

# Children and Adolescents with Autism Spectrum Disorder: Psychopharmacologic Treatment

Javaria Usef\*

Department of Pharmacy, Ghazni University, Ghazni, Afghanistan

# ABSTRACT

Autism spectrum disorders (ASDs) are a diverse collection of illnesses characterised by a wide variety of impairments ranging from mild to severe. ASDs are diagnosed when three core deficits are present, according to the Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition, Text Revised) (DSM-IV-TR)1: (1) impairment of social interactions, (2) impaired communication, and (3) repetitive and stereotyped patterns of behaviour, interests, and activities. Aggression, self-injury, impulsivity, poor concentration, anxiety, depression, and sleep disturbance are common associated/comorbid symptoms that can become a major cause of additional suffering and impairment in functioning, even though they are not required for a diagnosis. While developments in psychopharmacology have resulted in dramatic improvements in the symptoms and prognosis of many psychiatric disorders, this has not been the case for treating ASD's basic symptoms. Applied behavioural analysis (ABA), occupational therapy, speech therapy, physical therapy, and pharmacological, psychopharmacologic therapy are the most effective treatments available today.

# INTRODUCTION

The use of drugs in the treatment of mental illnesses is referred to as psychopharmacology. Medications can help with a wide range of mental health issues. Some people are treated solely with medication, while others are treated with therapy or other treatments in addition to medication. Drug-induced deviations in thought, mood, and behaviour are also studied in psychopharmacology. A psychopharmacologist must be familiar with pharmacological mechanisms as well as the body's reactivity to various medications. A psychopharmacologist must also be able to establish and maintain a positive working relationship with each patient. Autism spectrum disorder (ASD) is a multifaceted neurodevelopmental disease that necessitates comprehensive therapy. Psychopharmacology can be a valuable component of a wide range of interventions for children and adolescents with ASD. Purpose: The current evidence supporting the use of several psychiatric drugs to treat common symptoms that typically impair functioning is reviewed in this article [1]. These symptoms include severe irritability, interfering repetitive behaviours, ADHD, anxiety, melancholy, and sleep dysregulation. The paper also includes practise recommendations based on the accumulated research. Sources: The research for this article was mostly conducted by researchers from the Research Units on Pediatric Psychopharmacology Autism Network. Randomized controlled studies, meta-analyses, open trials, and review papers make up this corpus of work. Conclusions: Currently, there are no FDA-approved drugs to treat ASD's primary symptoms. As a result, all drugs are deemed off-label, with the exception of risperidone and aripiprazole for severe irritability. Additionally, more common drugs like antidepressants and stimulants should be used with cautiously due to lower levels of effectiveness and higher rates of side effects [2,3]. Evidence suggests, however, that careful use of psychiatric medication in concert with other therapies can help children and adolescents with ASD flourish at school and at home. Psychopharmacology is a branch of psychology and psychiatry that focuses on the effects of medications on mood and behaviour. The research of the effectiveness, dose, and indications for psychoactive medications is of particular interest in this subject. Psychotropic medicines are used to treat a variety of mental health issues. Psychopharmacology is the study of drugs that are used to treat mental illnesses such depression, anxiety, and psychosis. It also comprises pain relievers for both acute and chronic pain, as well as insomnia relievers and sleep aids. The study of various drugs used to treat depression and other mental health conditions is known as psychopharmacology. A psycho-pharmacologist examines what the body does to depression medicine and what the drug does to the body in order to comprehend the psychopharmacology of depression. When symptoms are moderate to severe or have not improved with therapy alone, medication is frequently indicated. A therapist may, on occasion, recommend that you see a psychiatrist based on their clinical judgement. Anyone who wants to find out if medication could assist them can meet with a psychiatrist for

\*Correspondence to: Javaria Usef, Department of Pharmacy, Ghazni University, Ghazni, Afghanistan, E-mail: usef.javaria@gmail.com Received: September 16, 2021; Accepted: September 30, 2021; Published: October 07, 2021

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an evaluation and discussion of how drugs might fit into their treatment plan [4]. Only a licenced medical expert, such as a psychiatrist or nurse practitioner, can prescribe psychiatric drugs. Psychiatric drugs can be used to relieve symptoms temporarily in some cases. Medications may also be effective for a longer amount of time in some circumstances. Depending on what the psychiatrist and the patient agree is the most effective strategy to treat a mental health illness, medication use could last anywhere from a few weeks to several years. The best way to decide whether to start or stop taking drugs is to consult with your treating psychiatrist. The patient and the practitioner collaborate to assess the advantages of drugs against the potential hazards or side effects. Antidepressants, Benzodiazepines, Stimulants, Mood stabilisers, Antipsychotics, and other medications are examples.

### CONCLUSION

To summarise, ASD is a complicated neurodevelopmental disorder that necessitates a multidisciplinary treatment approach. Psychopharmacology should be regarded one of several options available to assist a child or adolescent with ASD. There are no drugs approved by the FDA to treat the fundamental symptoms of ASD. As a result, all drugs are considered label, with the exception

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of risperidone and aripiprazole for severe irritability. Symptoms such as excessive irritability, interfering RRBs, ADHD, anxiety, depression, and sleep disturbances are common in children with ASD. Typical drugs used to treat some of these target symptoms, such as antidepressants and stimulants, should be taken with caution due to reduced rates of efficacy and higher rates of adverse effects. A increasing body of evidence suggests that behavioural approaches to managing target symptoms can be successful alone or in combination with psychiatric medication.

## REFERENCES

- Kanne SM, Mazurek MO. Aggression in children and adolescents with ASD: prevalence and risk factors. J Autism Dev Disord 2011;41:926-937.
- Mandell D, Morales K, Marcus SC. Psychotropic medication use among Medicaid-enrolled children with autism spectrum disorders. Pediatrics 2008;121:441-448.
- Posey DJ, Stigler KA, Erickson CA. Antipsychotics in the treatment of autism. J Clin Invest 2008;118:6-14.
- Owen R, Sikich L, Marcus RN. Aripiprazole in the treatment of irritability in children and adolescents with autistic disorder. Pediatrics 2009;124:1533-1540.