of a cause-effect relationship, so it is hard to explain the rates in our findings. It seems that information technology, changes in lifestyle and other changes in the population in Turkey over the past quarter century have not resulted in a positive change in the help-seeking behavior of schizophrenia patients.

Previous research has indicated that early detection of symptoms and early initiation of treatment positively affected the prognosis of schizophrenia; meanwhile, the opposite resulted in a negative effect on the prognosis.¹⁰ The rates found in the present study (e.g. 39% and 43.7%) were evaluated based on their social dimensions. The results indicated that treatment application was negatively affected to a substantial degree because of the interval which passed before the patients sought medical care after experiencing symptoms of schizophrenia. In a study conducted in two different regions of India, only 28% and 12% of the patients consulted a psychiatry specialist as the first treatment option.¹⁸ Further, in a study carried out in Nigeria, 69% of the schizophrenic patients first consulted religious and traditional healers for treatment.¹⁹ Research in the Iranian context revealed that 23.1% of first-attack psychosis cases initially consulted traditional healers. Similarly, 65.8% of patients in Malaysia, 52.6% of patients in the Philippines, and 4.7% of patients in Japan first sought religious/magical remedies.²⁰

The present research showed that 89.3% of the patients had consulted traditional healers at least once in their lifetime. To evaluate recent consultations with traditional healers, the patients were also asked whether they had consulted such healers in the past year. The rate of consultation with traditional healers in the previous year was 27.7%, which covered both chronic and first-attack psychosis patients.

Based on the study data and the fact that the patients consulted traditional healers at disease onset (74%), the situation was evaluated in relation to first-attack patients. In this group, 14.2% of the patients had visited traditional healers. This rate provides an optimistic view of treatment-seeking practices when evaluated in relation to the rate of consultation during the patients' lifetime.

One of the interesting results of this study is that 62.7% of the patients affirmed benefiting from or having their morale strengthened by traditional healers, while 24.9% expressed receptiveness to repeat consultations with traditional healers. As determined from the observations/interviews, 26% of the patients still wore amulets. The percentage of patients who were hesitant about repeat consultations with traditional healers was 28.2% - a figure which constitutes more than half of the sample including those who were willing to re-consult traditional healers. These results suggest that the patients' relatives do not easily change their minds about consulting traditional healers.

The payments made to traditional healers were difficult to determine because although some of the patients paid in cash, most for the services they received by providing the healers with gifts such as food, clothes, animals and mementos. An even more interesting finding was that 80.6% of our patients paid for the services provided by the traditional healers. Some of them described their expenses as amounting to the 'price of a house'. In studies on similar behaviours in different countries, the patients also paid for the services which they received from traditional healers.

The comparison of the sociodemographic data on the groups which did and did not consult traditional healers showed that the educational levels of the patients' relatives represented the only characteristic that differed across the sample, and that the families which did not consult traditional healers had higher educational levels. Previous studies showed that help seeking through direct consultation with a mental health service is related with higher levels of education, living in or near to a city centre, higher income levels, younger age and male gender.^{15,17,21} A study in India involving 264 patients' relatives indicates that apart from the educational level of a patient's relative, having supernatural beliefs was also associated with the education, age and sex of the patient in terms of explanations for disease causes.²²

In our study, the only factor which determined the tendency to consult traditional healers was the educational level of the family. This finding was derived from the regression analysis conducted along with the development of the model which featured sociodemographic variables. The results of this study and previous research are in agreement concerning the educational level of the patients/relatives in relation to presenting the proper help-seeking behavior. These data reveal the importance of considering patients' relatives in disease diagnosis and management; they also highlight the necessity of fostering collaboration in providing psycho-educational and rehabilitation programmes for schizophrenic patients and their relatives, as well as during specific treatment phases, such as those focussed on compliance with medication.

Other interesting results of this study are the rates of consultation with traditional healers in the past year amongst patients who were not hospitalised compared with those who were hospitalised in that time. The rate was higher for the former group. This difference may be attributed to different factors. Apparently, patients consult traditional healers when they struggle with chronic symptoms rather than attacks. Schizophrenic patients' failure to follow through on routine polyclinic control measures and non-compliance with medication are amongst the most frequently encountered problems.²³ Our data indirectly suggest that chronic patients seek help when they do not need hospitalisation, and in instances wherein they live far from a hospital, they are referred to traditional healers. The data also reveal the importance of community-based mental health care providers, which strive to reach patients during intervals between treatments by traditional means and by medical methods.

The risks engendered by consultations with traditional healers include the risk of delay in seeking medical treatment or abandoning ongoing treatment because of issues such as extra and forced payments. In our study, the hospitalization rates of the patients who consulted traditional healers were higher than those who did not. Previous studies emphasised the importance of understanding schizophrenia and the factors related to compliance with medication and good therapeutic collaboration.²⁴ Our patients' search for supplementary treatments raises questions regarding their understanding of the causes of the disease and the therapeutic collaboration established between traditional

healers and medical physicians. This situation suggests non-compliance with medication. Poor compliance with medication requirements for schizophrenia is amongst the factors which negatively affect disease progression.²⁵ In our sample, the number of hospitalisations of the patients who searched for supplementary treatments was higher. Although compliance with medication is an insufficient explanation for the high frequency of hospitalisation, it can be evaluated as one possible account.

The contributions of this study revolve primarily around its large sample, which has revealed scientific data in relation to the matter at hand and the most up-to-date information. We worked closely with traditional healers as we evaluated the patients' rates of consultation (89.3%). Ignoring this reality can mean underestimating the circumstances which affect 89.3% of the patients. Such underestimation is a deterrent to establishing an open and honest therapeutic relationship with patients and fostering cooperation between patients and physicians, as well as in directing the treatment process.

The results of this study suggest that the role of traditional healers (who were 'all religious healers' in our study) in treatment programmes should be evaluated. An 89.3% consultation rate means that such healers are addressing the problems of 89.3% of our patients. These individuals may be swindlers and practitioners with fraudulent credentials.²⁶ At the same time, religion can produce constructive effects on overcoming psychiatric diseases.^{1,27,28} Informing religious healers about psychiatric diseases and establishing productive cooperation with these practitioners can improve patients' lives. Educating healers who are consulted by psychiatric patients because of their religious titles and training will enable them to provide appropriate treatments. In the interviews with our patients, they stated that many religious healers referred them to physicians. An increase in such referrals would accelerate patients' access to medical care and their confidence in and compliance with medication.

CONCLUSION

This study demonstrated extremely high rates of consultation with traditional healers amongst the evaluated schizophrenic patients. Understanding this reality is important to improving appropriate treatment, rehabilitation and psycho-educational programmes.

Authors' contributions: E.Y.: Planning, conducting and writing of the study; A.B.Y.: Planning, writing, literature review and reference check; M.I.: Collecting data; Atila E.: Statistical analysis; Ayse E.: Collecting data; H.S.I.: Collecting data; I. K.: Coordination of the study team and final review

REFERENCES

1. Mohr S, Huguelet P. The relationship between schizophrenia and religion and its implications for care. *Swiss Med Wkly* 2004; 134:369-376.
2. Unal S, Kaya B, Yalvac HD. Patients' explanation models for their illness and help-seeking behavior]. *Turk Psikiyatri Derg* 2007; 18:38-47.
3. Furnham A, Chan E. Lay theories of schizophrenia. A cross-cultural comparison of British and Hong Kong Chinese attitudes, attributions and beliefs. *Soc Psychiatry Psychiatr Epidemiol* 2004; 39:543-552.
4. Furnham A, Murao M. A cross-cultural comparison of British and Japanese lay theories of schizophrenia. *Int J Soc Psychiatry* 2000; 46:4-20.
5. Angermeyer MC, Matschinger H, Schomerus G. Attitudes towards psychiatric treatment and people with mental illness: changes over two decades. *Br J Psychiatry* 2013; 203:146-151.
6. Kirpınar İ. Erzurum Numune Hastanesi Psikiyatri Kliniği'nde yatan hastalarda ruhsal bozukluklar nedeni ile tıp dışı kişilere başvurma davranışı üzerine bir araştırma. *Düşünen Adam* 1992; 1:13-17.
7. Coton X, Poly S, Hoyois P, Sophal C, Dubois V. The healthcare-seeking behaviour of schizophrenic patients in Cambodia. *Int J Soc Psychiatry* 2008; 54:328-337.
8. Odinka PC, Oche M, Ndokuba AC, Muomah RC, Osika MU, Bakare MO, et al. The socio-demographic characteristics and patterns of help-seeking among patients with schizophrenia in south-east Nigeria. *J Health Care Poor Underserved* 2014; 25:180-191.
9. Tang YL, Seigny R, Mao PX, Jiang F, Cai Z. Help-seeking behaviors of Chinese patients with schizophrenia admitted to a psychiatric hospital. *Adm Policy Ment Health* 2007; 34:101-107.
10. Farooq S, Large M, Nielssen O, Waheed W. The relationship between the duration of untreated psychosis and outcome in low-and-middle income countries: a systematic review and meta analysis. *Schizophr Res* 2009; 109:15-23.
11. First MB, Spitzer RL, Gibbon M, Williams JBW. Structured Clinical Interview for DSM-IV Clinical Version (SCID-I/CV). Washington, D.C: American Psychiatric Press, 1996.
12. Çorapçıoğlu A, Aydemir Ö, Yıldız M, Esen A, Köroğlu E. DSM-IV Eksen-I Bozuklukları İçin Yapılandırılmış Klinik Görüşme. Ankara: HYB, 1999.
13. Girma E, Tesfaye M. Patterns of treatment seeking behavior for mental illnesses in Southwest Ethiopia: a hospital based study. *BMC Psychiatry* 2011; 11:138.
14. Kirpınar İ. Ruhsal sorunları olan kişilerin tedavi amacıyla tıp dışı kişi ve kurumlara başvurmaları ile ilgili bir araştırma. 26 Ulusal Psikiyatri Kongresi bildirisi, İzmir, Turkey, 1990.
15. Kirpınar I, Caykoylu A, Kuloglu M. Pathways to Psychiatric Units in Erzurum. *Turkish Journal of Psychiatry* 1994; 53:175-181.
16. Birsöz S. Türkiye'de depresyonların sosyokültürel özellikleri. *Depresyon Dergisi* 1997; 2:3-8.
17. Alper Y, Coşkunol H, Çelikkol A, Saygılı R. Psikiyatri ABD polikliniğinde görülen hastalarda tıp dışı başvuruların araştırılması. 26. Ulusal Psikiyatri Kongresi, İzmir, Turkey, 1990.
18. Naik SK, Pattanayak S, Gupta CS, Pattanayak RD. Help-seeking behaviors among caregivers of schizophrenia and other psychotic patients: a hospital-based study in two geographically and culturally distinct Indian cities. *Indian J Psychol Med* 2012; 34:338-345.
19. Adeosun II, Adegbohun AA, Adewumi TA, Jeje OO. The Pathways to the First Contact with Mental Health Services among Patients with Schizophrenia in Lagos, Nigeria. *Schizophr Res Treatment* 2013; 2013:769161.
20. Rhi BY, Ha KS, Kim YS, Sasaki Y, Young D, Woon, et al. The health care seeking behavior of schizophrenic patients in 6 East Asian areas. *Int J Soc Psychiatry* 1995; 41:190-209.
21. Dunder S, Aldanmaz F, Oguz A, Oguzkaya N. Akıl hastasının iyileşmesi ve akıl hastalığının tedavisi konusundaki düşüncelerin belirlenmesi ve çeşitli değişkenler açısından incelenmesi. 30. Ulusal Psikiyatri Kongresi, Kayseri-Nevşehir, 1994.
22. Srinivasan TN, Thara R. Beliefs about causation of schizophrenia: do Indian families believe in supernatural causes? *Soc Psychiatry Psychiatr Epidemiol* 2001; 36:134-140.
23. Goff DC, Hill M, Freudenreich O. Treatment adherence in schizophrenia and schizoaffective disorder. *J Clin Psychiatry* 2011; 72:e13.
24. Lacro JP, Dunn LB, Dolder CR, Leckband SG, Jeste DV. Prevalence of and risk factors for medication nonadherence in patients with schizophrenia: a comprehensive review of recent literature. *J Clin Psychiatry* 2002; 63:892-909.
25. Zipursky RB. Why are the outcomes in patients with schizophrenia so poor? *J Clin Psychiatry* 2014; 75(Suppl.2):20-24.
26. Grover S, Nebhinani N, Chakrabarti S, Shah R, Avasthi A. Relationship between first treatment contact and supernatural beliefs in caregivers of patients with schizophrenia. *East Asian Arch Psychiatry* 2014; 24:58-67.
27. Mohr S, Perroud N, Gillieron C, Brandt PY, Rieben I, Borrás L, et al. Spirituality and religiousness as predictive factors of outcome in schizophrenia and schizo-affective disorders. *Psychiatry Res* 2011; 186:177-182.
28. Aukst-Margetic B, Jakovljevic M. Religiosity and schizophrenia. *Psychiatr Danub* 2008; 20:437-438.