The ADHD and its detecting date back to the several centuries. Although medical professionals began to notice the symptoms in 1700s, this disorder was not formally classified until 1980. At first, this disorder was misdiagnosed as cold, fever or even some type of demonic possession. It was in 1800 that for the first time this disorder was recognized as an issue of mental health, and in 1902 a German psychiatrist named Heinrich Hoffmann established ADHD as a psychiatric disorder. In this year he wrote a book called “Hyperkinetic disorders of childhood” and he mentioned his observations of children with ADHD-like symptoms including hyperactivity, impulsive behavior, and difficulty in focusing. He also discussed various treatments for the disorder.

In the mid 1900s, different treatments were developed. These treatments were varying from behavior therapy to counseling. However, it was not until 1980s that ADHD was officially recognized by the diagnostic and statistical manual of mental disorders. From this year, research about the disorder and diagnostics started to become more usual. Professional organizations such as American Psychiatric Association started to recognize the disorder and provide resources for diagnosing and treating it. As technology developed, more accurate and accessible diagnostic tools became available. Researchers are also started to develop new treatments, including stimulant medications, cognitive behavioral therapy, psychoeducational support, and life style changes.

Despite the progress in understanding the ADHD, many myths and misconceptions continue to persist and affect the way people diagnose and treat the disorder. It is still essential for professionals to conduct through evaluations before making diagnosis and for patients to receive appropriate treatment.

Also, the history of the automatic detection of the ADHD by electroencephalogram (EEG) signals goes back to the late 1980s as well. Different studies conducted in the Netherlands in 1989 and in Germany in 1992 found that EEG recording of individuals with ADHD exhibited distinct patterns, such as increased delta and theta activity, increased alpha activity, and reduced beta activity. These findings suggested that EEG recordings could be used to detect ADHD.

N 2000s, advances in technology enabled researchers to use EEG signals for the automated ADHD detection. Studies conducted during this period shown that machine learning algorithms were able to accurately detect ADHD from EEG recordings with an accuracy of up to 97%. Since then, the researches have been focusing on improving the accuracy and reliability of these algorithms as well as developing new automated detection methods. For instance, researchers are currently looking for using the EEG data in combination with other biomarkers, such as brain structure and activity to detect ADHD.

Overall, the continued development of the advanced technologies has provided a range of opportunities for automatically detecting the ADHD. Although much progress during the years have been made in this area of study, there is still need for the further research in terms of improving accuracy and reliability of existing detection methods.