



BÖLÜM 2

NÖROGELİŞİMSEL BOZUKLUKLAR

Fadime ÜSTÜNER TOP¹
Hasan Hüseyin ÇAM²

İÇERİK

- 2.1. Nörogelişimsel Bozukluklar
- 2.2. Anlıksal (Entellektüel) Yetiyitimleri (Zihinsel Yetersizlik)
 - 2.2.1. Değerlendirme ve Tanı
 - 2.2.2. Genel Yaklaşımlar
- 2.3. İletişim Bozuklukları
 - 2.3.1. Değerlendirme ve Tanı
 - 2.3.2. Genel Yaklaşımlar
- 2.4. Otizm Spektrum Bozukluğu
 - 2.4.1. Değerlendirme ve Tanı
 - 2.4.2. Genel Yaklaşımlar
- 2.5. Dikkat Eksikliği/Hiperaktivite Bozukluğu
 - 2.5.1. Değerlendirme ve Tanı
 - 2.5.2. Genel Yaklaşımlar
- 2.6. Özgül Öğrenme Bozukluğu
 - 2.6.1. Değerlendirme ve Tanı
 - 2.6.2. Genel Yaklaşımlar
- 2.7. Devinsel (Motor) Bozukluklar
 - 2.7.1. Değerlendirme ve Tanı
 - 2.7.2. Genel Yaklaşımlar
- Kaynaklar

¹ Doç. Dr., Giresun Üniversitesi, Sağlık Bilimleri Fakültesi, Çocuk Sağlığı ve Hastalıkları Hemşireliği AD., fadikom@hotmail.com

² Dr. Öğr. Üyesi, Kilis 7 Aralık Üniversitesi, Yusuf Şerefoğlu Sağlık Bilimleri Fakültesi, Halk Sağlığı Hemşireliği AD., cam_hasanhuseyin@hotmail.com

Kaynaklar

1. Melillo R, Leisman G. Neurobehavioral disorders of childhood: an evolutionary perspective. New York: Springer, 2010.
2. Sabariego-Navarro M, Fernández-Blanco A, Sierra C, Dierssen M. Neurodevelopmental disorders: 2022 update. *Free Neuropathology*. 2022;3(8). <https://doi.org/10.17879/freeneuro-pathology-2022-3801>
3. Thapar A, Cooper M, Rutter M. Neurodevelopmental disorders. *Lancet Psychiatry* 2017;4:339-46.
4. Ismail FY, Shapiro BK. What are neurodevelopmental disorders? *Curr Opin Neurol* 2019;32:611-6.
5. Stein MT. Developmental and behavioral pediatrics (Section 7). In Rudolph, C.D., Rudolph, A.M., Lister, G.E., First, L.R., Gershon, A.A., Leventhal, J.M (Eds.). *Rudolph's Pediatri*. By McGraw-Hill Compenies, New York: By McGraw-Hill Education. 23nd ed.;2018, pp. 305-55.
6. Patel DR, Merrick J. Neurodevelopmental and neurobehavioral disorders. *Transl Pediatr* 2020;9(Suppl 1):S1-S2. doi: 10.21037/tp.2020.02.03.
7. Morris-Rosendahl DJ; Crocq M. Neurodevelopmental disorders—the history and future of a diagnostic concept. *Dialogues Clin Neurosci*. 2020;22(1):65-72. doi:10.31887/DCNS.2020.22.1/macrocq
8. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed. Washington DC: American Psychiatric Association, 2013.
9. Aarnoudse-Moens CSH, Weisglas-Kuperus N, van Goudoever JB, Oosterlaan J. Meta-analysis of neurobehavioral outcomes in very preterm and/or very low birth weight children. *Pediatrics*. 2009; 124 (2):717-728. doi: 10.1542/peds.2008-2816.
10. Pacheco M, Dellz L, Martínez I, Morales L. Epidemiological profile of children with neurodevelopmental disorders in a diagnostic center in Southern Puerto Rico, 2006-2017. *Epidemiol Open J*. 2022; 7(1): 3-10. doi: 10.17140/EPOJ-7-127
11. Bellinger DC. Lead neurotoxicity and socioeconomic status: conceptual and analytical issues. *Neurotoxicology*. 2008;29 (5):828-32. doi: 10.1016/j.neuro.2008.04.005.
12. Rubin IL, Merrick J, Greydanus DE, et al. Health care for people with intellectual and developmental disabilities across the lifespan. Switzerland: Springer International, 3rd Edition.2016. doi 10.1007/978-3-319-18096-0
13. Lafçı D, Öztunç G, Alparslan ZN. Zihinsel Engelli Çocukların (Mental Retardasyonlu Çocukların) Anne ve Babalarının Yaşadığı Güçlüklerin Belirlenmesi. *Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi*. 2014;3(2):723-735. <https://dergipark.org.tr/tr/pub/gumussagbil/issue/23833/253905>
14. Eripek S. Zeka Geriliği Olan Çocuklar. Ataman A (Ed) Özel Gereksinimli Çocuklar ve Özel Eğitime Giriş), 2. Baskı, Gündüz Eğitim ve Yayıncılık, 2005.
15. American Association of Intellectual and Developmental Disabilities. *FAQ on Intellectual Disability*. Retrieved March 23, 2009 from http://www.aamr.org/content_104.cfm?navID=22.
16. Schroeder SR. Mental retardation and developmental disabilities influenced by environmental neurotoxic insults. *Environmental Health Perspectives*. 2000;108(Suppl.3):395-9. doi: 10.1289/ehp.00108s3395.

17. Yıldızırm Sarı H. Engelli çocukların hemşirelik bakımı. Conk Z, Başbakkal Z, Bal Yılmaz H, Bolışık B (Ed). Pediatri Hemşireliği. Ankara: Akademisyen Kitabevi. 2013, Ankara, 865-880.
18. McDermott S, Wu J, Cai B, Lawson A and Marjorie Aelion C. Probability of intellectual disability is associated with soil concentrations of arsenic and lead. *Chemosphere*. 2011;84(1):31-8. doi: 10.1016/j.chemosphere.2011.02.088.
19. King Bh, Hodapp RM, Dykens EM. Zeka geriliği. In: Comprehensive textbook of psychiatry. Sadock BJ, Sadock VA (Ed). 8. Baskı. Cilt 4. 2007:3076-3105
20. Servonsky J, Opas SR. Nursing management of children. Jones&Bartlett Publishers, Boston. 1987;544.
21. Johnson CJ, Bettchman JH. İletişim bozuklukları. In: Comprehensive textbook of psychiatry. Sadock BJ, Sadock VA (Ed). 8. Baskı, Cilt 4, 2007:3136-63.
22. Chapman R. Children's language learning: an interactionist perspective. *J Child Psychol Psychiatry*. 2000;41(1):35-54.
23. Toppelberg C, Shapiro T. Language disorders: A 10 year research update review. *J Am Acad Child Adolesc Psychiatry*. 2000;39:143. doi: 10.1097/00004583-200002000-00011.
24. Ahmed S, Lombardino L, Leonard C. Specific language impairment: definitions, causal mechanisms and neurobiological factor. *J Med Speech Lang. Pathol.* 2001;9(1):1-15.
25. McArthur GM, Bishop DVM. Which people with specific language impairment have auditory processing deficits? *Cogn Neuropsychol*. 2004;21(1):79-94. doi: 10.1080/02643290342000087.
26. Dodd B, Bradford A. A comparison of three therapy methods for children with different types of phonological disorder. *Int J Lang Commun Disord*. 2000;35(2):189-209. doi: 10.1080/136828200247142.
27. De Nill LF, Kroll RM. Searching for the neural basis of stuttering treatment outcome: recent neuroimaging studies. *Clin Linguist Phon*. 2001;15(1-2):163-8. doi: 10.3109/02699200109167650.
28. Ocakçı AF, Karakoç A. Çocuklarda uyum ve davranış sorunları ve hemşirelik bakımı. Z Conk, Z Başbakkal, Yılmaz Bal H, Bolışık B (Ed), Pediatri Hemşireliği. Akademisyen Tip Yayınevi. Ankara 2013: 819-842.
29. Reiff MI. Autism Spectrum Disorder. In Rudolph, CD, Rudolph, AM, Lister GE, First LR., Gershon AA, Leventhal JM (Eds.). *Rudolph's Pediatri*. By McGraw-Hill Compenies, New York: By McGraw-Hill Education. 23rd ed.;2018:352-355
30. Alyanak B. Çocukluk ve gençlik çağında klinik sendromlar: Otizm. Ben Hasta Değilim. A Ekşi (ed). Nobel Tip Kitapları. 2. Baskı. 2011. İstanbul. 150-164
31. Hallmayer J, Cleveland S, Torres A. et al. Genetic heritability and shared environmental factors among twin pairs with autism. *Archives of General Psychiatry*. 2011;68(11):1095-102. doi: 10.1001/archgenpsychiatry.2011.76.
32. Kinney DK, Barch DH, Chayka B, et al. Environmental risk factors for autism: do they help cause de novo genetic mutations that contribute to the disorder? *Medical Hypotheses*. 2010;74 (1):102-6. doi: 10.1016/j.mehy.2009.07.052.
33. Stein MT, Reiff MI. Hyperactivity and attention deficit. In Rudolph CD, Rudolph AM, Lister GE, First LR., Gershon AA, Leventhal JM (Ed). *Rudolph's Pediatri*. By McGraw-Hill Compenies, New York: By McGraw-Hill Education. 23rd ed.;2018. 321-327

34. Biederman J. Attention-deficit/hyperactivity disorder: A selective overview. *Biol Psychiatry*. 2005;57:1215-20. doi: 10.1016/j.biopsych.2004.10.020.
35. Larson K, Russ SA, Kahn RS, Halfon N. Patterns of comorbidity, functioning, and service use for U.S. children with ADHD, 2007. *Pediatrics*. 2011;127 (3):462-70. doi: 10.1542/peds.2010-0165.
36. Nigg J, Nikolas M, Burt SA. Measured gene-by-environment interaction in relation to attention-deficit/hyperactivity disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*. 2010;49 (9):863-73. doi: 10.1016/j.jaac.2010.01.02537.
37. Braun JM, Kahn RS, Froehlich T, et al. Exposures to environmental toxicants and attention deficit hyperactivity disorder in U.S. children. *Environmental Health Perspectives*. 2006;114 (12):1904-9. doi: 10.1289/ehp.9478.
38. National Dissemination Center for Children with Disabilities. 2010. *Disability Fact Sheet-No. 7: Learning Disabilities*. Retrieved April 6, 2010 from <http://www.nichcy.org/InformationResources/Documents/NICHCY%20PUBS/fs7.pdf>.
39. Bellinger DC. Very low lead exposures and children's neurodevelopment. *Current Opinion in Pediatrics*. 2008;20 (2):172-77. doi: 10.1097/MOP.0b013e3282f4f97b.
40. Vreugdenhil HJ, Mulder PG, Emmen HH, Weisglas-Kuperus N. Effects of perinatal exposure to PCBs on neuropsychological functions in the Rotterdam cohort at 9 years of age. *Neuropsychology*. 2004;18(1):185-93. doi: 10.1037/0894-4105.18.1.185.
41. Reiff MI, Stein MT. Learning problems. In Rudolph, C.D., Rudolph, A.M., Lister, G.E., First, L.R., Gershon, A.A., Leventhal, J.M (Ed). *Rudolph's Pediatri*. By McGraw-Hill Compenies, New York: By McGraw-Hill Education. 23rd ed.;2018. 327-331.
42. Dixon SD, Stein MT. Encounters with Children: Pediatric Behavior and Development. 4th. ed. Philadelphia, PA: Mosby Elsevier, 2006: 490.
43. Lindsay RI. School failure/disorder of learning. In: Bergman AB, ed. 20 common problems in pediatrics. New York. NY:McGraw-Hill 2001:328.
44. Semerci B. Çocuk ve ergenlik döneminde klinik sendromlar: Tik bozuklukları. A Ekşi (Ed). Ben Hasta Değilim. Nobel Tip Kitapevleri, 2. Baskı. 2011. İstanbul. 219-226
45. Leckman JF, Peterson BS, Cohen DJ. Tic Disorders. In:Lewis M (Ed). Child and adolescent psychiatry. Baltimore:Williams and Wilkins, 2002:735-744
46. Kim KM, Bae E, Lee J, et al. A Review of Cognitive and Behavioral Interventions for Tic Disorder. J Korean Acad Child Adolesc Psychiatry 2021;32(2):51-62. doi: 10.5765/jkacap.200042