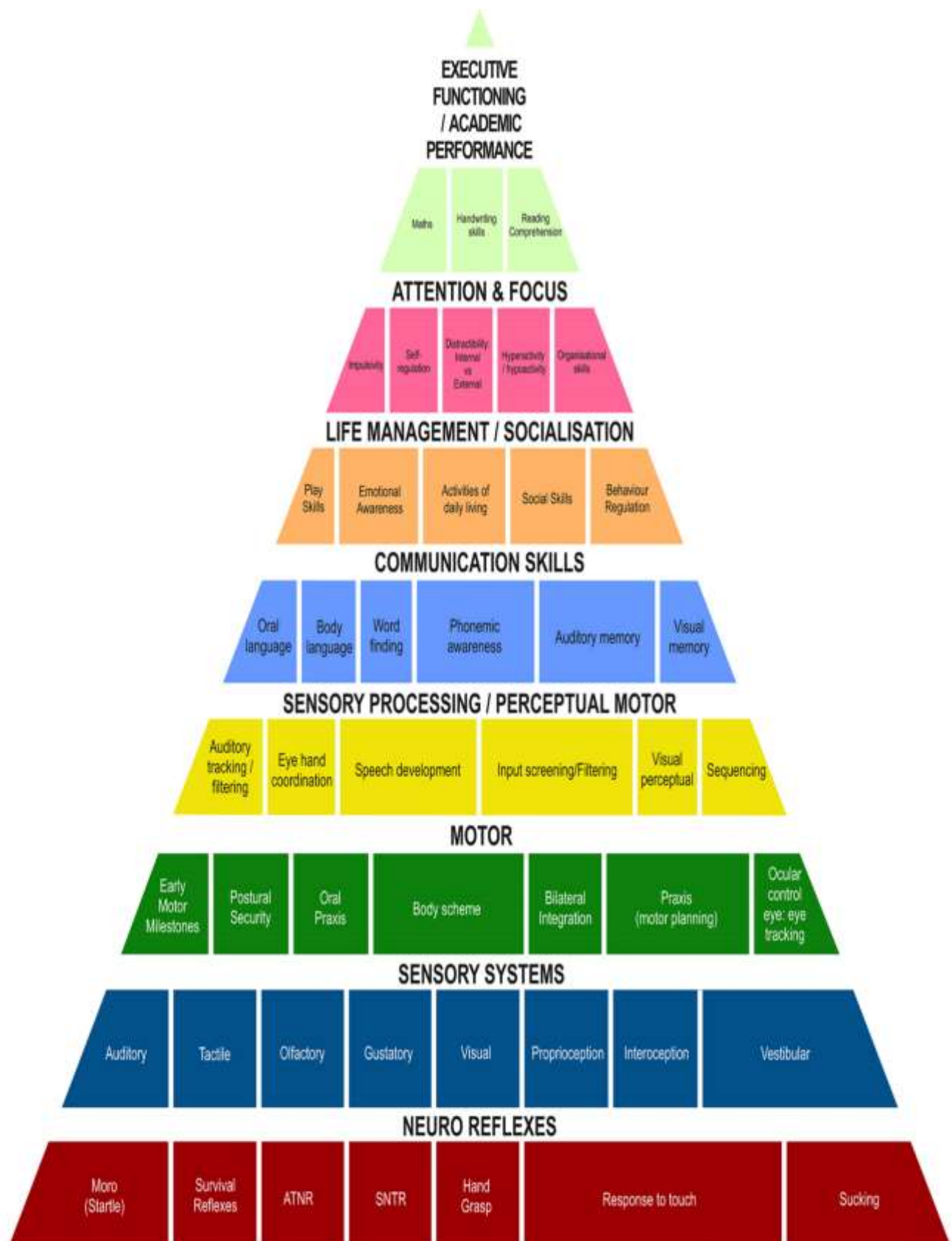


HOW TO IDENTIFY?



CONTENTS

1. AUTISM SPECTRUM DISORDER

- Early signs of autism
- Diagnostic symptoms of autism as per different domains
- Diagnostic symptoms in the social & communication domain
- Diagnostic symptoms in behavioural domain
- Areas in sensory domain
- Diagnostic symptoms in sensory domain
- Graphic symptoms overview

2. ATTENTION DEFICIT HYPERACTIVE DISORDER (ADHD)

- Symptoms of ADHD
- Inattention symptoms
- hyperactive –impulsive symptoms

3. DOWN SYNDROME

- Symptoms of Down syndrome
- Physical signs of Down syndrome
- Cognitive symptoms of Down syndrome
- Behavioral symptoms of Down syndrome

4. FRAGILE X SYNDROME

- Symptoms of fragile X syndrome
- Intellectual Domain
- Mental health problems
- Physical features
- Behavioral Domain

EARLY SIGNS OF AUTISM

Early signs of Autism can be identified, if a child misses/exhibits delayed developmental milestones in following aspects: -

- Babbling by 12 months
- Gesturing (e.g., pointing, waving bye-bye) by 12 months
- Single words by 16 months
- Two-word spontaneous (not just echolalia/repetition) phrases by 24 months
- Loss of any language or social skills at any age
- Not responding to verbal prompts or commands
- Poor eye contact



**POOR EYE CONTACT
& JOINT ATTENTION**



**OVER-SENSITIVITY
TO SOUNDS**



**LACK OF AWARENESS
TO DANGER**



**INAPPROPRIATE
LAUGHING OR CRYING**



**EXCESSIVE OBSESSION
ON A TOPIC**



**DIFFICULTY WITH
CHANGES IN ROUTINES**



**DIFFICULTY IN
MAKING FRIENDS**



**DELAYED SPEECH OR
ECHOLALIA**

DIAGNOSTIC SYMPTOMS OF AUTISM AS PER DIFFERENT DOMAINS

- Persistent deficiencies in social communication and interaction across settings like avoiding meeting people in group, crowded places, not playing with other children etc
- Restricted and repetitive behaviours, interests, or activities like lining of toys, piling of objects, fidgeting etc
- Sensitive to sounds and light tries to run away, not listening or looking in the eyes during communication/interaction



PREFERS TO PLAY ALONE



FAILS TO RESPOND TO HIS OR HER NAME



ECCENTRIC WAY OF MOVING

DIAGNOSTIC SYMPTOMS IN THE SOCIAL & COMMUNICATION DOMAIN

- Delayed social smile
- Impairment in eye-to-eye contact, facial expressions, body postures and gestures
- Lack of spontaneous sharing of enjoyment and interests with other people
- Poor social interaction and limited, delayed or no speech
- Makes inappropriate verbal sounds



AVOIDING EYE CONTACT



SENSITIVE TO SOUND



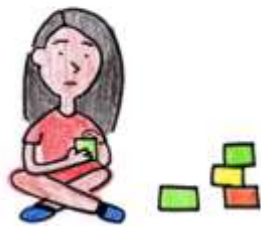
**DELAYED LANGUAGE
SKILLS**



AVOIDING EYE CONTACT

DIAGNOSTIC SYMPTOMS IN BEHAVIOURAL DOMAIN

- Body rocking, finger twirling, hand flapping, spinning and tip-toe walking
- Fascination with certain numbers, letters, schedules, animate or inanimate objects, especially parts of a toy
- Inflexible adherence to non-functional routines or rituals like upset/unsettled in new environment/experience, likes to do things in a certain way only



PREFERS TO BE ALONE



REPETITIVE MOVEMENTS



PREFERS TO PLAY ALONE

AREAS OF SENSORY DOMAIN

- Visual: - Seeing things from a particular angle
- Auditory: - pretends to be deaf, clapping hand over their ears
- Olfactory: - Sniffing objects
- Perceptual: - Refusing to eat food with certain textures or tastes
- Mouthing or series laying of objects
- Compulsive touching of certain objects or textures



SENSITIVE TO SOUND



AVOIDING EYE CONTACT

DIAGNOSTIC SYMPTOMS IN SENSORY DOMAIN

- Diminished response to pain, Increased sensitivity to touch like the feel of running water/playing with water/soap bubbles
- Averse to bathing or hygiene activities like cutting nails, combing, haircut, brushing etc
- Mood may be inappropriate to the situation or circumstances
- Uncontrollable crying or laughing or showing tantrum



SEIZURES



SENSITIVE TO LOUD NOISES



ISSUES WITH COMMUNICATION

GRAPHIC SYMPTOMS OVERVIEW



**ISSUES WITH
COMMUNICATION**



**INTOLERANCE
TO SOUNDS**



**NO EYES
FOLLOWING**



**AVERSION TO
TOUCHING**



HYPERACTIVITY



SLEEP PROBLEMS



**INAPPROPRIATE
CRYING**



**PREFERRED TO
PLAY ALONE**



**DELAYED SPEECH
DEVELOPMENT**

ATTENTION DEFICIT HYPERACTIVE DISORDER (ADHD)

Symptoms of ADHD can be classified in mainly two domains, one is Inattention and other one is hyperactive- impulsive.

Inattention Symptoms

- Fail to play close attention to details
- Appears not to listen, when spoken to directly
- Has difficulties in following instructions
- Trouble organising task and activities or keeping things on right place
- Have poor time management and easily distracted
- Avoid or dislike task that requires mental focus such as homework

Hyperactive – Impulsive

- Fidget with or tap his/her hands or feet, or squirm in the seat
- Have difficulties staying seated in the classroom or in other place
- Be constantly in motion or 'on the go' rush instead of taking time
- Climb or jump even when it's time to play quietly or inappropriate at certain situation
- Talks nonstop and blur out answer and interrupting the questioner

DOWN SYNDROME

What are the symptoms of Down syndrome?

Down syndrome causes physical, cognitive and behavioral symptoms. Not all people with Down syndrome have all of these symptoms. Symptoms and their severity are different from person to person.

Physical signs of Down syndrome



Physical signs of Down syndrome are usually present at birth and become more apparent as your baby grows. They can include

- A flat nose bridge.
- Slanted eyes that point upward.
- A short neck.
- Small ears, hands and feet.
- Weak muscle tone at birth.
- Small pinky fingers those points inward towards the thumb.
- One crease in the palm of their hand (palmar crease).
- Shorter-than-average height.

As child grows, additional symptoms can also arise like:

- Ear infections or hearing loss
- Vision problems or eye diseases
- Dental problems
- Being more prone to infections or illnesses
- Obstructive sleep apnea
- Congenital heart disease

Cognitive symptoms of Down syndrome

Your child with Down syndrome may have cognitive development challenges as a result of their extra chromosome. This can cause intellectual or developmental disabilities. Your child's ability to meet developmental milestones, or things that your child can do at a certain age, may differ from other children, including how they:

- Walk and move (gross and fine motor skills)
- Speak (language development skills)
- Learn (cognitive skills)
- Play (social and emotional skills)

As a result, child may take longer to do the following things:

- Toilet training
- Speaking their first words
- Taking their first steps
- Eating food independently

Behavioral symptoms of Down syndrome

Child diagnosed with Down syndrome may exhibit behavioral symptoms.

- Stubbornness and tantrums
- Difficulty paying attention
- Obsessive or compulsive behaviors

FRAGILE X SYNDROME

Symptoms of fragile X syndrome

Fragile X syndrome affects your child's intelligence, mental health, physical features and behavior. Common symptoms in each category include:

Intellectual Domain

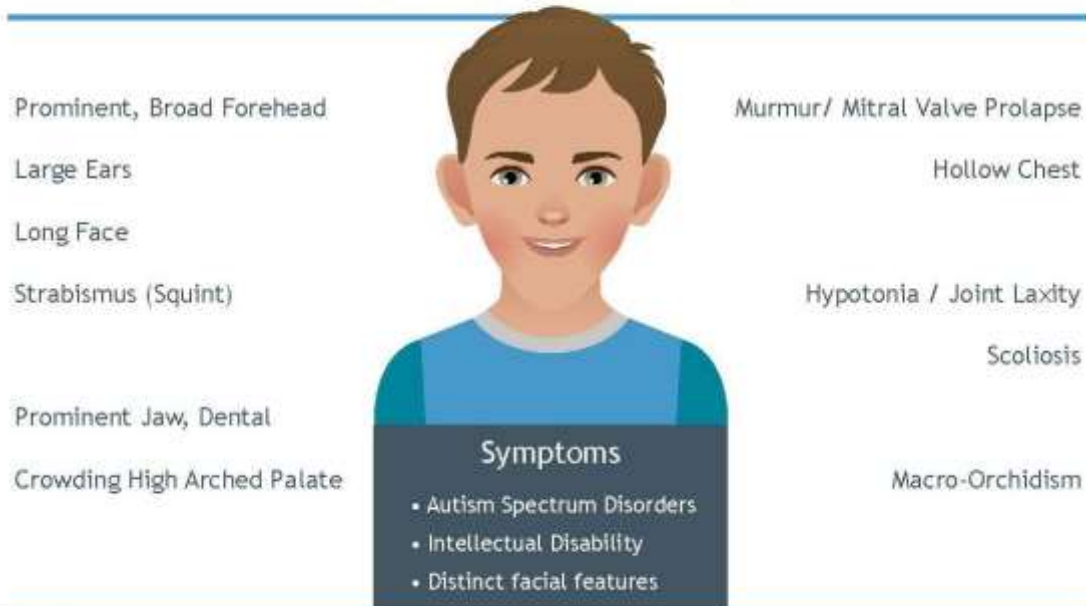
- Learning disabilities
- Low intelligence quotient (IQ)
- Delayed early developmental milestones. Milestones are social/emotional, language/communication, cognitive (thinking, learning, problem-solving) as well as movement/physical development
 - Delayed development of nonverbal communication such as using gestures, body language and facial expressions
 - Language processing disorder

Mental health problems that may arise during life

- Anxiety
- Depression
- Obsessive compulsive behaviors

Physical features

Fragile X syndrome: Common Physical Features



SYMPTOMS

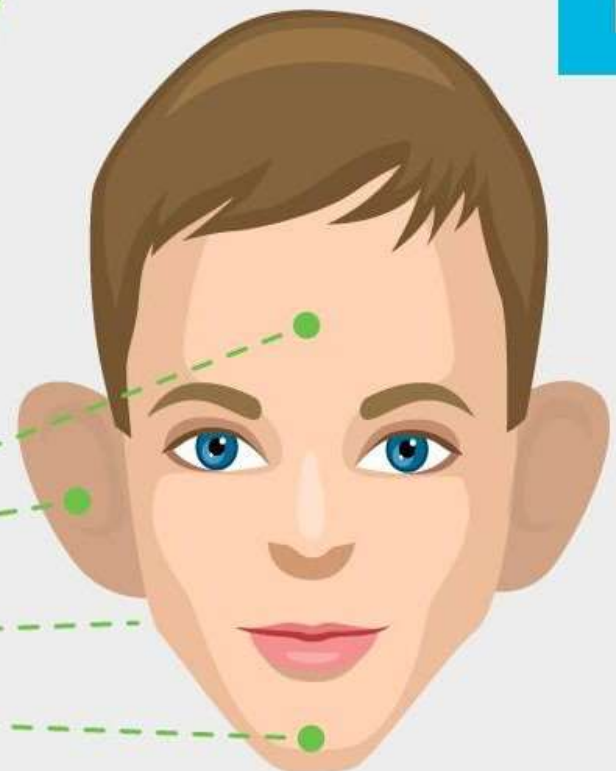
- Autism spectrum disorders
- Intellectual disability
- Abnormal facial features

PROMINENT FOREHEAD

LARGE EARS

LONG FACE

PROMINENT JAW



- A long, narrow face
- A large forehead
- A large jaw
- Soft skin
- Large ears and crossed/lazy eyes
- Very flexible or double-jointed fingers
- Flat feet
- Enlarged testicles (in males, after puberty)
- A high-arched palate (the roof of the mouth)
- Low muscle tone

Behavioral Domain

- Attention-deficit/hyperactivity disorder (ADHD)
- Social anxiety, shyness
- Flapping or biting their hands
- Poor eye contact
- Sensory disorders – sensitivity to crowds, touch, sounds, foods and textures
- Aggressiveness or irritability. People with FXS in addition to autism spectrum disorder are more likely to be aggressive
- Self-injury behaviors