



# Evaluation of Special Needs Reports for Children

## Çocuklar İçin Özel Gereksinim Raporlarının Değerlendirilmesi

Erdoğan Öz<sup>1</sup>, Mehmet Emin Parlak<sup>2</sup>

<sup>1</sup>Adıyaman Province Health Directorate, Adıyaman, Turkey  
<sup>2</sup>Kahta State Hospital, Department of Pediatrics, Kahta, Adıyaman, Turkey

### Abstract

**Aim:** This study aims to evaluate of the reports of children who applied to the Medical Board for special needs reports regarding gender, age, diagnosis, and special needs area.

**Material and Method:** The special needs reports of 269 children aged 0-18, who applied to Kahta State Hospital Medical board between January 1 and December 31, 2022, were analyzed retrospectively, together with their sociodemographic characteristics.

**Results:** The mean age of the cases was 7.4±4.9 years, of which 109 (40.5%) were female, and 59.5% were male. When the areas of the reports were examined, the highest rate was the cognitive area, with 42.4%. When the suggested special needs were examined, 43.9% stated the need for rehabilitation/early intervention to support cognitive functions. The highest level of special needs in both girls and boys was the presence of special conditions needs. There was no significant difference between the genders regarding the level of special needs. However, the rate of child and adolescent psychiatry area in boys (22.5%) was found to be significantly higher than the rate of girls (12.8%) (p=0.046). There was no significant difference between genders in other areas (p>0.05)

**Conclusion:** Special needs reports provide financial, social, and exceptional education support to the needs of children and families. For this reason, medical boards must be organized to make the fastest and most objective decisions. Examination of the reports as a whole guides health professionals for quality service, social scientists, and lawmakers for permanent solutions.

**Keywords:** Special needs, disability evaluation, disability medical board, medical board, health board, health committee

### Öz

**Amaç:** Bu çalışma, sağlık kuruluna çocuklar için özel gereksinim raporu (ÇÖZGER) için başvuran çocukların raporlarının cinsiyet, yaş, tanı ve özel gereksinim alanı açısından değerlendirilmesini amaçlamaktadır.

**Gereç ve Yöntem:** Kahta Devlet Hastanesi Sağlık Kurulu'na 1 Ocak-31 Aralık 2022 tarihleri arasında başvuran 0-18 yaş arası 269 çocuğun ÇÖZGER ve sosyodemografik özellikleri retrospektif olarak incelendi.

**Bulgular:** Olguların yaş ortalaması 7,4±4,9 olup, bunların 109'u (%40,5) kadın, %59,5'i erkekti. Rapor alanları incelendiğinde en yüksek oranın %42,4 ile bilişsel alan olduğu görüldü. Önerilen özel gereksinimler incelendiğinde %43,9'u bilişsel işlevleri desteklemek için rehabilitasyon/erken müdahale gerektiğini belirtmiştir. Hem kızlarda hem de erkeklerde en yüksek özel gereksinim düzeyi özel durum gereksinimlerinin varlığıydı. Özel gereksinim düzeyi açısından cinsiyetler arasında anlamlı fark yoktu. Ancak erkek çocuklarda çocuk ve ergen psikiyatrisi bölümü oranı (%22,5) kız çocukların oranından (%12,8) anlamlı olarak yüksek bulunmuştur (p=0,046). Diğer alanlarda cinsiyetler arasında anlamlı fark yoktu (p>0,05).

**Sonuç:** ÇÖZGER, çocukların ve ailelerin ihtiyaçlarına mali, sosyal ve istisnai eğitim desteği sağlar. Bu nedenle sağlık kurullarının en hızlı ve en objektif kararları verecek şekilde düzenlenmesi gerekmektedir. Raporların bir bütün olarak incelenmesi kaliteli hizmet için sağlık profesyonellerine, kalıcı çözümler için sosyal bilimcilere ve kanun koyuculara yol göstermektedir.

**Anahtar Kelimeler:** Özel ihtiyaçlar, engellilik değerlendirmesi, engelli sağlık kurulu, sağlık kurulu, sağlık kurulu, sağlık kurulu



## INTRODUCTION

One in every six people worldwide has a significant disability.<sup>[1]</sup> Although the disabled individual has been defined with different words in the historical process in Turkey and the world, the concept of "individual with special needs" has been adopted more recently.<sup>[2]</sup>

An individual with special needs; is a person who experiences inadequacy due to impairment, limitations, and restrictions in his/her physical, mental, spiritual, sensory, and social abilities due to various congenital or acquired reasons. These people need help meeting their daily needs and adapting to social life.<sup>[3,4]</sup>

Disability Medical boards are established in the health institutions determined by the Ministry of Health in Turkey to have specialist physicians in certain branches. In line with the decision of medical boards, individuals achieve gains for their needs arising from their diseases and/or disabilities. While there was only one disability regulation before, with the "Regulation on Special Needs Assessment for Children" dated February 20, 2019, published in the Official Gazette, it has become possible for children to be evaluated on boards formed only for children. There are at least six permanent members in the boards established to issue "Special Needs Reports for Children" (SNRFC), including at least four different specialist physicians, the chairman of the board, and the SNRFC-authorized physician. In addition to the child's disability, the board's decision is reported in 23 different categories, indicating the area of special needs (2) and degree.<sup>[4,5]</sup>

## MATERIAL AND METHOD

### Study Design

The study was conducted in Kahta State Hospital, the only hospital in the Kahta district of Adiyaman, a southeastern province of Turkey. During 2022, records of children aged 0-18 who applied for a special needs report for children were retrospectively reviewed one by one. The study was carried out with the permission of Firat University Non-Interventional Clinical Researches Ethics Committee (Date: 01.12.2022, Decision No: 2022/14-26).

### Statistical Analysis

Analyzes were evaluated in 22 package programs of SPSS (Statistical Package for Social Sciences; SPSS Inc., Chicago, IL). In the study, descriptive data were shown as n and % values in categorical data, and mean±standard deviation (mean±SD) and median, interquartile range (25-75 percentile values) in continuous data. Chi-square analysis (Pearson Chi-square) was used to compare categorical variables between groups. The Kolmogorov-Smirnov test evaluated the conformity of continuous variables to normal distribution. In comparing paired groups, Student's t-test was used for normally distributed variables, and Mann Whitney U-test was used for non-normally distributed variables. In comparing more than two variables, One Way ANOVA analysis was performed for those with normal distribution and the Kruskal Wallis test for those who did not.

The Pearson correlation test was used for those with normal distribution, and the Spearman correlation test was used for those with non-normal distribution to examine the relationship between continuous variables. Linear regression analysis was performed to determine the predictor of the dependent variable. The statistical significance level in the analysis was accepted as  $p < 0.05$ .

## RESULTS

Two hundred sixty-nine cases who applied for SNRFC were included in the study. Only one of those included in the study applied to SNRFC to benefit from law no. 2828 (caregiver salary) and all of the other patients to benefit from the disability rights.

The mean age of the cases in the reports included in the study was  $7.4 \pm 4.9$  years, of which 109 (40.5%) were female, and 59.5% were male. When the special needs levels were examined, 7.4% had no special needs, and 27.9% had special needs. 2.2% had mild special needs, 7.8% had moderate special needs, 1% 0.9 of them had advanced special needs, and 3.3% had very advanced special needs. 4.5% had significant special needs, and 45% had special conditional needs (**Table 1**).

**Table 1. Demographic and special needs levels of reports**

	Number	%
Age, Mean±SD	7.4±4.9	
Gender		
Girl	109	40.5
Boy	160	59.5
Special needs level		
No special needs	20	7.4
Have special needs (HSN): 20-39%	75	27.9
Mild special needs: 40-49%	6	2.2
Moderate special needs: 50-59%	21	7.8
Advanced special needs: 60-69%	5	1.9
Very advanced special needs: 70-79%	9	3.3
Have significant special needs (HSSN): 80-89%	12	4.5
Have special conditions needs (HSCN): 90-99%	121	45.0

When the areas of the reports were examined, 42.4% were cognitive, 40.1% were movement development, 20.4% were nervous system, 18.6% were a child and adolescent psychiatry, and 10% were language-speech-communication development area, 8.2% were hereditary-congenital diseases area, 7.4% visual function area, 5.9% endocrine system area, 4.5% hearing function-ear nose throat area, digestive system area in 2.2%, heart and circulatory system areas in 1.5%, metabolism area in 0.7%, genitourinary system area in 0.4% and hematology- oncology area was seen (**Figure 1**).

When the recommended special needs are examined, 43.9% are rehabilitation/early intervention to support cognitive functions, 41.3% require physiotherapy, occupational therapy, and rehabilitation, and 22.7% have a device, orthosis, prosthesis, or wheelchair and other equipment. 19.3% require rehabilitation at home or hospital, and 10.8% require speech and language therapy/rehabilitation. 10.8% require

therapy/rehabilitation for autism spectrum disorder, 7.1% received therapy/rehabilitation need for visual impairment/loss, 5.2% therapy/rehabilitation need for specific learning disability, and 4.1% therapy/rehabilitation needed for hearing impairment/loss (Table 2).

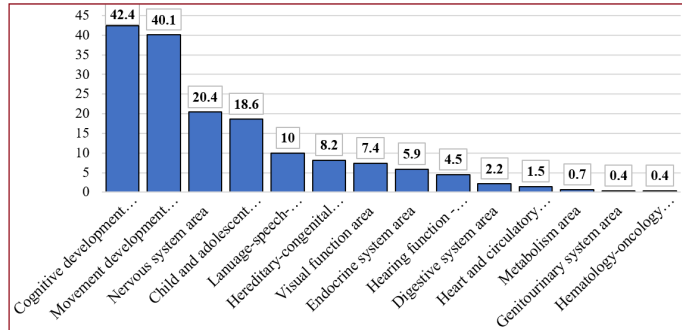


Figure 1. Distribution of the areas of the reports

	Number	%
Need for rehabilitation/early intervention to support cognitive functions	118	43.9
Need for physiotherapy, occupational therapy, rehabilitation	111	41.3
Need for devices, orthoses, prostheses, wheelchairs, and other equipment	61	22.7
Need for rehabilitation at home or hospital	52	19.3
Need for speech and language therapy/rehabilitation	29	10.8
Need for therapy/rehabilitation for autism spectrum disorder	29	10.8
Need for therapy/rehabilitation for visual function limitation/loss	19	7.1
Need for therapy/rehabilitation for specific learning disability	14	5.2
Need for therapy/rehabilitation for hearing impairment/loss	11	4.1

\*some patients are recommended for more than one special need.

The highest level of special needs in both girls and boys was the presence of special conditions needs, and there was no significant difference between the genders in terms of the level of special needs (p=0.645) (Table 3).

	Girl		Boy		p*
	Number	%	Number	%	
No special needs	11	10.1	9	5.6	0.645
Have special needs (HSN): 20-39%	25	22.9	50	31.3	
Mild special needs: 40-49%	2	1.8	4	2.5	
Moderate special needs: 50-59%	10	9.2	11	6.9	
Advanced special needs: 60-69%	2	1.8	3	1.9	
Very advanced special needs: 70-79%	5	4.6	4	2.5	
Have significant special need (HSSN): 80-89%	4	3.7	8	5.0	
Have special conditions needs (HSCN): 90-99%	50	45.9	71	44.4	

\* Chi-square analysis was applied.

	Girl		Boy		p*
	Number	%	Number	%	
Cognitive development area	50	45.9	64	40.0	0.339
Child and adolescent psychiatry area	14	12.8	36	22.5	0.046
Language-speech-communication development area	11	10.1	16	10.0	0.980
Endocrine system area	7	6.4	9	5.6	0.786
Genitourinary system area	1	.9	0	.0	0.405
Visual function area	6	5.5	14	8.8	0.319
Movement development area	48	44.0	60	37.5	0.283
Hematology-oncology area	0	.0	1	.6	0.408
Hearing function-ear nose, throat area	7	6.4	5	3.1	0.236
Hereditary-congenital diseases area	10	9.2	12	7.5	0.623
Hearth and circulatory system area	2	1.8	2	1.3	0.697
Metabolism area	1	.9	1	.6	0.784
Digestive system area	3	2.8	3	1.9	0.689
Nervous system area	23	21.1	32	20.0	0.826

\* Chi-square analysis was applied.

	HSN	Mild HSN	Moderate HSN	Advanced HSN	Very advanced HSN	HSSN	HSCN
Cognitive development area	23	2	17	2	9	4	57
Child and adolescent psychiatry area	18	1	1	0	0	3	27
Language-speech-communication development area	17	0	1	1	0	1	7
Endocrine system area	1	0	0	1	0	4	10
Genitourinary system area	0	0	0	0	0	0	1
Visual function area	6	2	0	2	0	0	10
Movement development area	25	3	10	3	3	5	59
Hematology-oncology area	0	0	0	0	0	0	1
Hearing function-ear nose, throat area	2	0	0	0	0	0	10
Hereditary-congenital diseases area	0	0	0	0	0	1	21
Hearth and circulatory system area	0	0	0	0	0	0	4
Metabolism area	0	0	0	0	0	0	2
Digestive system area	0	0	0	0	0	2	4
Nervous system area	12	1	5	2	3	2	30

HSN, Have special needs; HSSN, Have significant special need; HSCN, Have special conditions needs

## DISCUSSION

In a study conducted across Turkey by the State Institute of Statistics in 2002, the disability rate was 12.29% in all age groups.<sup>[4]</sup> Ministry of Family and Social Services 2022 statistical data remarks that the rate of people over the age of 3 with at least one disability in Turkey is 6.9%. Adiyaman is one of the provinces with a ratio of 6.37% to 7.85%. When examined in terms of gender, the disability rate is 56% for men and 44% for women. The disability rate for children aged 3-9 across the country is 6.7. The highest rate of disability; is a physical disability in the form of difficulty walking, climbing / descending stairs, and holding and carrying things.<sup>[6]</sup>

According to the Turkish Statistical Institute data, 27.2% of Turkey's population is children.<sup>[7]</sup> The needs of children due to disability are different from those of adults. So, social and institutional solutions should be produced with the child and family at the center. While SNRFC produces solutions for the needs of the disabled child and their families, it also enables physicians to make objective decisions without experiencing legal problems.<sup>[3,8]</sup>

Most studies<sup>[2,9]</sup> on the SNRFC examined psychiatric development. However, many new multi-faceted studies will be carried out in this regard, with the complete disappearance of the negative effect of the COVID-19 pandemic on medical boards.

In the present study, the mean age of the cases was 7.4±4.9 years, 109 (40.5%) were female, and 59.5% were male. The ratio between genders was similar to the Baykara et al.<sup>[2]</sup> study in 472 patients with a mean age of 8.5 (girls 39%, boys 61%). In addition, the high disability rate in men was consistent with studies in the literature.<sup>[2,4,8,9]</sup> This may be because some disorders, such as autism spectrum disorder or specific learning disorders, are more common in males. When the special needs levels of the patients were examined, it was reported that 7.4% had no special needs, and 3.3% had very advanced special needs. These rates coincide with the 7.2% and 3.2% of Baykara et al. However, in the study by Mehmet Kayhan & Yusuf Öztürk in 2020,<sup>[9]</sup> unlike both studies, no special needs were reported at the rate of 3.6%, while there was a very high level of special needs at a rate of 7.2%.

The highest level of special needs in both girls and boys is the presence of special conditions, which is consistent with other studies in the literature.<sup>[2-4,8]</sup> Similar to most studies, the most common area was the cognitive development area (42.4%), and the second was disability in the movement development area (40.1%).<sup>[4,8,9]</sup>

The rate of child and adolescent psychiatry area in boys (22.5%) was found to be significantly higher than the rate of girls (12.8%) ( $p=0.046$ ). There was no significant difference between the genders in other areas ( $p>0.05$ ). In the study conducted by Deniz Yıldız and Mahmut Cem Tarakçıoğlu,<sup>[4]</sup> the diagnoses of borderline cognitive delay and mild cognitive delay were significantly higher in girls. In contrast, the diagnosis of autism spectrum disorder was found to be higher in boys.

The need for devices, orthoses, prostheses, wheelchairs, and other equipment was determined at a rate of 22.7%. This situation shows that more than one-fifth of the children who apply to the medical board need serious rehabilitation. These data reveal the vital importance of SNRFC, as demonstrated by other studies.<sup>[2,10]</sup>

Only one person benefited from the law numbered 2828 (caregiver salary); All of the other patients applied to SNRFC to benefit from their disability rights. However, when the studies in the literature<sup>[8,9,11]</sup> are examined, the rates of application reasons in no study do not match each other showing us that each region has different needs. The economic situation of families, education levels, the social environment of children with special needs, physical conditions in their places of residence, and differences in the perspectives of different cultures towards the disabled may be the reason for this situation. Foreign nationals were not evaluated separately in the present study. We think that the number of children who are victims of war in cities with a large number of Syrian guests may affect the reasons for applying to medical boards and the results of the report need area. New studies will clarify this issue.

Objections to the medical board are substantial. Losing family time due to objections is exhausting for both the child and the family. For this reason, medical boards should be standardized in the same situation, with the same diagnoses, to determine the same need areas. The way to achieve this is to carry out other studies on the objections in the medical board and evaluate the results of the objections by a central commission established by the Ministry of Health. A platform can also be created where physicians can exchange information with this commission about the issues they need help with on medical boards.

After switching to SNRFC, there was a 90-99% disability rate in the group, which increased more than three times compared to the old regulation.<sup>[12]</sup> So, it can be said that medical boards established only for children reduce the victimization that may occur in children and families due to late detection. However, on this issue, Güller and Yaylacı,<sup>[12]</sup> contrary to our prediction,<sup>[12]</sup> stated that the increase in the rate of disability after switching to SNRFC would put families with already high-stress levels more stressed and hopeless. Accordingly, it is stated that families will refrain from applying to hospitals to get a medical board report. In our opinion, the financial and moral support provided by the special needs reports from the medical board for the child and family will reduce the stress of the families and increase the applications for SNRFC.

Creating free time for children and adolescents with special needs will contribute to their personal development.<sup>[13]</sup> For this reason, it is essential to identify the special needs of children and young people as soon as possible and eliminate the deficiencies that cause time loss as soon as possible. Because as the age increases, the quality of the needs may change while the quantity may also increase. This study it is aimed to reveal the problem with different indicators so that society can produce solutions by examining the special needs of children.

## CONCLUSION

It is necessary to ensure that all individuals with special needs, especially children, participate in social life at the highest rate. One of the most important ways to achieve this is that medical boards for children in hospitals work with a standardized algorithm consisting of fast, effective, and objective criteria. Special needs reports for children from these boards provide financial, social, and special education support to the needs of children and families. Examination of the reports as a whole guides health professionals for more accessible and qualified services and social scientists and lawmakers for permanent solutions.

## ETHICAL DECLARATIONS

**Ethics Committee Approval:** The study was carried out with the permission of Fırat University Non-Interventional Clinical Researches Ethics Committee (Date: 01.12.2022, Decision No: 2022/14-26).

**Informed Consent:** All participants signed the free and informed consent form.

**Referee Evaluation Process:** Externally peer-reviewed.

**Conflict of Interest Statement:** The authors have no conflicts of interest to declare.

**Financial Disclosure:** The authors declared that this study has received no financial support.

**Author Contributions:** All of the authors declare that they have all participated in the design, execution, and analysis of the paper, and that they have approved the final version.

## REFERENCES

1. World Health Organization. Disability. Available online: <https://www.who.int/news-room/fact-sheets/detail/disability-and-health> (accessed on December 2022)
2. Aydoğın Baykara R, Pıhtılı Taş N, Taşçı İ. Investigation of Movement Development Area of Patients Applying to Health Board for Special Needs Report for Children (SNRC) to Special Needs Report for Children Regulations: A Cross-Sectional Study. *J PMR Sci.* 2022;25:189-96
3. Uygun SD, Çetinkaya M, Efe A, et al. The Difficulties Encountered in Practice for the Field of Child and Adolescent Psychiatry After the Regulation on Assessment of Special Needs for Children (RASNC). *Turk J Child Adolesc Ment Health.* 2021;28:191-9.
4. Yıldız D, Tarakçıoğlu MC. Evaluation of clinical characteristics and comorbidities of children applied for special requirement report and comparison of diagnosis and disability rates according to old and new regulations. *Istanbul Kanuni Sultan Süleyman Med J.* 2020;12:144-50.
5. Resmi Gazete. Çocuklar İçin Özel Gereksinim Değerlendirmesi Hakkında Yönetim. Available online: <https://www.resmigazete.gov.tr/eskiler/2019/02/20190220-1.htm> (accessed on December 2022)
6. TC. Aile ve Sosyal Politikalar Bakanlığı. Engelli ve yaşlı istatistik bülteni Ocak 2022. Available online: [https://www.aile.gov.tr/media/98625/eyhgm\\_istatistik\\_bulteni\\_ocak\\_2022.pdf](https://www.aile.gov.tr/media/98625/eyhgm_istatistik_bulteni_ocak_2022.pdf) (accessed on December 2022)
7. Türkiye İstatistik Kurumu İstatistik Veri Portalı. Available online: <https://data.tuik.gov.tr/Search/Search?text=engelli&dil=1> (accessed on December 2022)
8. Kumbul YÇ, Sivrice ME, and Akın V. The Importance of Otorhinolaryngology and Evaluation of Clinical Features of the Admitted Patients in Special Need Report for Children (SNRC). *Süleyman Demirel University J Health Sci* 2020;11:348-52.
9. Kayhan M, Öztürk Ö. Clinical and Sociodemographic Characteristics of Cases Presenting to an University Hospital for Special Need Reports for Children. *Osmangazi J Med* 2020;42:240-8.
10. Oral A, Aydın R, Ketenci A, Akyüz G, Sindel D, Yalman A. World Report on Disability: analysis of the disability issues and contributions of physical medicine and rehabilitation medical specialty in Turkey/Dunya Engellilik Raporu: Türkiye'de engellilik ile ilgili konuların analizi ve fiziksel tıp ve rehabilitasyon tıp uzmanlığının katkıları. *Turk J Phys Med Rehab.* 2016;1:83-97.
11. Şahin N, Altun H, and Kara B. Assessment of Disabled Child Health Council Reports. *Kocatepe Med J* 2014;15:48-53.
12. Barış G, Yaylacı F. The evaluation of medical board report datas for one year period after the transition to special s report for children. *J Clin Psychiatry.* 2021;24:207-16.
13. Powrie B, Kolehmainen N, Turpin M, Ziviani J, Copley J. The meaning of leisure for children and young people with physical disabilities: a systematic evidence synthesis. *Dev Med Child Neurol.* 2015;57:993-1010.