

# Needs of Individuals with Chronic Mental Disorders: A Systematic Review

## Kronik Ruhsal Bozukluğu Olan Bireylerin Gereksinimleri: Sistematik Derleme

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### Abstract

This systematic review was undertaken to assess the needs of individuals with chronic mental illness and the investigations in the last decade that have identified the factors that affected them. The systematic review of the literature was conducted using the keywords "Pubmed", "Google Scholar", "Science Direct", "Medline", "Ebsco", "Cochrane". The studies were evaluated within the inclusion and exclusion criteria. As a result of the literature reviewed, between 2008 and 2018, 20 studies with patients with chronic mental disorders were included in the review. Nineteen of the investigated studies are descriptive and one is randomized controlled experimental work. The sample size of the studies studied is between 35 and 588. Psychosocial needs such as social and close relationships, physical health status, disease status and treatment information, daytime activities and psychological distress were mostly unmet. It was determined that the needs of the patients were affected by socio-demographic characteristics such as age, gender, ethnicity, disease diagnosis, disease duration and number of hospitalizations. In addition, it was found that the needs of patients were affected by socio-economic status and functionality and symptom severity. In this systematic review, it is seen that patients need many areas and socio-demographic and economic factors and disease characteristics affect the requirements. The planning and implementation of interventions to meet the needs of individuals with chronic mental disorders is important for the survival of individuals in community.

**Keywords:** Chronic mental disorder, need, assessment

### Öz

Bu sistematik derleme, kronik ruhsal bozukluğu olan bireylerin gereksinimleri ve etkileyen faktörleri saptayan son on yıl içindeki araştırmaları değerlendirmek amacıyla yapılmıştır. Sistematik derlemenin literatür taraması "Pubmed", "Google Scholar", "Science Direct", "Medline", "Ebsco" "Cochrane" veri tabanlarında İngilizce ve Türkçe anahtar kelimeler kullanılarak yapılmıştır. İncelenen literatür sonucunda 2008 ve 2018 yılları arasında, kronik ruhsal bozukluğu olan bireyler ile yapılmış olan 20 çalışma derlemeye dahil edilmiştir. İncelenen araştırmaların 19'u tanımlayıcı, biri ise randomize kontrollü deneysel çalışmadır. İncelemeye alınan çalışmaların örneklem büyüklüğü 35 ve 588 aralığındadır. Hastaların sosyal ve yakın ilişkiler, fiziksel sağlık durumu, hastalık durumu ve tedavi hakkında bilgi, gündüz aktiviteleri, psikolojik sıkıntı gibi psikososyal gereksinimlerinin çoğunlukla karşılanmadığı bulunmuştur. Hasta bireylerin gereksinimlerinin yaş, cinsiyet, etnik köken, hastalık tanısı, hastalık süresi ve yatış sayısı gibi sosyo-demografik özelliklerden etkilendiği saptanmıştır. Ayrıca hastaların gereksinimlerinin sosyo-ekonomik durum ile işlevsellik ve semptom şiddeti gibi değişkelerden etkilendiği bulunmuştur. Bu sistematik derleme, hastaların bir çok alanda gereksinimi olduğu ve sosyo-demografik ve ekonomik faktörlerin, hastalık özelliklerinin gereksinimleri etkilediği görülmektedir. Kronik ruhsal bozukluğu olan bireylerin gereksinimlerini karşılamaya yönelik müdahalelerin planlanması ve uygulanması, bireylerin toplumda yaşamını sürdürebilmesi için önemlidir.

**Anahtar sözcükler:** Kronik ruhsal bozukluk, gereksinim, değerlendirme

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**NEEDS** are defined as the conditions necessary for the ideal growth of individuals physically, mentally and socially. Abraham Maslow defines needs in a hierarchical order. In this hierarchical order, Maslow defines five basic needs as the physiological need, and the needs for security, love and belonging, respectability and self-realization (Maslow translated by Gündüz 2001). In terms of chronic diseases, needs are defined as the individuals' having adequate life quality and social independence at an acceptable level and in a sustainable fashion. For individuals with chronic mental disorders, needs are identified as having the necessity to access adequate care, support and services in accordance with the level of physical and psycho-social losses. The needs of individuals with chronic mental disorders vary based on the nature of the illness they have, the problems caused by their disability, and individual, familial and social circumstances they have to face with. Within this context, individuals with chronic mental disorders may have different needs that stem from various conditions they come across, apart from their existing disorders. In addition, the needs of these individuals differ in different periods of their diseases (Grinshpoon and Ponizovsky 2008, Wiersma et al. 2009). This shows that the needs of these individuals are more specific, different and unique than other individuals (Hansson et al. 2003, Joska and Flisher 2005).

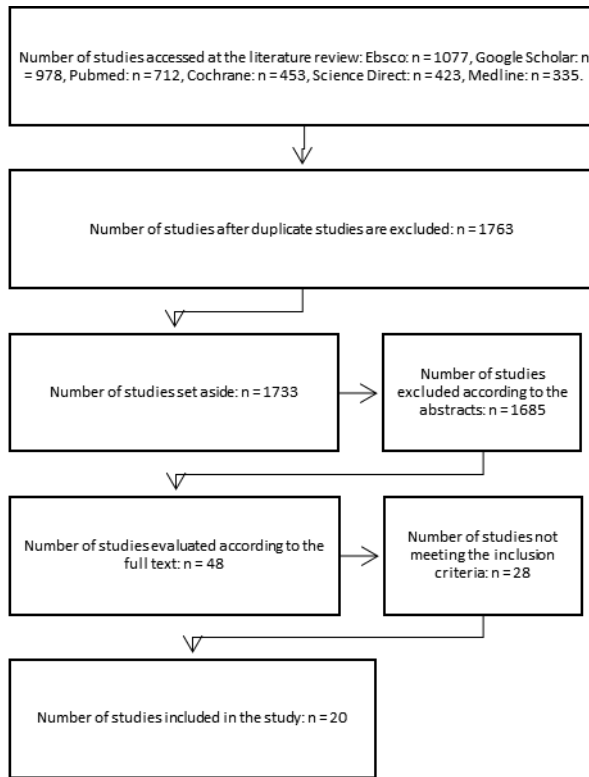
The needs of individuals with chronic mental disorders become special cases due to their losses of cognitive, social and functional skills. Such losses bring about a special set of needs for these patients to sustain their daily lives (Olivas et al. 2013). These individuals need holistic care of mental health professionals and family members to ensure their adaptation to society and to improve their quality of life (Lasalvia et al. 2012). It is important to know about the studies on the needs of individuals with chronic mental disorders, to determine the needs of such individuals and to plan appropriate interventions. A systematic review of the studies on the needs of individuals with chronic mental disorders was conducted by Joska and Flisher in 2005 (Joska and Flisher 2005). However, the studies involved in this review belong to 2003 and earlier. In our country, there are studies identifying the educational needs of individuals with chronic mental disorders and their families (Gümüş 2006, Bademli et al. 2016). However, no study is found that is aimed at identifying the needs of individuals with chronic mental disorders in all areas. Therefore, it is necessary to examine, analyze and synthesize the findings of the current studies on the needs of individuals with chronic mental disorders.

This systematic review aims to examine the studies conducted in the last ten years on the needs of individuals with chronic mental disorders in order to guide the services to be offered in this area, and to elicit what types of studies are needed in the field. The research question of this systematic review is: "What are the studies conducted on the needs of individuals with chronic mental disorders, and what are their results?"

## Method

The purpose of this systematic review is to evaluate the research conducted in the last decade identifying the needs of and factors affecting individuals with chronic mental disorders. This study was carried out in accordance with the guide for the Center for Reviews and Dissemination (CRD) 2009 (Center for Reviews and Dissemination 2009). The review was performed by defining the seven stages in line with the guide. At the first two stages of the guideline, that are the identification of the study and literature review, it was decided to merely create proof in line with the purpose of the review, wit-

hout getting into its discussion. At the 6th phase of the guideline, the PRISMA Statement checklist (PRISMA Statement: Checklist of items to include when reporting a systematic review or meta-analysis) was included and reported ([www.prisma-statement.org](http://www.prisma-statement.org)). The literature review was conducted on "Pubmed," "Google Scholar," "Science Direct," "Medline," "Ebsco," and "Cochrane" databases. Searches were performed using the key words "chronic mental disorder" (severe mental disorder/illness), "needs in chronic mental disorders" (severe mental disorder/illness need), "assessment of needs", "(needs assessment)"; and also, schizophrenia/bipolar disorders words were used as extenders. The searches were limited with the last decade, i.e. between the years 2008 and 2018.



**Figure 1. Selection of studies examined according to the PRISMA statement checklist guide.**

Only observational or intervention studies in Turkish or English language conducted on individuals with chronic mental disorders between the ages 18 and 65 and the full texts of which were accessible were included in the review. On the other hand, studies conducted on individuals without chronic mental disorders, on children and adolescents with chronic mental disorders, on elderly people with chronic mental disorders, on the fields of special needs of individuals with chronic mental disorders, and also reviews, methodological studies, theses, case reports, panel presentations, studies that are not in English or Turkish languages, studies published before 2008, studies that have been accepted for publication, have received DOI numbers, but not published yet, and studies that could not be accessible full text online were excluded from this review.

The studies that were collected through the application of the key words in the literature review were evaluated based on the inclusion-exclusion criteria specified above, and the studies which were not in accordance with the inclusion criteria were excluded. A total of 1763 studies that were obtained from the databases were evaluated according to their abstracts and 1685 irrelevant studies were excluded from the review. 48 of the remaining 73 studies, the full texts of which were examined, were included in this review. These studies were, then, re-evaluated based on the inclusion and exclusion criteria. Eventually, a total of 20 studies were included in the study (Figure 1).

## Results

### Methods and sampling characteristics

The studies were conducted between the years 2008 and 2018. All of the studies included in the review are studies conducted abroad (Table 1). No studies that fits in the inclusion criteria examining the needs of individuals with chronic mental disorders in our country could be found. 19 of the studies reviewed are descriptive and one is randomized controlled experimental study. Of the studies reviewed, Howard and Hunt's study (2008) is the one with the smallest sample size ( $n = 35$ ), while the sample size of the study by Arnold et al. (2017) is the largest ( $n = 588$ ). The sample size of the randomized controlled experiment conducted by Wiersma et al. (2009) is 294 (Table 2).

The sample of one study consists of patients with non-affective psychosis, another study consists of schizophrenia and bipolar disorder, another of schizophrenia and schizo-affective disorder, another of mothers with chronic mental disorder, three studies of schizophrenia, two studies of males with chronic mental disorder, and 11 studies of patients with chronic mental disorder. Of the studies reviewed, one study has been conducted in South American countries, two in Australia and New Zealand, four in Asian countries and 12 in Europe.

### Measurement tools

Various measurement tools were used to determine the needs of individuals with chronic mental disorders in this study (Table 1). These measurement tools are: Camberwell Assessment of Need (CAN), Camberwell Assessment of Need Short Appraisal Schedule (CANSAS), Self-rated version of Camberwell Assessment of Need Short Appraisal Schedule (CANSAS-P), and Inventory of Need and Demand for Community Psychiatric Rehabilitation (INDCPR). These needs assessment tools have been developed to describe the needs of individuals with chronic mental illness in the physical, psychological and social areas (Phelan et al. 1995, Yeh et al. 2011). In addition to these scales, tools that are applied to measure the symptom severity and functionality of individuals with chronic mental disorders were used as well. These tools were used to examine the relationship between the needs level and the symptom severity and the level of functionality.

### Camberwell Assessment of Need Scales (CAN / CANSAS / CANSAS-P)

These tools consist of 22 items to describe the needs of individuals with chronic mental illness in the health and social areas. Each item identifies a specific domain: housing, nutrition, home care, self-care, daytime activities, physical health, psychotic symptoms, information about the condition and treatment, psychological distress, self-directed

safety, safety of others, alcohol, substance, social life, close relationships, sexual life, child care, education, telephone, transportation, money and social welfare. The goal of each item in the tools is to determine whether the patient has any needs and whether he or she receives adequate assistance to meet these needs. The tools measure whether there has been a problem in any of these areas in the last months and whether this problem is solved (Phelan et al. 1995).

**Table 1. Studies included and scales used**

Study	Method	Tools
Arnold et al., 2017	Descriptive study	CANSASP, CANSASS
Arvidson, 2008	Descriptive study	CAN, GAF
Bitter et al., 2016	Descriptive study	CANSAS, MANSA
Broadbent et al., 2008	Descriptive study	CAN, GAF
Bruce et al., 2012	Descriptive study	CANSAS, AUDIT
Caqueo-Urizar et al., 2017	Descriptive study	2COM Checklist, PANSS
Cialkowska-Kuzminska et al., 2014	Descriptive study	CANSAS, BPRS
Ernest et al., 2013	Descriptive study	CANSAS, PANSS
Grinshpoon and Ponizovsky, 2008	Descriptive study	CAN, PANSS
Guillén Andrés and Munoz Lopez, 2011	Descriptive study	CAN, GAF
Guzman-Parra et al., 2017	Descriptive study	CAN, BPRS
Gwaspari et al., 2011	Descriptive study	CANSAS
Hancock et al., 2017	Descriptive study	CANSAS, CANSASP
Howard and Hunt, 2008	Descriptive study	CAN, GAF
Lasalvia et al., 2012	Descriptive study	CAN, VSSS
Neogi et al., 2016	Descriptive study	CAN, GAF, WHOQOLF
Olivas et al., 2013	Descriptive study	CAN, GAF
Werner, 2012	Descriptive study	CANSASP, GAF
Wiersma et al., 2009	Experimental study (Randomized Controlled)	CANSAS, PANSS, MANSA
Yeh et al., 2011	Descriptive study	INDCPR

\* HAS: Help Association Scale, GAF: General Functionality Scale, MANSA: Manchester Short Scale, AUDIT: Alcohol Use Disorder Recognition Test, 2-COM Checklist: Two Way Communication Checklist, PANSS: Positive and Negative Symptom Scale, BPRS: Basic Psychiatric Rating Scale, VSSS: Verona Service Satisfaction Scale, WHOQOLF: World Health Organization Quality of Life Short Form, CAN / CANSAS / CANSAS-P: Camberwell Needs Assessment Tools, INDCPR: Inventory of Needs and Demand for Community Psychiatric Rehabilitation.

## Inventory of Needs and Demands for Community Psychiatric Rehabilitation (INDCPR)

INDCPR includes 8 areas that question the needs and demands of patients for the community psychiatric rehabilitation program; it assess the needs for: structured day-to-day service, service delivery, home care services, housing, club house, home care, resting service and carer support. The tool was designed to determine the needs and demands of the patients and to organize the rehabilitation program accordingly (Yeh et al. 2011).

## Needs of the patients

The needs of individuals with chronic mental disorders and whether these needs were met are identified in the studies reviewed (Grinshpoon and Ponizovsky 2008, Lasalvia et al. 2012, Olivas; et al. 2013). It was found that the patients had certain needs such as social and close relationships, information about their physical health status, disease and

treatment, daytime activities, and psychological distress, and that these needs were not met (Grinshpoon and Ponizovsky 2008, Guillén Andrés and Munoz Lopez 2011, Lasalvia et al. 2012, Bruce et al. 2012, Cialkowska-Kuzminska et al. 2014, Bitter et al. 2016, In 2016, Neogi et al. 2016).

## Factors affecting patients' needs and defining characteristics

The socio-demographic variables that affect the needs of patients with chronic mental disorders are frequently examined in the studies reviewed. In the studies, factors affecting the needs of these patients were identified as: age, gender, ethnic and racial differences, diagnosis and duration of disease, socio-economic status, working status, and number of hospitalizations (Grinshpoon and Ponizovsky 2008, Guillén Andrés and Munoz Lopez 2011, Werner 2012, Olivas et al. 2013, Guzman-Parra et al. 2017, Hancock et al. 2017). In addition, it was found in a follow-up study that the needs do not remain the same, but change over the years (Arvidson 2008).

Also identified in the studies reviewed, were factors other than socio-demographic characteristics affecting the needs of individuals with chronic mental disorders. In the studies, the association between the patients' needs and their loss of functionality and faculties, perception of the disease, level of symptom severity, and presence of personality disorder were revealed (Grinshpoon and Ponizovsky 2008, Guillén Andrés and Munoz Lopez 2011, Werner 2012, Olivas et al. 2013, Caqueo-Urizar et al. 2017)

**Table 2. Characteristics of studies**

Study	Population/ Sample Size	Key Findings / Results
Arnold et al., 2017	United Kingdom, Germany, Hungary, Denmark Patients with chronic mental disorder (n = 588)	At the initial assessment, the unmet needs levels of patients with high assistance cooperation were found to be lower. The unmet needs levels in expert evaluations were found to be higher according to patient evaluations.
Arvidson, 2008	Sweden Patients with chronic mental disorder (n = 171)	Total and met needs has increased in the 10-year period. Unmet needs have decreased in the 10-year period. There has been a significant decrease in unmet needs in housing and daytime activities.
Bitter et al., 2016	The Netherlands Patients with chronic mental disorder (n = 263)	There is no significant difference between the groups that demonstrated individual, social and clinical improvement. Less unmet needs were found in those who showed personal improvement. Unmet needs were found in the field of social relations and physical health.
Broadbent et al., 2008	New Zealand Patients with chronic mental disorder (n = 203)	Moderate association was found in the total needs between patient and the expert evaluations. A very weak negative correlation was found between the perception of disease and unmet needs.
Bruce et al., 2012	United Kingdom Male patients with chronic mental disorder (n = 165)	It has been found that the unmet needs mostly exist in the fields of daytime activities, social benefits and psychological distress.
Caqueo-Urizar et al., 2017	Peru, Chile, Bolivia Schizophrenia (Aymara * (n = 66), Non-Aymara Patients (n = 67)	Aymara patients were found to have more total needs in the feeling, medicine and coping sub-scales than Non-Aymara patients. Aymara patients with high PANSS scores demonstrated a higher needs level.

		Most of their needs were found at the fields of medicine treatment, expression of feelings and coping.
Cialkowska-Kuzminska et al., 2014	Poland Patients with chronic mental disorder (n = 60)	Total needs were found to be higher in the caregiver evaluations than in patient evaluations. A positive correlation between met, unmet, and total needs in the patient and caregiver evaluations were found. The unmet needs were mostly found in the fields of social and physical health.
Ernest et al., 2013	India Schizophrenia (n = 101)	Unmet needs ratio and PANSS score increases as the age increases, and as the level of education and socio-economic status decreases. There is a moderate negative correlation between the total met needs and PANSS total scores.
Grinshpoon and Ponizovsky, 2008	Israel Schizophrenia and schizoaffective disorder (n = 52)	The ratios of unmet needs to the met needs are quite high. The unmet needs are mostly found in the areas of social welfare, transportation and security of others.
Guillén Andrés and Munoz Lopez, 2011	Spain Patients with chronic mental disorder (n = 95)	The met needs level was found to be higher than the unmet needs level. The unmet needs are mostly found in the areas of close relations, social relations, and condition and treatment.
Guzman-Parra et al., 2017	Spain Patients with chronic mental disorder (n = 99)	The total and unmet needs levels of the re-hospitalized patients are higher than those of the patients who have not hospitalized. An association between the meeting of psycho-social needs and reduction in recurrent hospitalizations was found. The unmet needs are mostly found in the areas of close relations, social relations, and daily activities.
Gwaspari et al., 2011	United Kingdom Male patients with chronic mental disorder (n = 79)	It was found that patients meeting the criteria for antisocial personality disorder have unmet needs in more areas. It was also found that alcoholism and substance abuse are associated with unmet needs.
Hancock et al., 2017	Australia Patients with chronic mental disorder (n = 550)	The unmet needs in specialist and patient evaluations are at a similar level. The unmet needs are mostly found in the areas of sexual life and security of others.
Howard and Hunt, 2008	United Kingdom Mothers with chronic mental disorders (n = 35)	The total needs in the patient evaluations are higher than those in expert evaluations. The unmet needs ratio in the patient evaluations is higher than those in the expert evaluations. The unmet needs are mostly found in the areas of psychological distress, social welfare, and sleeping areas.
Lasalvia et al., 2012	Italy Non-Affective psychosis (n = 116)	In both patient and expert evaluations, the level of met needs was found to be higher than the level of unmet needs. The unmet needs are mostly found in the areas of psychological distress and daily activities.
Neogi et al., 2016	India Bipolar (n = 75) and Schizophrenia (n = 150)	In the patient evaluations, the met and unmet needs are higher in schizophrenia patients than in those bipolar patients. The unmet needs are mostly found in the areas of social welfare, social relations, condition and treatment.
Olivas et al., 2013	Spain Patients with chronic mental disorder (n = 518)	The rate of met needs is higher than the rate of unmet needs. The unmet needs are mostly found in the areas of psychological distress, psychotic symptoms and home care.

Werner, 2012	Israel Schizophrenia (n = 206)	The met needs area is higher in the expert evaluations, while the unmet needs area is higher in the patient evaluations. The unmet needs are mostly found in the areas of close relations, sexual life and social relations.
Wiersma et al., 2009	Spain, the Netherlands, UK, Switzerland, Germany Patients with chronic mental disorder (n = 294)	The total and met needs levels remained constant, except for the reduction in unmet needs in patient evaluations after the DIALOG intervention.
Yeh et al., 2011	Taiwan Patients with chronic mental disorder (n = 182) and caregivers (n = 182)	Structured day services, club house and carer support were found to be the most needed and demanded programs. It was found that the most urgent needs of the patients is caregivers' support.

\* Aymara: An ethnic minority community living in South America.

## Discussion

A comprehensive study of the needs of patients with chronic mental disorders is a crucial source of data in order to plan their care and intervention activities. In the studies reviewed, it was found that some of the similar needs of individuals with chronic mental disorders have been met while some others remained unmet. In the studies, it was found that needs of the patients such as social and close relationships, physical health status, daytime activities, psychological distress, social welfare, transportation, information about the disease process and treatment, safety of others, sexual life, and sleeping areas were unmet (Grinshpoon and Ponizovsky 2008, Howard and Hunt 2008, Guillén Andrés and Munoz Lopez 2011, Bruce et al. 2012, Werner 2012, Cialkowska-Kuzminska et al. 2014, Bitter et al. 2016, Neogi et al. 2016, Caqueo-Urizar et al. 2017, Guzman-Parra et al. 2017, Hancock et al. 2017). In other studies reviewed, it was found that the patients had needs such as psychological distress, daytime activities, distress caused by psychotic symptoms and house care and that these needs were met (Lasalvia et al. 2012, Olivas et al. 2013). The studies mentioned above have been conducted in the community. Once the disease symptoms of individuals with chronic mental problems are taken under control, they start to receive services from community-based centers, and home-based care support is initiated for these individuals. Together with home based care, it is seen that social and self-care needs of these individuals come to the fore due to the fact that they experience social problems rather than disease symptoms (Werner 2012, Bitter et al. 2016).

In the studies examined, the relationship between the needs and age in patients with chronic mental disorders has been frequently manifested from different aspects. While in the studies conducted by Guillén Andrés and Munoz Lopez (2011) and Ernest et al. , it was found that the rate of unmet needs increases proportional to age, Werner (2012) and Olivas (2013) found that the needs decrease as the person gets older. It was found in the studies examined that the socio-economic status and low level of education affect the needs. Olivas (2013) and Ernest et al. (2013) found that the level of unmet needs increases as the education level and the socio-economic status decrease. Individuals' level of education affects their expression of their social needs. Individuals with a lower level of education can hardly express their needs and this paves the way for their needs to remain unidentified. This, then, is considered the main factor in failing to meet the needs (Olivas et al. 2013). It is thought that interpersonal interaction and expression of needs deteriorates as the level of education decreases, and this consequently causes failure in



meeting the needs. This result implies that, while working with individuals with low levels of education, it is important to assess the needs that they might not express. In community-oriented mental health services, it is possible to comprehensively evaluate and meet the requirements that cannot be expressed by service models such as case management wherein there is a holistic assessment, care and monitoring.

In the studies reviewed, the number of hospitalizations, and diagnosis and duration of illness were found to affect the needs. In the study conducted by Guzman-Parra et al. (2017), it was found that the level of total and unmet needs of the patients who were re-hospitalized were higher than those who were not hospitalized. It is known that the number of hospitalizations increases the needs of individuals. The increase in the number of seizures increases the loss of faculties which then leads to the emergence of new needs that will remain unmet until the intervention to be made (Guzman-Parra et al., 2017). In addition, another study found that the meeting of psycho-social needs drags down recurrent hospitalization (Guzman-Parra et al. 2017). Olivas (2013) on the other hand, found that patients who suffer mental diseases for several years had more unmet needs. In the study of Neogi et al. (2016), it was determined that schizophrenic patients had more met and unmet needs when compared with bipolar patients. It is stated that the schizophrenia patients have more needs, stems from their inability to initiate and maintain their relationship with social support systems (Neogi et al., 2016).

In the studies reviewed, gender, ethnic differences and working status were found to have impacts on the needs. Werner (2012) examined gender and working status in his study where he found that males have more unmet needs than females. In addition, those who work in protected or normal jobs were found to have less unmet needs in the area of daytime activities (Werner 2012). This situation shows the positive effect of the sustenance of individuals' productivity and employment on the needs (Werner 2012). In the study of Bruce et al. (2012), the needs levels of both African and Caribbean participants were found to be lower than those of white participants. In the study of Caqueo-Urizar et al. (2017), it was found that Aymara patients had higher amount of total needs in the drug treatment and coping sub-scales in comparison to non-Aymara patients. The different results of these two studies show that further research is needed regarding the effects of being ethnic minority on needs.

In the studies reviewed, it was also found that the perception of disease, the presence of personality disorder and alcohol and substance use are associated with needs. Broadbent et al. (2008) found that the perception of disease is negatively and rather weakly correlated with unmet needs. This finding suggests that individuals' acknowledging of the disease and having a positive perception about it makes a positive impact on expressing their needs (Broadbent et al., 2008). The study by Gwaspari et al. (2011) also found that patients who meet the criteria for antisocial personality disorder have unmet needs in more areas. It was also found that alcoholism and substance abuse are associated with unmet needs (Gwaspari et al., 2011). It is known that having personality pathology and alcohol use affect the disease process more negatively. The affection of the disease process eventually negatively affects the socialization and daytime activities of individuals, increases their needs at various areas and makes it more difficult to meet these needs.

In our review, only one intervention study, that has been conducted in the last 10 years, on needs has been found. In the intervention study by Wiersma et al. (2009), a new model is added to the community-based mental health services and the change in the unmet needs of individuals with chronic mental disorders are identified. No studies

conducted in our country on the identification of the needs of individuals with chronic mental disorder and on their intervention were found. The reason for finding only one intervention study in this field in the world over a ten-year period is that community-based service practices based on needs have begun abroad approximately 20 years earlier than our country. In an article reviewing the needs, by Joska and Flisher in 2003, it is stated that the interventions between 1995 and 2002 mostly involved the holistic services that might be effective in the field of community mental health and that there were six intervention studies (Joska and Flisher 2003). These results show that intervention studies to improve community-based mental health services abroad have increased in the 1990s, that interventions with community-based activities have been implemented and that these services have been well-established. In recent years, in these countries, intervention studies have been conducted towards specific needs areas, rather than all needs areas of individuals with chronic mental disorders (Fleury et al. 2016). In our country, community-based mental health services have officially started in 2011 and Community Mental Health Centers have begun to be opened (T.R Ministry of Health 2011). It is thought that the needs assessment is limited in our country because of the fact that individuals with chronic mental disorders are directed to the community mental health centers after short hospitalization periods and that these centers are in the transition period in terms of the diagnosis of their needs and initiation of the relevant interventions.

Most of the studies examine the relationship between functionality and needs levels. Arvidson (2008) found that patients with high functionality have less unmet needs. In the study conducted by Guillén Andrés and Munoz Lopez (2011), it was found that the increase in faculty loss and deterioration of the level of functionality enhances the needs level. Similarly, Werner (2012) found a negative correlation between functionality and total needs. In Olivas's (2013) study, unmet needs were found to increase in patients with impaired functioning. In the study by Grinshpoon and Ponizovsky (2008), a moderate and negative correlation was found between unmet needs and general healing and functionality. Broadbent et. al. (2008) found that the level of functionality has a moderate negative correlation with the level of met needs, a moderate negative relationship with the level of unmet needs, and a moderately positive relationship with the level of total needs. Although there are different findings in the studies, as the level of functionality increases in individuals with chronic mental disorder, they can better meet their needs, or seek for help to meet their needs. This situation shows that with the increase of general functionality, the individual can meet his / her needs or reach out the necessary sources of support to meet his / her needs.

Most of the studies included in the review examine the relationship between symptom severity, symptom level and needs level. In the study of Ernest et al. (2013), a moderate negative relationship was found between the needs level and symptom severity. In the study by Caqueo-Urizar et al. (2017), patients with higher symptom severity were found to have more needs. Grinshpoon and Ponizovsky (2008) found that the need levels of patients with affective, disorganized and negative symptoms are high. These studies show that by decreasing the level of symptoms, not only may the needs of individuals be diminished, but the individuals' level of meeting these needs will also improve.

The main limitation in this review is that it could reach only one intervention study although search and analyses were performed in accordance with the systematic review methodology. This situation arises from the fact that the intervention studies carried out worldwide with individuals with chronic mental disorders living in the society are shif-

ting towards specific needs areas (shelter, employment, nutrition, security, etc.) rather than general needs. Therefore, our review does not constitute a level of evidence including intervention studies. Another limitation of our study was that it could not be converted into a meta-analysis, since the effect sizes of the systematically reviewed literature could not be presented.

## Conclusion

This review reveals the importance of needs assessment in mental health services and the needs levels of individuals with chronic mental disorders. The needs of individuals with chronic mental disorders are special due to the loss of cognitive, social and functional skills they suffer. In this systematic review towards evaluating the needs of patients, it was found that psycho-social needs of the patients such as social and close relationships, physical health status, information about disease status and treatment, daytime activities and psychological distress mostly remain unmet. In our study, it was found that the needs of the patients are affected by socio-demographic characteristics such as age, gender, ethnicity, disease diagnosis, disease duration and number of hospitalizations. In addition, it was found in our study that the needs of the patients are affected by such variables as socio-economic status, functionality and symptom severity.

In this study, the most common needs of individuals with chronic mental disorders living in the community were identified. It is thought that these results will guide the studies to be conducted and services to be established in this field. In our study, descriptive studies identifying the needs of patients constitute the majority. In our country, it is necessary to identify the needs of individuals who benefit from community mental health services and to plan the interventions towards these needs. The need-based interventions to be applied on the patients will ensure the meeting of their needs with the most ideal care in the rehabilitation of these individuals. In addition, it is also thought that the establishment of service models to meet the needs in our country will guide the structuring of community mental health services.

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