

INDIAN ACADEMY OF PEDIATRICS

IAP CHAPTER OF NEURO DEVELOPMENTAL PEDIATRICS

RED FLAGS FOR EARLY IDENTIFICATION OF AUTISM

A. SPEECH AND LANGUAGE SKILLS

Between the ages of 1-2 years, a child should have a meaningful vocabulary of 50 - 100 words. The child should say his first meaningful word by the age of 1 year such as Mamma, baba, dada, bye-bye. Speech is the ability to express thoughts and feelings by articulate sounds. It includes articulation, voice and fluency. Speech is the physical production of spoken language.

Language is made up of socially shared rules that include Semantics, Syntax, Phonology and Pragmatics. Receptive Language means the ability to understand an incoming message and what has been said. Expressive Language is the ability to formulate an outgoing message. Language can also be Verbal or Non Verbal.

RED FLAGS FOR SPEECH AND LANGUAGE SKILLS:

- a) A child who has not said his / her first meaningful word by the age of 16 - 18 months
- b) A child who is not able to make a 2 word phrase by 2 years
- c) A child who may have said his / her first words by 18 months but subsequently the development did not keep pace.
- d) A child who may have said his / her first syllables between 9 - 18 months but this regressed.
- e) A child who developed good eye contact and social smile with mother by the age of 2-4 months but these skills started regressing by the age of 9-18 months.
- f) Other associated deviancies
- g) A child around who has echolalia / neologisms, no meaningful words, uses jargon of meaningless words

B. COMMUNICATION SKILLS

Communication Skills refer to the ability to convey information from one person to another. Communication is conveyed through words and actions. It involves the ability to understand others, and to express one's self through words or actions. Communication can be Receptive, Expressive, or Interactive.

RED FLAGS FOR COMMUNICATION SKILLS:

- a) Lack of meaningful eye contact
- b) Lack of age appropriate gestures (pointing, waving)and facial expressions
- c) Lack of ability to initiate or sustain a conversation
- d) Lack of ability to follow non verbal communication by 12 months of age
- e) Lack of Joint Attention and Social Referencing
- f) Lack of Protodeclarative Pointing

C. Social AND PERSONAL Skills

Social skills refer to the ability to interact effectively with peers and others. They include Inter - personal skills, social responsibility, self esteem, social problem solving, gullibility and the ability to follow rules / obey rules. They also include the ability to understand and comply with social rules, customs, and standards of public behavior. Personal Independence refers to the ability to take care of your own self. Some examples are bathing, dressing, and feeding. It also includes the ability to safely complete day-to-day tasks without guidance.

RED FLAGS FOR SOCIAL & PERSONAL SKILLS

- a) Lack of Social and Emotional Reciprocity
- b) Has difficulty making friends
- c) Lack of seeking to share enjoyment, interests, or achievement
- d) Failure to develop age-appropriate peer relationships.
- e) Difficulty in understanding the concept of age appropriate play
- f) Difficulty in differentiating between family members and outside visitors
- g) Age Appropriate ADL's not attained (Activities of Daily Living)

D. SENSORY ISSUES AND SENSORY PROCESSING DISORDER

Children with Autism often have trouble effectively processing information that comes into the brain through the senses and this interferes with the ability to understand and interpret what is in the environment around them. The normal process of Sensory Integration begins before birth and continues throughout life, with the majority of SI development occurring before the early teenage years. For most children sensory integration develops in the course of ordinary childhood activities. But for some children, sensory integration does not develop as efficiently as it should. This is known as dysfunction in sensory integration

Sensory Processing refers to the way the nervous system receives messages from the senses and turns them into appropriate motor and behavioral responses. Processing information normally correctly involves:

- Registration - The information actually reaching the brain through the sensory channel (problems in registration might include blindness, hearing loss, etc.).
- Modulation - The brain is normally able to filter the various incoming messages for what is meaningful and what is not, and helping choose the information to focus on
- Integration - The brain is able to organize the incoming information, analyze it accurately, choose a reaction, and follow through on the action.

Sensory Processing Disorder is a condition that exists when sensory signals don't get organized into appropriate responses. It is like a neurological "*traffic jam*" that prevents certain parts of the brain from receiving the information needed to interpret sensory information correctly. This condition creates great challenges in performing countless everyday tasks for children with Autism. Sensory

issues can affect mood (anxiety and depression), social skills, behavioural breakdowns, and learning.

E. MAJOR CONCERNS AND CHALLENGES IN A CHILD WITH AUTISM

- a. Social Challenges - Absence of Reciprocal Social Interaction
- b. Communication Difficulties
- c. Stereotyped, Repetitive Behaviors
- d. Inappropriate Emotional Responsiveness
- e. Sensory Issues
- f. Co- morbidities such as Hyperactivity and Inattentiveness
- g. Earliest symptoms are absence of normal behavior not presence of abnormal ones
- h. Uneven Cognitive skills, regardless of level of intelligence

Dr SAMIR DALWAI
CHAIRPERSON, IAP CND

Dr SS KAMATH
PRESIDENT CIAP 2015

Dr CHHAYA PRASAD
SECRETARY, IAP CNDP