

RESEARCH

Psychiatric Examination of Health Board Reports of Disability and Investigation of Differences Related to Regulation Amendment

Engelli Sağlık Kurulu Raporlarının Psikiyatrik Açıdan İncelenmesi ve Yönetmelik Değişikliği İle Ortaya Çıkan Farklılıkların Araştırılması

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Abstract

The aim of the study is to investigate the sociodemographic characteristics, psychiatric diagnosis, disability rate and psychiatric dependency status of patients who applied for the health board report of disability and the differences emerged after the regulation change dated February 20, 2019. Data of 1315 individuals aged 18 and over who were evaluated between September 1, 2018 and August 31, 2019 were retrospectively analyzed, and the data of those patients evaluated before and after the regulation change were compared. 56.2% of the cases were male, 43.8% were female. The median age was 46. 32.8% of the patients were assigned a report due to mental illness. The rate of those diagnosed with a disability rate of 40 % and above was found to be 22.4 %. When the severe disability / full dependency assessments of patients with a disability rate of 50% and above were compared according to the old and new regulations. There was no significant difference between the groups. As a referee hospital, the initial assessment of 16.1% of the applicants as "not severely disabled" and 1% of the applicants as "severely disabled" was changed to "partially dependent". In psychiatric cases, the level of functionality should be evaluated multidimensionally in relation to the course of the disease and various factors specific to the patient. It is thought that the intermediate rate "partially improves with treatment" and the definition of "partially dependent" brought to certain diseases by the new regulation can be a solution for the patients who lie in between.

Keywords: Disabled, psychiatry, health board, fully dependent, partially dependent

Öz

Çalışmanın amacı, engelli sağlık kurulu raporu için başvuran ve psikiyatrik değerlendirmesi yapılan hastaların sosyodemografik özellikleri, psikiyatrik tanıları, engel oranları, psikiyatrik açıdan bağımlılık durumları ve 20 Şubat 2019 tarihli yönetmelik değişikliği sonrası ortaya çıkan farklılıkların araştırılmasıdır. 1 Eylül 2018-31 Ağustos 2019 tarihleri arasında değerlendirilen 18 yaş ve üzeri 1315 kişinin verileri geriye dönük olarak incelenmiş, yönetmelik değişikliği öncesi ve sonrası değerlendirilen bu hastaların verileri karşılaştırılmıştır. 56.2'si erkek, %43.8'i kadın olan olguların yaşlarının ortanca değeri 46 olup, %32.8'i psikiyatrik engel oranı almıştır. Olguların %22.4'ü, %40 ve üzerinde engel oranı almıştır. Engel oranı %50 ve üzerinde olanlarda eski ve yeni yönetmeliğe göre ağır engellilik/tam bağımlılık kararları yönünden gruplar arasında anlamlı fark olmadığı saptanmıştır. Hakem hastane değerlendirmesi kapsamında başvuruların %16.1'inde 'ağır özürsüz değil' ibaresi, %1'inde ise 'ağır özürsüz' ibaresi 'kısmi bağımlı' olarak değişmiştir. Psikiyatrik olgularda işlevsellik düzeyi, hastalığın seyri doğrultusunda ve hasta özelinde çeşitli faktörlerle ilişkili biçimde çok boyutlu olarak değerlendirilmelidir. Yeni yönetmelik ile bazı hastalıklara getirilen 'tedavi ile işlevselliği kısmen düzelen' ara oranının ve 'kısmi bağımlı' tanımının karar sürecinde arada kalan olgular için çözüm olabileceği düşünülmektedir.

Anahtar sözcükler: Engelli, psikiyatri, sağlık kurulu, tam bağımlı, kısmi bağımlı

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DISABILITY is not just a health problem, but a multidimensional concept with social and economic consequences that concern one's family, society and work life. The World Health Organization (WHO) stated that disability occurs as a result of the interaction of personal and environmental factors with individuals who have health problems, and suggested environmental and social interventions to diminish the difficulties encountered by these people (WHO 2001).

When the data on the rate of the people with disabilities in the world is observed, an average prevalence rate of 15.6% in the population aged 18 and above is reported while it varies by 11.8% in high-income countries and 18% in low-income countries (WHO 2011). According to the World Health Survey vulnerable groups such as women, poor income groups and the elderly have a higher prevalence of disability in all countries, with higher rates in developing countries (WHO 2011). As reported by the Turkey Disability Survey of the State Institute of Statistics (SIS) conducted in 2002, the prevalence of disabilities in our country is 12,29% and most of the age group of the disabled population comprises people aged 60 and above (2004). Pursuant to the National Database, people with mental disabilities make up 29.2% of the entire disabled population (Turkish Statistical Institute (TURKSTAT) 2011). Unlike the results of the World Health Survey, disability was found more common in males than females in our country (SIS 2004, TURKSTAT 2011).

WHO has developed the International Classification of Functioning, Disability and Health (ICF) system to provide international standardization in the assessment of disability and to classify functionality and disability in a multidimensional approach. The international practice of ICF was approved in May 2001 (WHO 2001). In our country, some public and social rights have been assigned to ensure the participation of people with disadvantages because of health problems in social life equally with other individuals. In order to benefit from these rights, the disability status must be determined. We also use ICF as the classification system for disability status assessment.

'The Regulation on the Disability Criterion, Classification and Health Board Reports for the People with Disabilities', which is used in disability assessment in our country, was amended in 2010, 2012 and 2013 after it was published in 2006 (Official Gazette 2006, Official Gazette 2010, Official Gazette 2012, Official Gazette 2013). The current used 'The Regulation on Disability Assessment for Adults' was published in the Official Gazette on February 20, 2019 (2019a). Many revisions were performed in this regulation to reduce stigma. The term 'handicapped' in the regulation dated March 30, 2013 was replaced with the term 'disabled', and the 'disabled individual' is defined as 'the individual affected by the attitudes and environmental conditions that restrict his full and effective participation in society on equal terms with other individuals because of various levels of loss in his physical, mental, psychological and sensory abilities' (Official Gazette 2013, Official Gazette 2019a). A separate regulation was prepared under the name of 'Special Needs Assessment Report (SNARC)' for children aged 0-18. It was ensured that the phrase 'disabled' was not used in the health board reports received up to the age of 18 and the expression of disability rates as a percentage (%) has been abolished in this new regulation. Instead, the special need levels were determined by introducing the phrases of mild, moderate, and severe. For the children who were previously considered as 'severely disabled', need levels such as 'very advanced special needs', 'significant special needs', and 'special condition needs' were determined. It has been stated that delayed

milestone diagnosis should be used instead of mental retardation or mental deficiency diagnoses (Official Gazette 2019b, Güller and Yaylacı 2021).

The term of ‘severely disabled’ in the 2013 regulation was removed from the health board report of disability and definitions of ‘partially dependent disabled individual’ and ‘fully dependent disabled individual’ were defined according to the level of ability to perform daily life activities determined by functional independence measures (Official Gazette 2013, Official Gazette 2019a). It has been stated that the expression “fully dependent disabled individual” in this regulation refers to ‘severely disabled’ in terms of implementing the relevant legislation. The dependency/independency assessment of the individual was required to be made by the Functional Independence Measures (FIM). This scale was developed to assess the level of independence of a person in basic daily physical and cognitive life activities (Hamilton et al. 1987) and has been shown to be valid and reliable in the Turkish population (Kucukdeveci et al. 2001).

The procedures and principles regarding the reception, validity and evaluation of the health board report, which reports the situation due to terrorism, accident and injury, were specified in detail. The 10% disability rate, which was formerly added to the total disability ratio of individuals aged above 60 with the Balthazar formula, has been determined to be added to individuals aged 65 and above in the new regulation.

Some changes also were made in disability rates according to diseases. In the field of mental health; disability rates for specific learning disorders, attention deficit and hyperactivity disorder, gender identity disorders, and sexual selection disorders have been removed. 65% disability rate has been set for those whose functionality has been partially improved with treatment in schizophrenia, schizoaffective disorder diagnoses, and disability rate for eating disorders has been determined. There have also been changes in the rates of disability in other diseases. Besides, the rates determined according to the sub-diagnosis groups for personality disorders in the old regulation were removed, and disability rates according to functionality were introduced under the general heading of personality disorders.

Health board reports are important documents that require detailed medical evaluation. It is a crucial part of the daily work practice of a psychiatrist. However, studies on health board reports in adult mental health in the Turkish literature are limited (Demirci et al. 2011, Yıldız et al. 2016, Aslan and Şimşek 2017, Gökçeimam et al. 2019, Ergül 2019). In the present study, we aimed to investigate the sociodemographic characteristics, psychiatric diagnosis, disability rate, psychiatric dependency status of patients who applied for the health board report of disability and compare the psychiatric dependency status such as severe disability/full dependency before and after the regulation amendment.

Method

Sample

This retrospective descriptive study was carried out at Ankara Training and Research Hospital, psychiatry health board outpatient clinic. Data were obtained retrospectively by reviewing the medical records of patients who applied for the health board report of disability between September 1, 2018 and August 31, 2019. Files were scanned by considering the health board transactions for 12 months, 6 months before and 6 months after implementing the new regulation published on February 20, 2019.

There were 17,533 applications to the Ankara Training and Research Hospital for health board procedures between 1 September 2018 and 31 August 2019. Among these applications, we scanned the data of 7848 people who were evaluated in the psychiatry health board outpatient clinic. Eligibility reports where the disability level is not determined, health status reports, reports prepared for military enrollment procedures, guardianship reports and judicial reports were excluded. The files of 64 people who were determined to have not completed the health board process because of the lack of medical documents or psychometric tests required for disability evaluation were excluded. The patient files with missing data were also excluded. The data of 1315 cases aged 18 and above, who applied to benefit from the law numbered 2022, tax reduction, disability retirement, special consumption tax reduction, disability employment and individual applications for health board report of disability were included in the study. The diagnosis and final decision of the attending psychiatrist who evaluated the patient on the date of application, as a result of patient's clinical observation, medical documents and psychometric examination, was considered as valid.

Age, gender, reason for application, duration of illness, comorbid medical illness, psychiatric diagnosis and disability rate, the reason for the patients who were not rated, duration of the report, severe disability status for the patients evaluated according to the previous regulation, dependency status for the patients evaluated according to the new regulation, the diagnosis and disability rate of the patient who applied as a referee hospital or objection to the previous report were examined and recorded with the data collection form prepared by the researchers.

The study was approved by the University of Health Sciences, Ankara Training and Research Hospital, Clinical Research Ethics Committee with the ethics committee approval dated 13/02/2020 and decision number 176/2019. Since our research is a retrospective and file-based study, consent was not got from the participants. Our research was conducted under ethical committee standards.

Definitions

Disability reports of the patients who applied between September 1, 2018 and February 28, 2019 were evaluated based on the 'The Regulation on Disability Criterion, Classification and Health Board Reports for the People with Disabilities' dated March 30, 2013. The definition of 'severely disabled' in this regulation refers to those who are determined to have a disability rate of 50% or above according to their disability status, and those who have been decided by the health board that they cannot perform their daily life activities without the help of others (Official Gazette 2013).

Disability reports of the patients who applied between March 1, 2019 and August 31, 2019 were evaluated based on the current 'The Regulation on Disability Assessment for Adults' dated 20 February 2019. While the 'partially dependent disabled individual' in this regulation refers to the individual who is determined to perform daily life activities with help, according to functional independence scales whose reasoning ability should be evaluated depending on tissue, organ and/or function loss and/or psychiatry diagnosis, 'fully dependent disabled individual' refers to the individual who is determined to cannot perform daily life activities on his own, among those whose disability rate is determined to be 50% or above according to their disability status. (Official Gazette 2019a). We evaluated the diagnosis and disability rates of the patients according to the

disability rates guide in the 'Mental, Psychological and Behavioral Disorders' section included in the annex of the regulation.

Statistical analysis

Statistical analyzes were performed with the SPSS version 22 software (IBM Corp, USA, 2012). Nominal data are expressed as numbers and percentages. The normality of distribution of continuous variables was tested by visual (histogram and probability graphs) and analytical methods (Kolmogorov-Smirnov / Shapiro-Wilk tests). While values with normal distribution were presented as means and standard deviation; non-normal variables were presented as median and 1st and 3rd quartile. Mann-Whitney U test was used to compare numerical variables such as age, duration of illness, disability rate between the paired groups. The chi-square test was used to compare the qualitative parameters such as gender, duration of the report (continuous/recurring), severe disability/full dependency status between paired groups. The frequencies of categorical variables were compared using Pearson chi-square or Fisher's exact test, when appropriate. A value of $P < 0.05$ was considered significant.

Results

A total of 1315 patients aged 18 and above who applied to psychiatry health board outpatient clinic for the disability report and met the research criteria were included in the study. This number makes up 16.8% of the all applications to the psychiatry health board outpatient clinic. Out of 1315 patients, 635 (48.3%) were evaluated according to the old regulation, while 680 (51.7%) patients were evaluated according to the new regulation.

Table 1. Psychiatric diagnoses of patients who applied for health board report of disability

	Old regulation		New regulation		All group	
	n	%	n	%	n	%
Mental dysfunctions	104	16.4	150	22.1	254	19.3
Anxiety disorders	114	18	122	17.9	236	17.9
Depressive disorder/Dysthymia	46	7.2	52	7.6	98	7.5
Schizophrenia	21	3.3	33	4.9	54	4.1
Bipolar disorder	18	2.8	13	1.9	31	2.4
Atypical psychosis	16	2.5	8	1.2	24	1.8
Organic mental disorder	6	0.9	9	1.3	15	1.1
Personality disorders	5	0.8	5	0.7	10	0.8
Obsessive compulsive disorder	4	0.6	5	0.7	9	0.7
Mood disorder	1	0.2	0	0	1	0.1
Schizoaffective disorder	1	0.2	3	0.4	4	0.3
Autism spectrum disorder	3	0.5	0	0	3	0.2
Post traumatic stress disorder	2	0.3	1	0.1	3	0.2
Adjustment disorder	0	0	3	0.4	3	0.2
Delusional disorder	2	0.3	0	0	2	0.2
Comorbid diagnosis	3	0.5	4	0.6	7	0.5

56.2% (n=739) of the applicants were male and 43.8% (n=576) were female. The median age was 46 and 1.-3. quartile values were 34-60. 72.1% (n=948) of the cases were

first application, 11.3% (n=149) objection to the previous report, 4.2% (n=55) application as a referee hospital, 12.4% (n=163) report renewal.

Table 2. The diagnoses and severe disability/full dependency status of patients with a disability rate of 40% or above

	n	%
Diagnosis		
Mild mental dysfunction	113	38.4
Moderate mental dysfunction	59	20.1
Severe mental dysfunction	14	4.8
Schizophrenia	52	17.7
Schizoaffective disorder	4	1.4
Bipolar disorder	22	7.5
Atypical psychosis	14	4.8
Depressive disorder	5	1.7
Organic mental disorder	3	1
Autism spectrum disorder	3	1
Obsessive compulsive disorder	2	0.7
Comorbid diagnosis	3	1
Independent	24	8.2
Partially dependent	104	35.4
Fully dependent	37	12.6
Not severely disabled	101	34.4
Severely disabled	28	9.5
Severe disability/Full dependency	65	22.1

Table 3. Comparison of gender, age and duration of illness of patients with disability rate between 1-39% and 40% and above

	Between 1%-39%	40% and above	X ² /Z	p
Median, 1.-3. quartile				
Age	39 (22.0-49.0)	34 (20.8-45.3)	-2.066	0.039*
Duration of illness (years)	18 (5.0-23.0)	20 (18.0-33.0)	-4.939	<0.001**
N,%				
Gender			0.498	0.481
Female	44 35.8	116 39.5		
Male	79 64.2	178 60.5		

*:p<0.05; **:p<0.001

The diagnoses according to the clinical interview and psychometric evaluation of patients were shown in Table 1. 42.7% (n=561) of the patients were not found to have a mental disorder at a level that met the diagnostic criteria. The diagnoses in the reports were, in order of frequency; mental dysfunctions (19.3%), anxiety disorders (17.9%), depressive disorder (7.5), schizophrenia (4.1%), bipolar disorder (2.4%) and atypical psychosis (1.8%). 65.4% of the patients had comorbid medical illnesses. Diabetes mellitus (n=132, 10.1%), dementia (n=106, 8.1%), cardiovascular diseases (n=95, 7.2%), epilepsy (n=68, 5.2%), cerebrovascular diseases (n=47), 3.6%), hypertension (n=44,

3.4%), lung diseases (n=43, 3.3%) and malignancy (n=42, 3.2%) were found to be most common comorbid illnesses.

31.8% of the cases were assigned a disability report because of a mental illness. 68.2% (n=898) of the cases did not receive any psychiatric disability rate. Considering the reasons for not receiving a disability rate; 57% (n=512) had no previous psychiatric visit, 17.8% (n=160) were in remission with treatment, 12.4% (n=111) had no regular psychiatric follow-up or treatment in the last one year and 10.4% (n=93) of the cases were not on a treatment with effective dose and duration. 2.4% (n=22) of the cases were referred to the higher order center because no decision could be made about them.

In the entire group, 61.6% (n=257) of the 417 cases with any psychiatric disability rate were male and 38.4% (n=160) were female. These 417 patients were between the ages of 18-74 and the median value of their age was 35, 1.-3. quartile values were 21.5-47.0. It was determined that 77.5% (n=323) had a continuous disability report, while 17.3% (n=72) had a 1-year report and 5.3% (n=22) had a 2-year report.

Table 4. Comparison of patients with a disability rate of 50% or above according to the old and new regulations in terms of age, gender, duration of illness, duration of report, severe disability or full dependency status

	Old regulation (n=97)		New regulation (n=143)		χ^2/Z	p
Median, 1.-3. quartile						
Age	34 (25.0-47.5)		28 (18.0-41.0)		-3.527	<0.001**
Duration of illness (years)	29 (20.0-39.0)		20 (18.0-34.0)		-2.922	0.003*
Disability rate	70 (50.0-80.0)		65 (50.0-70.0)		-1.646	0.100
N, %						
Gender					0.104	0.747
Female	38	39.2	59	41.3		
Male	59	60.8	84	58.7		
Duration of report					0.079	0.779
Continuous	90	92.8	134	93.7		
Recurring	7	7.2	9	6.3		
Severe disability/Full dependency					0.262	0.609
Yes	28	28.9	37	25.9		
No	69	71.1	106	74.1		

*:p<0.05; **:p<0.001

Based on "The Regulation on Establishing a Database for Disabled Persons and Issuing Identity Cards to Disabled Persons" published in the Official Gazette dated 19 July 2008 and numbered 26941, in order to benefit from the rights of the disabled persons, it is necessary to have lost 40% or above of their physical, mental, psychological, sensory abilities for any reason, either congenital or acquired (2008). In our study, the number of patients with 40% or above disability rate was 294 (22.4%). The most common diagnoses in this group were mild mental dysfunction (n=113, 38.4%), moderate mental dysfunction (n=59, 20.1%), schizophrenia (n=52, 17.7%) and bipolar disorder (n=22, 7.5%). The diagnosis, age, duration of illness and severe disability/full dependency status of those with a disability rate of 40% or above are shown in Table 2.

Comparisons were made by grouping the entire group as those with a psychiatric disability rate between 1-39% and those with 40% and above. 123 cases with a disability rate of 1-39% were compared with 294 cases with a disability rate of 40% or above. No significant difference was found between the groups in terms of gender (p=0.481), while

the difference between age and duration of illness was statistically significant ($p = 0.039$ and <0.001 , respectively). Comparisons between groups are shown in Table 3.

Among the patients with a psychiatric disability rate of 50% or above, according to the level of being able to perform daily life activities with or without help, severe disability was determined in those who were evaluated according to the old regulation, and full dependency status was determined in those evaluated according to the new regulation. Out of 240 cases, the disability report of 224 (93.3%) were continuous. 2.1% ($n=5$) of the cases were considered as fully independent, 42.1% ($n=101$) as partially dependent, 15.4% ($n=37$) as fully dependent whereas 28.7% ($n=69$) were evaluated as 'not severely disabled' and 11.7% ($n=28$) as 'severely disabled'. 65 (27.1%) of these cases were considered to be severely disabled or fully dependent, and 61 (93.8%) had a continuous disability report. The diagnoses of these patients were as follows: moderate mental dysfunction in 39 (60 %) cases, severe mental dysfunction in 14 (21.5%) cases, schizophrenia in 7 (10.8%) cases, autism spectrum disorder in 2 (3.1%) cases, atypical psychosis in 2 (3.1%) cases and 1 (1.5%) case bipolar disorder, which was added to the borderline mental capacity.

Patients with a disability rate of 50% or above, were divided into groups as those evaluated according to the old and new regulations and compared in terms of age, gender, duration of illness, duration of report, severe disability or full dependency status. The results were demonstrated in Table 4. The cases which were evaluated according to new regulation were more likely to be younger and with a shorter duration of illness ($p <0.001$ and <0.05 , respectively). No significant differences were found between groups in terms of severe disability/full dependency status ($p=0.609$).

Table 5. Comparison of patients with schizophrenia and schizoaffective disorder according to the old and new regulations

	Old regulation	New regulation	X ² /Z	p
Median, 1.-3. quartile				
Age	41.5 (38.0-54.0)	45.5 (34.25-50.75)	-0.136	0.892
Duration of illness (years)	11.5 (7.25-15.75)	19 (10.0-26.0)	-2.338	0.019*
Disability rate	80 (45-80)	65 (65-80)	-0.490	0.624
N, %				
Not severely disabled	20 90.9			
Severely disabled	2 9.1			
Independent		9 25		
Partially dependent		22 61.1		
Full dependent		5 13.9		
Severe disability/Full dependency	2 9.1	5 13.9	0.017	0.897

*: $p <0.05$

204 (15.5%) of the applicants objected to the previous report or applied as a referee hospital, and 5 of these people were referred to the higher order center because no decision could be made about them. It was found that the disability rate of 160 (80.4%) of the remaining 199 patients did not change, whereas the rate of disability increased in 15 (7.5%) and decreased in 24 (12.1%). The diagnosis of 157 (78.9%) out of these 199 patients, remained the same, while 42 (21.1%) had changed. Also the diagnosis of 9 (4.5%) people did not change, but the disability rate changed, while both the diagnosis and disability rate of 30 (15.1%) people changed. While a different report was prepared

in terms of 'severe disabled' or fully/partially dependent decisions in 45 of the cases (22.6%), there was no change in 154 (77.4%) cases. In terms of the 'partial dependency' situation, which was not defined in the previous regulation, while the expression 'not severely disabled' in the previous reports of 32 cases (16.1%) was changed to 'partially dependent', the expression of 'severely disabled' in the previous reports of 2 (1%) patients was changed to 'partially dependent'.

There was no statistically significant difference between the age and disability rates of patients diagnosed with schizophrenia and schizoaffective disorder ($p = 0.892$ and 0.624 , respectively), who were evaluated according to the old and new regulations. However, the duration of illness of the patients evaluated according to the new regulation was found to be significantly higher ($p < 0.05$). After the regulation amendment, we found no significant difference in the ratio of the 'fully dependent' decisions corresponding to the 'severe disabled' in the previous regulation ($p = 0.897$). Comparisons made to determine the change in disability rates and severe disability or full dependency decisions after regulation amendment are shown in Table 5.

Discussion

In the present study, 1315 (16.8%) of 7848 cases evaluated in the psychiatry health board outpatient clinic within one year were for health board of disability procedures. Similar to previous studies, the most common psychiatric diagnosis was mental dysfunction (Yıldız et al. 2016, Aslan and Şimşek 2017). The most common diagnoses after mental dysfunction were, respectively; anxiety disorders, depressive disorder, schizophrenia, bipolar disorder and atypical psychosis. Schizophrenia and bipolar disorder diagnoses were less common than anxiety and depressive disorders, unlike previous studies. We could relate this to the absence of a psychiatric inpatient clinic in our hospital. The patients with diagnoses such as schizophrenia and bipolar disorders, who may need inpatient treatment more likely to apply to institutions where they previously received treatment. Yıldız et al. reported the diagnosis of patients with mental dysfunction as mild mental dysfunction, moderate mental dysfunction, borderline mental capacity and severe mental retardation, respectively (2016). The intellectual disability levels in the patients with mental dysfunctions in our study were similar to their study.

31.8% of the applicants received a psychiatric disability rate in our study. Yıldız et al. reported this rate as 14.02% out of all hospital applications for health board report of disability (2016). Demirci et al. reported the rate as 14.6% for those applied to the hospital health board and were diagnosed with a psychiatric diagnosis, and 6.56% were given a psychiatric disability rate (2015). In our study, the rate of cases who received 40% or above psychiatric disability rate was 22.4%. Aslan and Şimşek found this rate as 11.1% in their study in which they examined the psychiatric disability reports given in a university hospital (2017). In our study, only the health board applicants that referred to psychiatric evaluation by declaring their psychiatric complaint or illness were included. Also, the institutions where the studies were conducted are different order of hospitals with different health board densities. This could be the reason for the different rates between the studies. There were also patients who applied to the general health board of hospital for disability determination and were not referred to the psychiatry health board outpatient clinic for psychiatric evaluation. We excluded these patients from the file screening for the study.

We observed that 68.2% (n=898) of the cases did not receive any psychiatric disability rate. The most common reasons for not being given a disability rate were the absence of previous psychiatric admission and the fact that the disease was in remission with treatment. In previous studies, it is seen that most of the applications were also not given a psychiatric disability rate. Many people apply to the health board by declaring that they have mental complaints, but the mental status examination and the investigation of the patients' previous medical records have a great importance in the determination of disability. Our findings are also important to show the necessity of keeping the medical records of the patients meticulously who applied for treatment.

56.2% of the applicants were male, 61.6% of those with a psychiatric disability were male, and 60.6% of those with a disability rate of 40% or above were male in terms of gender distribution. Yıldız et al. found that 61.8% of the patients with a psychiatric disability rate were male which is similar with our results (2016). Demirci et al. found that 64.4% of the adult cases who applied to the health board were male. Aslan and Şimşek found that 63.6% of the cases were male, and 77.7% of those with a disability rate of 40% or above were male (2015, 2017). Aslan and Şimşek interpreted this situation as the fact that men are more likely to apply to the health board in relation to their higher employment status and disability retirement demands (2017). SIS 2002, Turkey Disability Survey and the National Disability Database, also determined that the proportion of men in the disabled population is higher than women (2004, TURKSTAT 2011). In a study of 576 patients who received psychiatry-related disability rates, the mean disability rate was found significantly higher in men than women (Ergul 2019). Our findings showed no significant difference in terms of gender between cases with or without 40% or above disability rate.

In our study, among the patients whose psychiatric disability rate was determined, duration of illness of the patients with a disability rate of above 40% was found to be significantly higher than those with a disability rate of 1-39%. Also the median age was found to be significantly lower in patients with a disability rate of above 40%. We associated this situation with the high frequency of applications who have a diagnosis of intellectual developmental disorders and had a previous disability report from child and adolescent psychiatry clinic that is needed to renewal in order to continue to benefit from various social rights over the age 18.

The median age of all applicants was 46 (34-60), the median age of patients with any psychiatric disability was 35 (21.5-47.0), and the median age of patients with a disability rate of 40% or above was 34 (20.8-45.3). The median value of duration of illness was 20 (18-33) for those with a disability rate of 40% or above. In the study of Demirci et al., the mean age was 38.24±15.07. In Aslan and Şimşek's study, the mean age of the patients with disability due to psychiatric illness was 41.9±13.2 (2015, 2017). These findings show that disability because of psychiatric diseases is seen from a young age contrary to studies that state disability is more common over the age of 65 according to results of general health board reports of disability (Uysal et al. 2013, Benli et al. 2016, Balcı et al. 2017, Koçak et al. 2018). The provision of social security benefits for these individuals in younger age groups is also important in terms of their participation in social life.

In the new disability regulation dated February 20, 2019 the rate of 45% 'who can work with treatment', 80% 'who cannot work despite treatment' for schizophrenia and schizoaffective disorder diagnoses are changed to 45% 'whose functionality improves

with treatment', 65% 'whose functionality partially improves with treatment', and 80% 'whose functionality does not improve with treatment'. In our study, the median disability rate of patients with these diagnoses was 80% (45-80) before the regulation change, and 65% (65-80) after the regulation change. This difference was not significant statistically. We may attribute this to the small number of patients included in our study with these diagnoses.

Ergul stated that 17% of the patients who received a psychiatric disability rate were given a decision to be severely disabled (2019). Benli et al. found the rate of severe disability as 21.5% (2016). In our study, among the patients with a psychiatric disability rate of 50% or above, 28.9% of those evaluated according to the 2013 March regulation were given a 'severely disabled' decision, while 25.9% of the patients evaluated according to the 2019 February regulation were given the decision to be 'fully dependent disabled individual'. We found no significant difference between these two groups. Although 'severely disabled' and 'fully dependent' decisions were found at a similar rate in our study, there may be diversity of views among clinicians regarding this decision in psychiatric cases. While some clinicians make this decision according to their self-care skills, others think it is right to make positive discrimination by considering the situations such as communication and reasoning problems, stigma and inability to find a job (Türkcan and Türkcan 2011, Yıldız et al. 2016). We think that the definition of partial dependency added to the new regulation can be beneficial for the problems experienced in this context. As a referee hospital, the initial assessment of 16.1% of the applicants as "not severely disabled" and 1% of the applicants as "severely disabled" was changed to "partially dependent" in the present study.

In the study conducted with 100 reports of 43 cases, Keten et al. evaluated the cases who applied to the health board with an objection. They found that disability rate of 36 (83.7%) cases changed while 5 (11.6%) did not change, and a different report was prepared for 18 of the cases (41.8%) in terms of 'severely disabled' or 'not severely disabled' decision (2012). This difference was attributed to the inadequacy of objective criteria, and as a solution, they suggested for physicians assigned to the health board to receive in-service training, to update the guidelines used in preparing reports and also they stated that forensic medicine specialists should take part in health boards (Keten et al. 2012). In our study, out of 199 cases who applied with an objection to previous disability report or as a referee hospital, 39 (19.6%) patients were given a psychiatric report with different disability rates. It can be thought that this ratio will increase with different decisions of other departments, similar to the previous study. It is seen that 42 (21.1%) of these 199 patients had a change in diagnosis, 9 (4.5%) had a change in disability rate without a change in diagnosis and 30 (15.1%) had a change both in diagnosis and disability rate. The reports with different decisions among institutions in this way increase the workload by increasing the number of applications with objection and cause a prolongation of the process in which people with disabilities benefit from their social rights. Examining the previous medical records related to the disease and treatment process in determining psychiatric disability, supporting the decision with required psychometric examinations, evaluation of the functionality with social case study report and family interviews when necessary, will contribute to more objective decisions about patients.

The current regulation on disability assessment for adults, published in the Official Gazette on February 20, 2019, requires making an assessment of

dependency/independency using the scale, and brings a distinction as independent/partially dependent/fully dependent instead of severely disabled/not severely disabled. This can help to overcome subjective assessments and provide an intermediate option for the hard cases who lie in between. However, in clinical practice, a detailed evaluation of the individual's reasoning and functionality by using valid and reliable additional scales specific to the psychiatric disease will help to make a more accurate decision when distinguishing partially dependent/fully dependent patients.

This study has some limitations. First, it is a retrospective study based on medical records. Another limitation was the single-center nature of the study. Finally, because of the large number of patients, only the data of the cases who applied to the psychiatry health board outpatient clinic were examined. Hence, there was no data on disability related to other systems in these patients.

Conclusion

As a result of the findings of the study, psychiatric diseases cause disability from an early age. However, it is seen that there are many applications to the health board of disability for mental complaints that are not at the level of disability. Ensuring standardization with instructions and guidelines published on this subject is of great importance for both patients and clinicians. Given the fact that psychiatric diseases should be evaluated as a spectrum and some patients have a partial response to treatment; the intermediate rate "partially improves with treatment" brought to certain diseases by the new regulation can be a solution for the patients who lie in between. Similarly, it is thought that the concept of 'partially dependent' is needed in some cases for individuals who do not meet the criteria for severe disability but need help in their daily life activities, considering their reasoning ability. To date, no study that examines the psychiatric data in the health board reports of disability of adult patients after the regulation amendment has yet been found in the Turkish literature. Therefore, we think that our study can contribute to new studies and future regulations on this subject by drawing attention to the clinical results of the adjustments made in the new regulation.

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