

Editorial

Dyslexia: Not a Mental Illness

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Introduction: Dyslexia is one of the most common learning disability specially among children that disrupts how brain processes written language.¹ Person with dyslexia experiences trouble with reading and related skills.² It's a treatable condition, and it doesn't stand in the way of success. Dyslexia and autism are separate conditions. Similarly, dyslexia and attention-deficit/hyperactivity disorder (ADHD) are also separate conditions. Dyslexia is considered a reading or learning disability. It happens because of differences in parts of your brain that process words and language.³ Some experts estimate that it affects about 7% of people worldwide, equally regardless of sex and race.¹ Some demographical data also said it affects roughly around 10% of the population globally. Including people with symptoms but without a diagnosis, dyslexia may affect up to 20% of people worldwide.¹ Among Americans about 5%-15% have some symptoms of dyslexia, like slow reading, trouble spelling, or mixing up words. Adults can have this learning disorder, but most people are diagnosed early in life. Others don't realize they have dyslexia until they get older.³ In Bangladesh, dyslexia is a new concept to most educators and parents, and many dyslexic people themselves. A study in 2015 revealed a 9.02% prevalence rate of dyslexia in the primary schools of Dhaka. Apart from this study, there is only a handful of research that has been carried out in Bangladesh which explains the oblivious attitude of common people to the condition.²

What is dyslexia?

Dyslexia is a language-based learning disability. Dyslexia refers to a cluster of symptoms, which result in people having difficulties with specific language skills, particularly reading. Students with dyslexia usually experience difficulties with other language skills such as spelling, writing, and pronouncing words. Dyslexia affects individuals throughout their lives; however, its impact can change at different stages in a person's life.^{1,4} Dyslexia during childhood known as "developmental dyslexia." Dyslexia falls under the umbrella of "specific learning disorder." That disorder has three main subtypes: Reading (dyslexia), Writing (dysgraphia), Math (dyscalculia). Dyslexia also has levels of severity: Mild, Moderate and Sever.¹

Causes

The exact cause of dyslexia is not clear.¹ Dyslexia is linked with genes, which is often runs in families. Children 30%-50% more likely to have dyslexia if one of

parents has it.³ Genetic conditions like Down syndrome can also make dyslexia more likely to happen.¹ They are neurodivergent. That means their brain formed or works differently than expected. Research shows people with dyslexia have differences in brain structure, function and chemistry. Infections, toxic exposures (air/water pollution with heavy metal like lead or manganese, nicotine, flame retardant) and other events (reading is not encouraged or where reading material is less available)^{5,6} can disrupt fetal development and increase the odds of later development of dyslexia.^{7,8} About 85% of students have a primary learning disability in reading and language processing.⁹ People with dyslexia can be very bright. They are often capable or even gifted in areas such as art, computer science, design, drama, electronics, math, mechanics, music, physics, sales, and sports.^{4,10}

Symptoms: One might not notice child has signs of dyslexia until they start school so, teacher may be the first to see the signs in preschool. Dyslexia symptoms in preschoolers are hard to learn or remember the letters of the alphabet, gets their letters and words mixed up, falls behind their peers in language skills, mispronounces familiar words, has trouble with letters (mistaking "t" for "d"), can't recognize rhyming patterns, like "Humpty Dumpty sat on a wall/Humpty Dumpty had a great fall". Dyslexia symptoms in elementary school are reads slower than kids their age, cannot tell the difference between certain letters or words, cannot connect letters with the sounds they make, writes letters or numbers backward, such as "b" instead of "d", has trouble sounding out words when they read, writes slowly, misspell easy words like "dog", says words look blurry or jump around on the page, struggles to follow instructions. Dyslexia symptoms after elementary school are withdraws socially because it's hard to communicate with peers, make errors in spelling, grammar, and punctuation, takes a long time to finish their homework or complete tests, messy handwriting, speaks slowly, avoids reading aloud, uses the wrong words, like "furnish" instead of "finish" or "lotion" for "ocean". Adults who have dyslexia may find that they have a hard time during Reading or doing things that involve reading, spelling, memorizing, or remembering words, taking notes or copying things down, understanding common sayings or jokes like put a different meaning to a set of words like "in the home stretch", doing math, learning another language, or remembering numbers such as passwords or pins, staying organized and meeting deadlines.³

Diagnosis: Although dyslexia is due to differences in brain function, no blood tests or lab screenings can detect

it. Instead, careful evaluation and testing of common signs identify someone with this reading problem.¹¹ Testing for dyslexia should look at: decoding, oral language skills, reading fluency and reading comprehension, spelling, vocabulary, word recognition.¹²

Management and Treatment

Dyslexia is not preventable. Currently, no medications treat dyslexia. Instead, educational interventions can teach effective new ways to learn and read.^{13,14} There are different tools for child can use to be an effective reader.³ Dyslexia is a lifelong condition. With proper help, many people with dyslexia can learn to read and write well. Early identification and treatment is the key to helping individuals with dyslexia achieve in school and in life. Most people with dyslexia need help from a teacher, tutor, or therapist specially trained in using a multisensory, structured language approach. It is important for these individuals to be taught by a systematic and explicit method that involves several senses (hearing, seeing, touching) at the same time. Many individuals with dyslexia need one-on-one help so that they can move forward at their own pace. In addition, students with dyslexia often need a great deal of structured practice and immediate, corrective feedback to develop automatic word recognition skills. For students with dyslexia, it is helpful if their outside academic therapists work closely with classroom teachers.¹³

Conclusion

A child with dyslexia may suffer self-esteem issues or believe they are not intelligent. They also have a higher risk of developing mental health conditions like anxiety or depression. Positive support from parents and teachers can help a child overcome these obstacles.

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