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Printed Matter



March 2017

Special Children **need** Special Care



CONTENT

- 04 Message from CMD
- 05 Foreword by Dr S Prakash
- 06 The Journey alongside the spectrum
- 07 Myths and Facts
- 08 Can communication disorders be identified
- 09 Parents Love for that special child
- 10 Autism Spectrum Disorders
- 15 Down Syndrome
- 19 Working with Special Needs Children
- 22 Approaching Autism
- 27 Dental Needs in Special Children
- 30 Cerebral palsy
- 32 Physiotherapy for Special Children
- 36 Parenting – A Role Perspective

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Upcoming issue will focus on Bone and Joint Diseases.



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Dr. S. Prakash

Editorial Board Members:
Dr. Asiya Shahima Khan
Dr. S. Philip Chandran
Dr. C.B. Krishna Kumar

Corporate Office :
Star Health and Allied Insurance Company Ltd., #1, New Tank Street, Valluvar Kottam High Road, Nungambakkam, Chennai – 34.
Email: editor@starhealth.in



MESSAGE FROM CMD

My Dear Policyholder,

Wish you a Happy, Healthy and Prosperous New Year.

I am glad to inform you that our Company has completed 2000 crore premium as on 27th January, 2017. This landmark in the life cycle of our Company could become a reality only with continued patronage of the customers like you.

You are aware that all our operations spin around the customer as the focal point. To bring awareness to customers, our Company brings out a Quarterly Health Magazine. The Magazine for the first quarter of this year is on Autism Spectrum Disorder (ASD). I am confident that the articles contributed by experts will be informative and educative to the readers.

Always at your service
with kind regards,

V. JAGANNATHAN
Chairman-cum-Managing Director



FOREWORD

Greetings from your very own "Star Health"....

Autism Spectrum Disorder (ASD) is a condition now affecting people across the Globe and India is no exception. Children, in general, are special, while those with ASD all the more so. There is a need to change the perception of society towards children with special needs. We need to work towards providing equal opportunities to the children with special needs. At Star Health we do not discriminate!!

This magazine is our continuing effort to ensure that our customers are looked after and are empowered with knowledge to understand and accept ASD better.

The professionals who contribute articles in our magazine, as always, are chosen based on their proficiency and I am confident that each one of you will benefit from their updated expertise. On this occasion I congratulate all the authors for their valuable inputs and members of the Editorial Board for their determination and efforts to bring out this magazine with customer-centric topics.

Dr. S. PRAKASH, MS., FRCS (Glasg) FAIS
Senior Executive Director
STAR HEALTH AND ALLIED INSURANCE CO. LTD

The Journey alongside the spectrum

- A Mother's Story

Gayathri Sridhar, Mother of 9 years old Anirudh

When I was told that my dear child was in autism spectrum, I was clueless about the way to go further and hardly could I accept. But my little Buddha had re defined our journey of life exposing the colors of spectrum making every day so vibrant with a quest to conquer. They said "no two children in spectrum are same and behaviors are no-ending ordeals". Yes indeed no two humans are same though described as neuro typical and don't we the so called normal people exhibit behaviors in every stage of life and in every change of situation?

Then what is this label for? I have my own label. Autism to Awesome!.. A beautiful way of being. He is not a child with disease or disability but is designed by Nature to get connected by soul and not by deeds. The more I was looking for an answer through inner self connection I started to enjoy keeping my rhythm to learn, update and facilitate to get aligned with my son.

We started to "live this moment", stopped worrying about acceptance by society and questions like "what after me?"

It's all about re discovering the child in you and being a buddy keeping your child in first place. In our family he is not special but equal. We include him in every way and discuss every crucial thing with him trusting that he understands and participate. I worked ahead giving him exposure in neighborhood bonding and made sure that he is respected more than accepted, just like you and me. Probing his strengths and needs we structured routines and give him sensory diets. A hammock between windows, involving him in kitchen activities, beautiful water play at bathing time, blowing bubbles over the balcony, feeding birds and kick-scooter driving from room to room.., every small thing does bring magical moments along!

"kindness, unconditional love, honesty, simplicity, spirituality, living the moment and absolute acceptance"

Every behavior is a mode of communication. It has a purpose. Looking closely at it we can unwind many a knots and help the child to bloom beautifully. Now I am laughing at the declaration by a few specialists that autistic children show inappropriate emotions. May be their sensory needs are exhibited like inappropriate emotions. Sensory integration in a lovely natural way exposed the passionate side of my child. The personal diary written by ASD adult Aishwarya @ Aishy exposes the emotional quotient of the children in the spectrum quite beautifully.

Training on self help, helping in house hold activities, enjoying culinary skills for olfactory needs, sports for hormone balance, skill training for safety and vocational benefits, social exposure through simulation along with academics according to the interest and ability of the child helps molding them into awesome beings spreading a colorful spectrum of "kindness, unconditional love, honesty , simplicity, spirituality, living the moment and absolute acceptance". You are chosen to explore the colors and expand the horizon of the SPECTRUM. It's just awesome!! Love Light and Energy to dear co passengers!

" It takes someone really brave to be a mother, someone strong to raise a child and someone special to love someone more than herself "

- Lilly



Myths and Facts about "High-Functioning" Autism, Asperger's Syndrome, PDD-NOS-Pervasive Developmental Disorder - Not Otherwise Specified

DR PHILIP CHANDRAN M.CH (CONSULTANT PEDIATRIC SURGEON, CHENNAI)
DR ASIYA KHAN MBBS, PG DIP (HEALTH SCIENCES)

Myth: People with "higher-functioning" Autism Spectrum Disorders have a mild disability and need next to nothing in the way of support.

Fact: People with "high functioning" Autism Spectrum Disorders are often quite severely disabled. They need support and services in the areas of relationships, social care, living skills, respite and community integration, health, housing, education, employment, etc. "High-functioning" means that they are higher functioning than other people with Autism Spectrum Disorders, not that they are high functioning in relation to the typical population.

Myth: HF ASD (High Functioning Autism Spectrum Disorder) is just a learning disability like ADHD or Dyslexia.

Fact: There are significant differences in brain development from age 8 – 10 months for all people on the Autism Spectrum. High-functioning Autism Spectrum Disorder affects many, many areas. For instance, it often affects the person's physical coordination. It affects the person's ability to receive information from their senses – sight, hearing, touch, taste, smell, proprioception and vestibular sense. People with learning disabilities are

often able to function well in social situations, whereas, those with ASDs aren't. Even when specifically taught, HF ASD individuals do not learn relationship and social skills as quickly as others.[2]

What is Intelligence?

"Intelligence" is a general mental ability representing the global capacity of the individual to act purposefully, to think rationally, and to deal effectively with the environment. (Niolon Richard, Ph.D)

" The world is made up of two kinds of people... The one's who think they are normal and the one's who know there is no such thing. "

Can communication disorders be identified before the age of 2?

DR ROOPA NAGARAJAN M.Sc ,MS (SP and A)
HOD-SPEECH LANGUAGE AND HEARING SCIENCES -SRMU

In India, approximately 3 million children (Census of India, 2011) exhibit communication disorders. These include children with developmental disabilities such as autism, intellectual disability, attention deficit hyperactive disorder, learning disability, hearing loss and so on. 'Red flags' for communication disorders can be observed well before the child begins to speak before 2 years of age. These include:

- Difficulty in feeding or swallowing
- No or inconsistent response to sounds or name call
- Limited sound production during play
- No or limited imitation
- No first word till 12 Months of age
- No interest in play or people
- Obsessed with a specific object or its part or routine

In addition to these, concerns reported by parents should be evaluated by an Audiologist and Speech Language Pathologist (ASLP) at a medical centre or clinic or school. Several standardised tools are available to assess hearing abilities, communication and swallowing skills in children as young as few days. This early identification facilitates early intervention through specific strategies suitable for the child. Intervention programmes for newborns, infants and young children are often play-based and empower parents or caregivers to facilitate communication in their children. Speech therapy intervention often focuses on improving communication skills with respect to speech clarity or fluency or voice quality or swallowing or vocabulary or sentence length.

In India, ASLPs are qualified allied health professionals with a minimum of four year educational qualification recognised by the Rehabilitation Council of India. More about ASLPs and the details to contact them can be viewed at Rehabilitation Council of India's (<http://rehabcouncil.nic.in/>) or Indian Speech and Hearing Association's website (<http://ishaindia.org.in/>).

Parents Love for that special child

A Child is the ultimate gift from above

Be it a special child and all one feels is love

Being a parent isn't a cake walk

But being the parent here causes a lot of hushed talk

Only once you spend time with that child

Are you so fascinated that its imagination can run so wild

Yes! It requires a lot of hardwork and strength

However for the love from that child , all rules can be bent

So take some time to ponder and understand

That every special child is that coral among the sand

The work to be done could seem like a hugh pile

But that smile of your kids face make everything worthwhile !!

Ms. Zaha Shakir (B.Sc Psychology)

“ If every Child matters, every child has the right to good start in life. If every child matters, every child has the right to be included. And that is so important for children with special needs.”

- Cherie Blair



DR BISWAJIT BANERJEE MD
CONSULTANT PSYCHIATRIST KOLKATA
(NEURO- PSYCHIATRY) NIMHANS



Autism spectrum disorder (ASD) is a developmental condition associated with abnormal connectivity of the frontal lobes which is linked to aberrant developmental trajectories of the frontal networks that persist in adult life. Also it has been seen that male adults with autism spectrum disorder have regional differences in brain anatomy, which correlate with specific aspects of autistic symptoms.

It is said that Leo Kanner discovered and contributed to the Autism disorder, Hans Asperger and other researchers made great contributions to the disorder.

AUTISM

These are common characteristics children with autism may have, but not everyone will have these characteristics and how severe they are also changes from person to person.



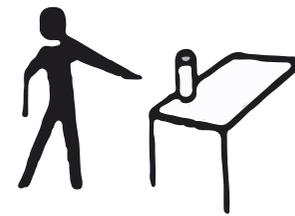
Repetitive style of playing



Might not want to look people in the eyes



May prefer to be alone



Might have trouble speaking



Prefers to do things the same way, like following the same routine or eating the same food



May echo words or phrases others say



Might enjoy spinning objects or spinning themselves

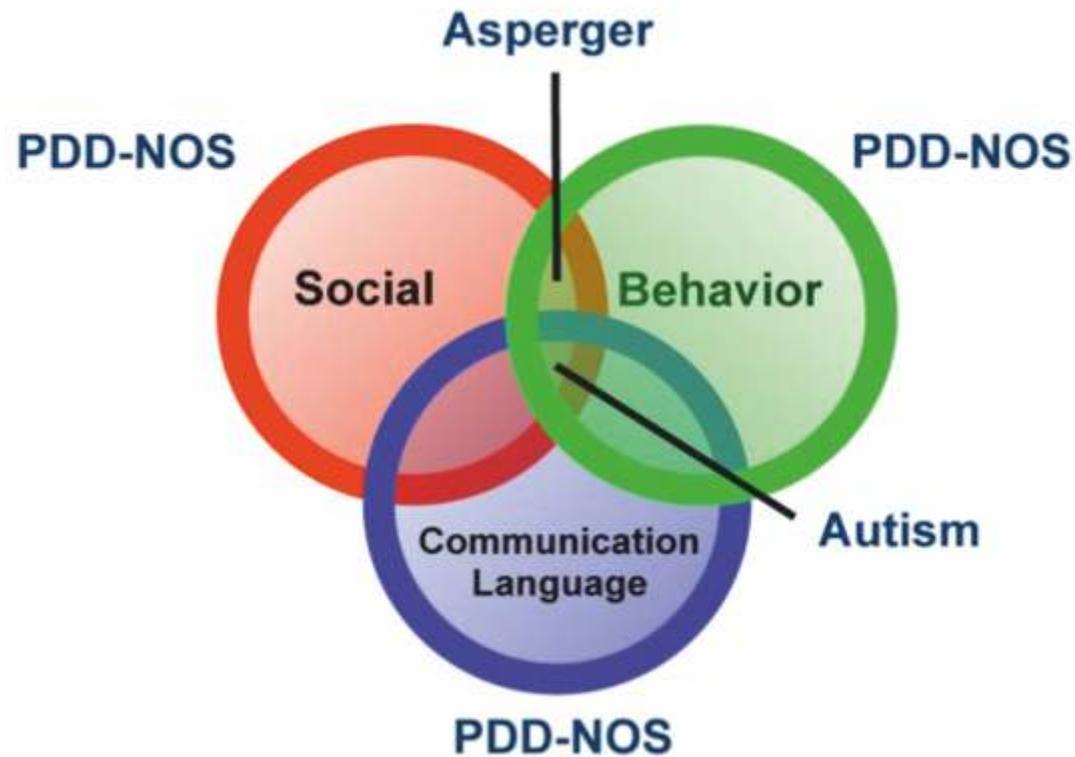


May have trouble playing or talking with other children

“If you ask 99.9 percent of parents who have children with autism if we'd rather have the measles versus autism, we'd sign up for the measles.”

-Jenny McCarthy

OVERLAP AMONG AUTISM SPECTRUM DISORDER



GENETIC BASIS-Until recently, the genetic etiology of ASD has remained obscure. Over the last decade, however, a key role for de novo germline mutation has been established definitively. Such mutations have led to the discovery of dozens of ASD risk loci and genes. In short, various studies support the conclusion that large-effect de novo mutations contribute to ASD risk apart from intellectual disability.



Behavior and Development Programs



Education and Learning Programs



Medications



Other Treatments and Therapies



TREATMENT

- **In early childhood**, - focus is on the acquisition of language, play skills, joint attention, and effective communication strategies through intensive behavioral and educational interventions, particularly Applied Behavioral Analysis (ABA).
- **Middle childhood and adolescence** - focus is on continued skills acquisition, including development of social skills, peer relationships, and maximizing supports for academic weaknesses.
- **In older adolescence and young adulthood** - focus is on developing vocational and adaptive living skills to maximize opportunities for independence.
- **In adulthood** - focus is on ensuring opportunities for social, leisure, and vocational activities, maintaining physical health through diet and exercise, and support for transitions in caregiving as parents age. Clinicians should be careful of various medical complications that can affect behavior and may not be readily apparent in individuals with limited verbal abilities, including gastrointestinal problems, seizures, etc. Various pharmacological interventions are primarily aimed at ameliorating the emotional and behavioral symptoms that accompany ASD.

To date, no medications are approved for the treatment of core symptoms of ASD, including social communication deficits, and stereotypic behaviors and interests. Pharmacologic interventions in ASD are primarily aimed at reducing maladaptive symptoms—inattention, impulsivity, hyperactivity, compulsions, anxiety, sleep disturbance, and irritability—namely severe tantrums, self-injury, and aggression.

Pharmacological Interventions:

Atypical antipsychotics like- risperidone, aripiprazole, etc are used for the treatment of severe irritability in ASD.

Antidepressants like SSRIs and other antidepressants may be helpful for treatment of depression, obsession and anxiety, which are particularly common in higher-functioning individuals with ASD.

Anticonvulsants and muscle relaxants like sodium valproate, baclofen etc may be helpful for the treatment of associated seizure disorders, spasticity etc if any.

Alpha-2 agonists- like clonidine, are often used in the treatment of comorbid ADHD symptoms—particularly hyperactivity and impulsivity.

Behavioral Therapy:

Behaviorally based therapies, including Applied Behavioral Analysis (ABA) and cognitive behavioral therapy (CBT), may be helpful for alleviating symptoms of depression, anxiety, and impaired self-regulation.

Hyperbaric oxygen therapy (HBOT) is proposed to improve oxygen levels in the body, which leads to decreased inflammation and less oxidative stress in ASD patients.

Speech Therapy:

Speech and Communication Therapy-evaluation by a speech-language pathologist experienced in the use of Alternative and Augmentative Communication (AAC) methods for individuals with ASD is recommended

Sensory integration approaches are often utilized in occupational therapy for individuals with ASD

Parent Management Training: has been found effective in reducing parental stress and improving management of problematic behaviors such as aggression, non-compliance, and self injury in children with ASD

DIET AND LIFE STYLE MODIFICATIONS:

Gastrointestinal (GI) symptoms are common among individuals with ASD- prevalence in studies ranging from 9 to 91 % . Gluten-free and casein-free (GC/CF) diets are commonly sought by patients based on anecdotal evidence. However, there is an insufficient evidence basis in the medical literature to support the use of a GF/CF diet Careful interventions should be taken regarding various nutritional / vitamin supplements .

CONCLUSION / RECOMMENDATIONS

- Enhance parent & professional education in the community about ASD - focus on screening tests, group participation, (disseminating information about ASD & access to treatment facilities) etc.
- Remove Professional hesitancy in giving early diagnosis-By removing the stigma linked to it (by providing information to the general public in a positive manner)
- Fill up Lack of trained professionals, take up community base programmers, increase resources, improved referral process for treatment etc.
- Improve the Inadequate insurance coverage in this field- Thereby reducing the financial burden in the families harboring the ASD children particularly in developing countries like us where rehabilitation of this disabled Children is a big problem



Down Syndrome

DR GURDEV CHOWDHARY MD (PEDIATRICS) DM (NEONATOLOGY)
DIRECTOR, ANKUR KIDS HOSPITAL JALANDHAR (PUNJAB)

In every cell in the human body there is a nucleus, where genetic material is stored in genes. Genes carry the codes responsible for all of our inherited traits and are grouped along rod-like structures called chromosomes. Typically, the nucleus of each cell contains 23 pairs of chromosomes, half of which are inherited from each parent. Down syndrome occurs when an individual has a full or partial extra copy of chromosome 21.

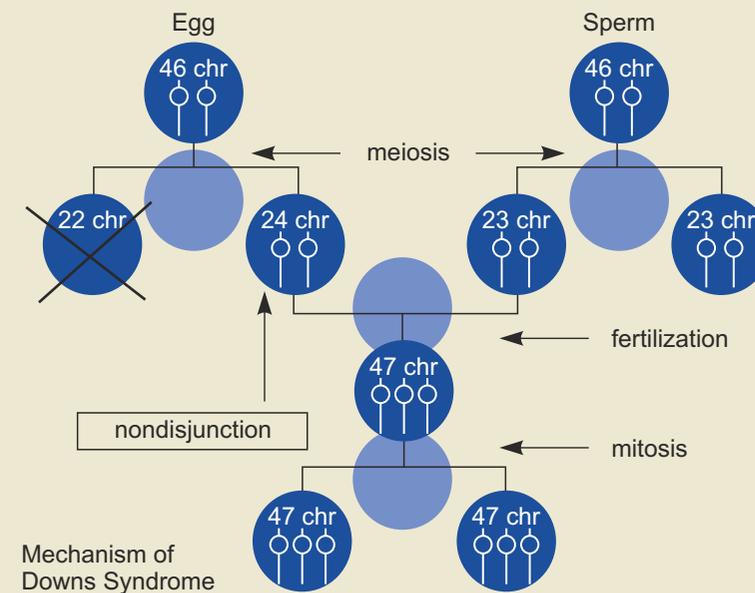
How common is Down Syndrome?

One in every 691 babies is born with Down syndrome, making Down syndrome the most common genetic condition. Exact Indian data is not available but approximately 400,000 Americans have Down syndrome

and about 6,000 babies with Down syndrome are born in the United States each year.

When was Down Syndrome discovered?

For centuries, people with Down syndrome have been alluded to in art, literature and science. It wasn't until the late nineteenth century, however, that John Langdon Down, an English physician, published an accurate description of a person with Down syndrome. It was this scholarly work, published in 1866, that earned Down the recognition as the "father" of the syndrome. Although other people had previously recognized the characteristics of the syndrome, it was Down who described the condition as a distinct and separate entity.



Maternal age is the only factor that has been linked to an increased chance of having a baby with Down syndrome resulting from nondisjunction or mosaicism. However, due to higher birth rates in younger women, 80% of children with Down syndrome are born to women under 35 years of age.

There is no definitive scientific research that indicates that Down syndrome is caused by environmental factors or the parents' activities before or during pregnancy.

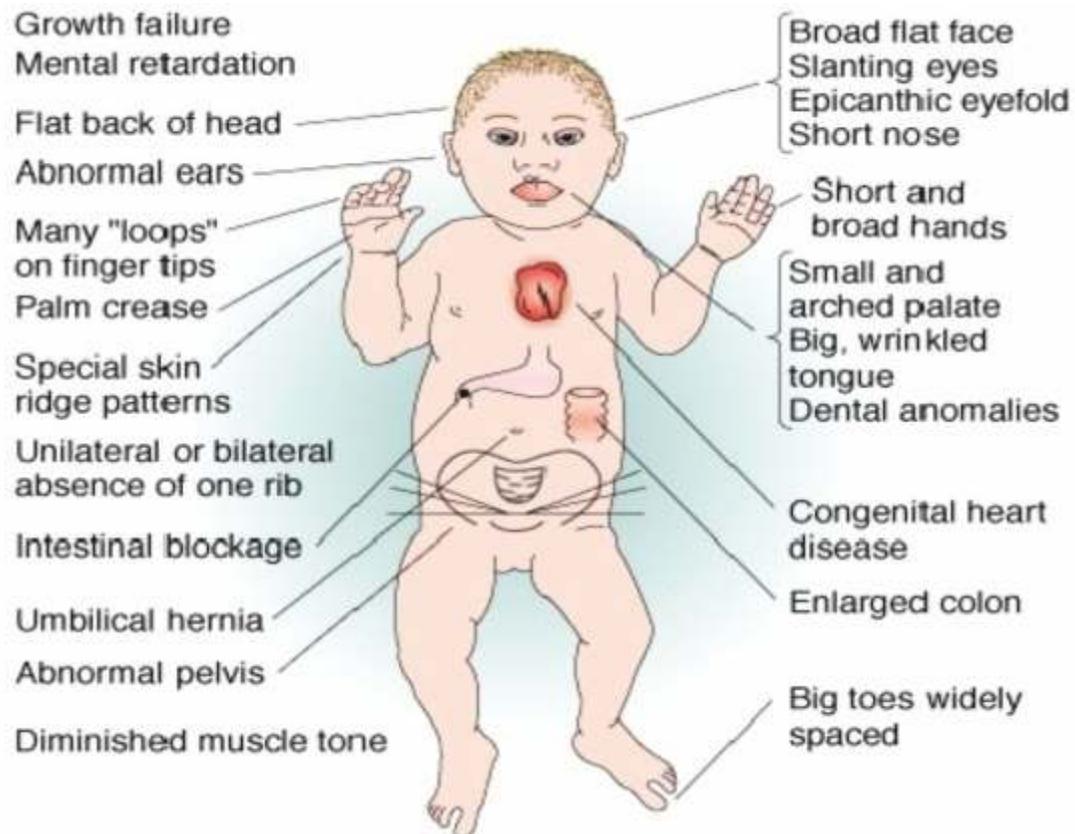
What is the Likelihood of Having a Child with Down Syndrome?

Down syndrome occurs in people of all races and economic levels,

though older women have an increased chance of having a child with Down syndrome. A 35 year old woman has about a one in 350 chance of conceiving a child with Down syndrome, and this chance increases gradually to 1 in 100 by age 40. At age 45 the incidence becomes approximately 1 in 30. The age of the mother does not seem to be linked to the risk of translocation.

Maternal Age	Incidence of Down Syndrome	Maternal Age	Incidence of Down Syndrome
20	1 in 2,000	40	1 in 100
21	1 in 1,700	41	1 in 80
22	1 in 1,500	42	1 in 70
23	1 in 1,400	43	1 in 50
24	1 in 1,300	44	1 in 40
25	1 in 1,200	45	1 in 30
26	1 in 1,100	46	1 in 25
27	1 in 1,050	47	1 in 20
28	1 in 1,000	48	1 in 15
29	1 in 950	49	1 in 10

Phenotypic features of Down syndrome



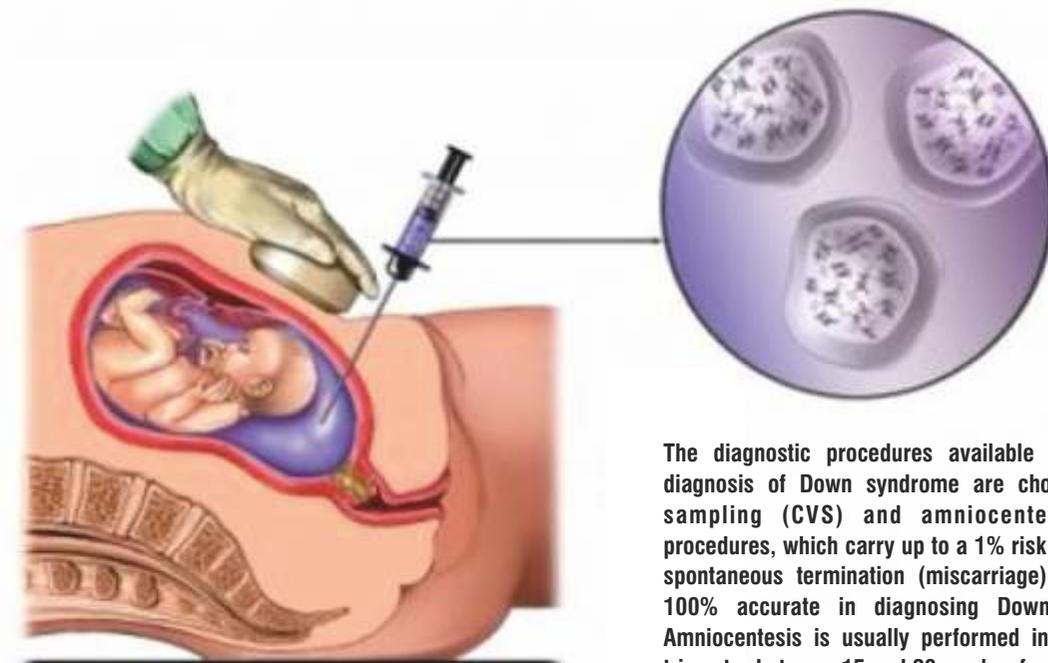
Since many couples are postponing parenting until later in life, the incidence of Down syndrome conceptions is expected to increase. Therefore, genetic counselling for parents is becoming increasingly important. Still, many physicians are not fully informed about advising their patients about the incidences of Down syndrome, advancements in diagnosis, and the protocols for care and treatment of babies born with Down syndrome.

How is Down Syndrome diagnosed?

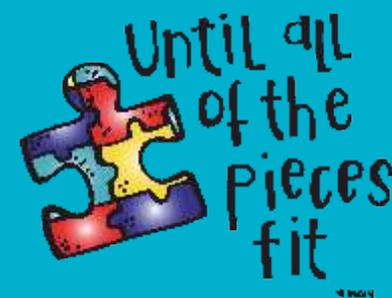
PRENATALLY

There are two categories of tests for Down syndrome that can be performed before a baby is born: screening tests and diagnostic tests. Prenatal screens estimate the chance of the fetus having Down syndrome. These tests do not tell you for sure whether your fetus has Down syndrome; they only provide a probability. Diagnostic tests, on the other hand, can provide a definitive diagnosis with almost 100% accuracy.

There is an extensive menu of prenatal screening tests now available for pregnant women. Most screening tests involve a blood test and an ultrasound (sonogram). The blood tests (or serum screening tests) measure quantities of various substances in the blood of the mother. Together with a woman's age, these are used to estimate her chance of having a child with Down syndrome. These blood tests are often performed in conjunction with a detailed sonogram to check for "markers" (characteristics that some researchers feel may have a significant association with Down syndrome). New advanced prenatal screens are now able to detect chromosomal material from the fetus that is circulating in the maternal blood. These tests are not invasive (like the diagnostic tests below), but they provide a high accuracy rate. Still, all of these screens will not definitively diagnose Down syndrome. Prenatal screening and diagnostic tests are now routinely offered to women of all ages.



The diagnostic procedures available for prenatal diagnosis of Down syndrome are chorionic villus sampling (CVS) and amniocentesis. These procedures, which carry up to a 1% risk of causing a spontaneous termination (miscarriage), are nearly 100% accurate in diagnosing Down syndrome. Amniocentesis is usually performed in the second trimester between 15 and 20 weeks of gestation, CVS in the first trimester between 9 and 14 weeks.





AT BIRTH

Down syndrome is usually identified at birth by the presence of certain physical traits: low muscle tone, a single deep crease across the palm of the hand, a slightly flattened facial profile and an upward slant to the eyes. Because these features may be present in babies without Down syndrome, a chromosomal analysis called a karyotype is done to confirm the diagnosis. To obtain a karyotype, doctors draw a blood sample to examine the baby's cells. They photograph the chromosomes and then group them by size, number, and shape. By examining the karyotype, doctors can diagnose Down syndrome. Another genetic test called FISH can apply similar principles and confirm a diagnosis in a shorter amount of time.

What Impact does Down Syndrome have on society?

Individuals with Down syndrome are becoming increasingly integrated into society and community organizations, such as school, health care systems, work forces, and social and recreational activities. Individuals with Down syndrome possess varying degrees of cognitive delays, from very mild to severe. Most people with Down syndrome have cognitive delays that are mild to moderate.

Due to advances in medical technology, individuals with Down syndrome are living longer than ever before. In 1910, children with Down syndrome were expected to survive to age nine. With the discovery of antibiotics, the average survival age increased to 19 or 20. Now, with recent advancements in clinical

treatment, most particularly corrective heart surgeries, as many as 80% of adults with Down syndrome reach age 60, and many live even longer. More and more people are interacting with individuals with Down syndrome, increasing the need for widespread public education and acceptance.

“ I hear things more loudly

I see things more clearly

I smell things more strongly

I feel things you don't

I taste things differently

I have autism ”

Working with Special Needs Children and Issues Pertaining to them

SINDU S. KUMAR, PRINCIPAL , SANKALP
 EVELYN JOHN, VICE PRINCIPAL, SANKALP
 THE OPEN SCHOOL LEARNING CENTRE CHENNAI

Every child has a different learning style and pace of learning. Each child is “Unique”, not only capable of learning but also capable of succeeding.

Children with special needs can be defined as an umbrella under which number of diagnosis can be included, ranging from children with developmental delays to Neurological impairments. Following are the disabilities which fall under this category. Visual impairment, Hearing impairment, Cerebral palsy, Mental retardation, Learning disability (Dyslexia, Dysgraphia, Dyscalculia) ADHD or ASD. They might have mild or serious disorders which may lead to psychological and behaviour stress.

Getting professional help at an early stage and early intervention can make a tremendous difference in their quality of life and their later development. They require a specially designed instruction and a structured environment hence seeking support or intervention from a special school might help the child towards improvement.





A Special Educator has to use the general curriculum and modify the lessons to suit each learner by providing Individualised Education Programme (IEP) Following are few of the steps undertaken by special educators.

- a) Observe :- (Observe the child and) Build a rapport by observing and understanding the child. Remember behaviours is itself a part of communication process. We need to keep looking out for these differences and think what the child is trying to communicate to us.
- b) Be flexible:- Use a variety of methods till the child understands and masters the new skills. Certain concepts can be presented in a game form or provide hands on experience.
- c) Use multisensory approach Visual Auditory Kinaesthetic or Tactile cues. This can make a difference between participating and non participation of many children with special needs.
- d) **Be positive – A positive attitude is an important quality for a person who works with children with special needs.**
- e) Bridge the gap between home and school. Listen to a parent respectfully and learn the child through parent's views and observations.
- f) Record – Always record child's mood disturbances, achievements, failures, regularly mention the progress for our reference.
- g) **Focus on the strength of the child to overcome his or her weakness. The overall motto of Special Education is: "If the child does not learn in the way we teach then Teach them in the way they can learn"**

“ Mom and Dad, I know it's hard at times. Please don't ever give up on me. Beneath my meltdowns, trouble talking and limited eye contact, lies a love for you and a bond I cannot express right now. I love you....”
“Love your autistic child”



Apart from special education most of the children with special needs require Physical Therapy, Occupational Therapy or Speech Therapy. Therapist evaluate and assess the child and based on the evaluation, determine goals and strategies for enhancing skills. The therapy involves half an hour to one hour session with a frequency determined by the individuals needs.

Working with special children is very challenging, demanding but yet very rewarding. Every child is different and unique in their own way.

*“A child is like a butterfly in the wind,
 Some can fly higher than others,
 But each one flies the best it can,
 Why compare one against the other
 When each one is different
 Each one is special,
 Each one is beautiful.”*

Approaching Autism

DR MADHUMATHI RAMAKRISHNAN MRCPCH(UK)
CONSULTANT PAEDIATRICIAN
CHENNAI

Autism Spectrum Disorder (ASD) is a social communication disorder in someone displaying repetitive and restrictive interests. Diagnosed in early childhood, children struggle to develop social relationships required for further learning and independent living. This article discusses how the diagnosis is made, the prevalence, causes and a simple overview follows.



“I cannot emphasize enough the importance of a good teacher”

Diagnosis of Autism:

A diagnosis of ASD applies where there is evidence of functional impairment caused by:

- Problems reciprocating social or emotional interaction, including difficulty establishing or maintaining back-and-forth conversations and interactions, inability to initiate an interaction, and problems with shared attention or sharing of emotions and interests with others.
- Severe problems maintaining relationships, ranging from a lack of interest in other people to difficulties in pretend play and engaging in age-appropriate social activities, and problems adjusting to different social expectations.
- Nonverbal communication problems such as abnormal eye contact, posture, facial expressions, tone of voice and gestures, as well as an inability to understand these.
- Additionally, two of the four symptoms related to restricted and repetitive behaviour need to be present:
 - Stereotyped or repetitive speech, motor movements or use of objects.
 - Excessive adherence to routines, ritualised patterns of verbal or nonverbal behaviour, or excessive resistance to change.
 - Highly restricted interests that are abnormal in intensity or focus.
 - Hyper- or hypo-reactivity to sensory input or unusual interest in sensory aspects of the environment.

How is a diagnosis made?

While parents often suspect developmental delay or ASD, the variability in child development during the first four years can lead to variability in the age of first diagnosis - **typically around three years of age.**

Restrictive and repetitive interests can be difficult to identify before the age of four because even typically developing two - and three-year-olds can show repetitive behaviours. Since the new diagnosis also requires behaviours to be demonstrably incompetent (such as during a child's interaction at day care), a lag between symptoms and diagnosis is likely to continue.

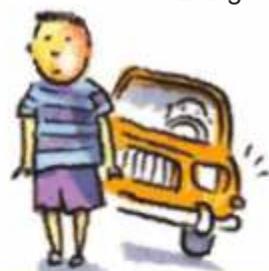
A typical diagnostic evaluation involves a multi-disciplinary team including pediatricians, psychologists, and speech & language pathologists. Testing takes a number of hours and can be exhausting for subjects, parents and clinicians.

In initial consultations, screening tools may be used such as the Autism Behavior Checklist (ABC), Checklist for Autism in Toddlers (CHAT), Modified Checklist for Autism in Toddlers (M-CHAT), Childhood Autism Rating Scale (CARS) and Gilliam Autism Rating Scale (GARS). However, for a diagnosis, the Autism Diagnostic Interview-Revised (ADI-R) and Autism Diagnostic Schedule (ADOS) are used.

“Autism is not a disability,
it's a different ability.”

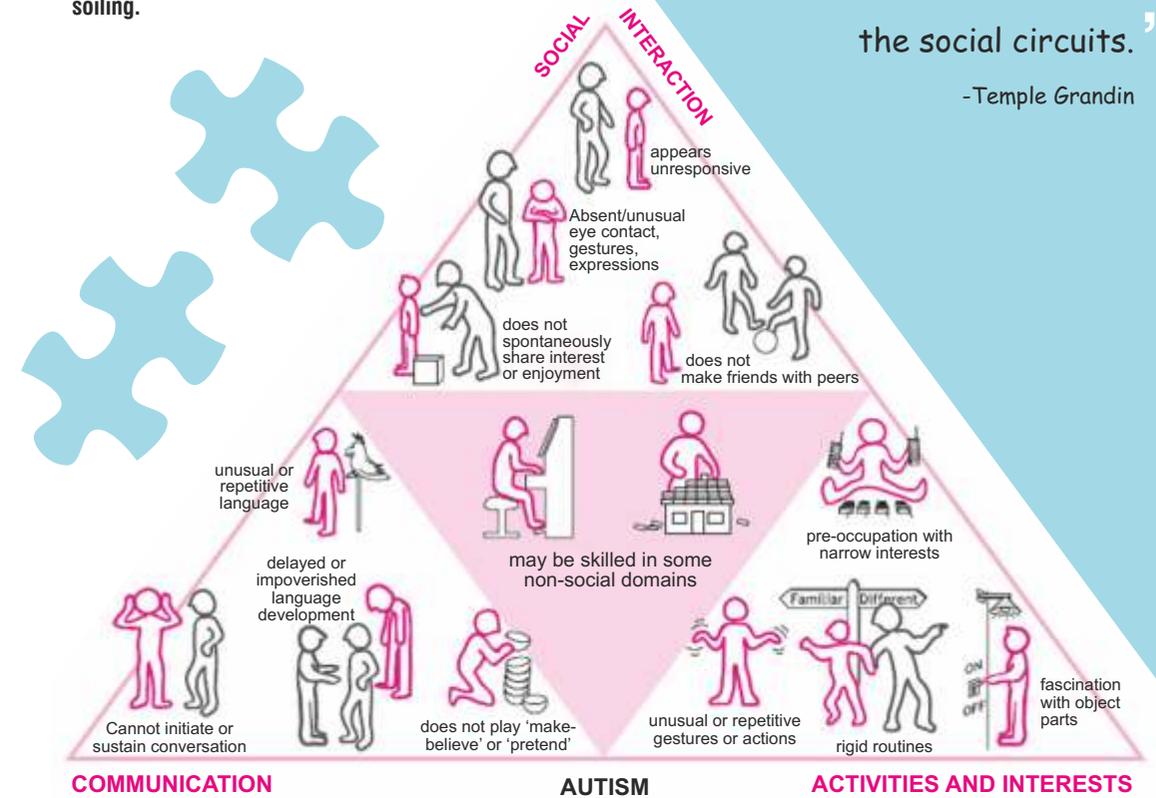
-Stuart Duncan

What are the signs of Autism?

<p>Inability to relate to children or adults</p> 		<p>Poor speech or lack of speech</p> 
<p>Oversensitive or undersensitive to sound</p> 	<p>Inappropriate playing with toys</p> 	<p>Difficulty dealing with changes in routine</p> 
<p>Inappropriate laughter or crying</p> 	<p>Lack of awareness of Danger</p> 	<p>Hyperactivity or Passiveness</p> 
<p>Oversensitive or undersensitive to touch</p> 	<p>Strange attachment to objects</p> 	<p>Lack of eye contact</p> 

There is an increased risk of epilepsy in individuals with ASD. The more common presentations include late infantile spasms, partial complex epilepsies and forms of Landau-Kleffner syndrome. Mutations in the tuberous sclerosis genes are particularly associated with ASD and epilepsy.

Gastrointestinal disorders (GID) are a common complication in ASD. Given that some "cognitive" genes of the brain are also expressed in the enteric nervous system, decreased visceral sensitivity, myogenic reflexes or even CNS integration of visceral input may be exacerbated in genetically susceptible individuals. Language impairments may be associated with toilet training difficulties, which can lead to constipation with overflow incontinence and soiling.



“ I think that autistic brains tend to be specialized brains. Autistic people tend to be less social. It takes a ton of processor space in the brain to have all the social circuits.”

- Temple Grandin

What treatments are available?

There is no cure for ASD, but early intensive behavioural intervention (based on Advanced Behavioural Analysis) is somewhat successful towards promoting learning and independent living. This intervention aims to addressing the core deficits of ASD in a structured, predictable setting with a low student-teacher ratio (initially 1:1). It promotes behavioural systems for generalization and maintenance, promotes family involvement and monitors progress over time. There is some evidence to suggest that participation in social skills groups also improves social interaction.

At present, pharmacological intervention targets some symptoms associated with ASD. These include serotonin reuptake inhibitors, anti-psychotics, anti-epileptics, mood stabilisers and other medications to treat hyperactivity, aggression and sleep disruption. Given the degree of notable side effects in these pharmacotherapeutics, new generation compounds continue to be tested. There are high rates of complementary and alternative diet use in children with ASD, but a lack of rigorous studies means that the evidence for efficacy is poor.

Concluding Remarks

Autism is a spectrum disorder. As such, each child is unique. For this reason it is best not to get caught up with the 'label', but to focus on the individual's abilities or disabilities, with an understanding that simplicity, patience and adaptability may be needed. A team work with the parents or the carer is required to achieve the desired outcomes.



Dental Needs in Special Children

DR SUBASHINI, BDS, MBA (HEALTH MANAGEMENT)
DENTAL SURGEON
CHENNAI

Autism is a neurodevelopmental disorder characterised by impairments in language and communication, social interactions and restricted and repetitive behaviours.

Let's discuss in this column dental problems & special needs specific to these special children. By the time some children with autism first see the dentist, they have already developed serious dental problems.

The type of impact autism has on the individual and their implications for oral health are manifold. Communication deficits affect their ability to understand and express needs and concerns. Individuals with autism have in general heightened levels of anxiety. Emotional outburst and decreased pain perception can add to their fear of the noise of the bur and bright lights.

Sensory processing difficulties can trigger escalation in behaviours and over-responsiveness to various elements in the environment, causing potential melt downs. Many people with ASD also have restricted diets and tend to eat certain types of foods like for eg: only white food... pasta, rice, bread... refined carbohydrates, which contributes to acid attacks.

To add, over 50% of individuals with ASD are usually taking some form of psychotropic medication which typically have general side effects - dry mouth, reduced salivary flow and predisposes to increased risk of caries experience.

All of these factors influence the ability of individuals with ASD to, receive dental treatment & perform oral hygiene.

Some of the common oral health problems are :

- **Stained teeth:** Due to lack of adequate oral hygiene
- **Gingivitis & periodontitis:** Incidence of periodontitis is higher for the autism population. Periodontitis cannot be cured; it must be maintained and requires, frequent, diligent dental visits and oral care
- **Dental decay:** Due to lack of oral hygiene & food habits
- **Bruxism:** Individuals with ASD, have a higher incidence of clenching and grinding. Higher levels of anxiety and sensory disorders may be contributory to bruxism
- **Dental Erosions:** Some associated digestive disorders, such as GERD, are frequently seen in individuals on the spectrum resulting in dental erosion. Dietary choices and beverages consumed may also be contributory



- **Trauma:** Trauma is very common in patients with ASD as they do not have an accurate sense of danger and have a very high pain tolerance. Unusual patterns of wear or unexplained trauma may be due to PICA when the child chews on non-food items like wood or rocks. In addition, the individual may not show their parents / caregivers when they have been hurt.
- **Drooling:** These children lack coordination in muscles and may drool. One simple recommendation is to have the child suck on a sugar free candy. This will help them practice swallowing more frequently. The ideal treatment would be for the individual to be assessed and treated by an orofacial myofunctional therapist. These therapists help individuals learn chew, breathe, and swallow correctly.

Providing dental treatment can be challenging due to the following:

- Extreme anxiety
- Uncooperative behaviour
- Inability to tolerate oral instrumentation
- Altered pain perception

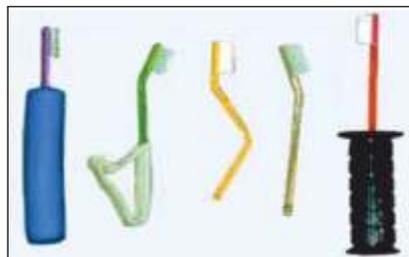


Dental Disease Prevention in special children :

The best thing a dental provider can do for any patient and especially those with special needs, is to help them prevent disease. The strategies listed here are easily implemented and have been used by patients & found effective.

Xylitol Daily use of xylitol in oral care (e.g., chewing gum, lozenges) in addition to daily oral hygiene with fluoride-containing toothpastes has shown remarkable effectiveness.

Adaptive & Power Brushes Fine motor skills like brushing and flossing can be difficult for many individuals with ASD. The handles are also helpful with dexterity challenges. Power brushes remove more plaque than manual brushes. Multisurface brushes reduce the time for effective brushing in un cooperative children.



3 Assistive Tooth Brushes



Power Brushes



Multi Surface Brush



Oral health, dental needs and barriers in children with an autism spectrum disorder

- **Remineralization Paste:** The use of tooth creams that aid in remineralization have gained popularity in the last several years. These creams are used after brushing and flossing and help buffer acidic attacks, reduce white spot lesions and prevent decay.
- **Sugar free Lollipops** –They help to improve swallowing .
- **Interdental Cleaners:** They help in cleaning between the teeth to prevent interdental plaque & periodontitis.
- **Probiotics:** Oral care probiotics are intended to help maintain a healthy oral flora, by creating the delicate balance between oral micro flora and the host to prevent the over colonization of undesirable oral bacteria associated with rampant caries, bad breath and oral infections.

“ I have Autism. It is not a disorder or a disease
Ignorance is a disorder AND a disease. IT needs to be eradicated! ”

-Robert Moran

Cerebral palsy - A genetic disorder??? - A recent perspective

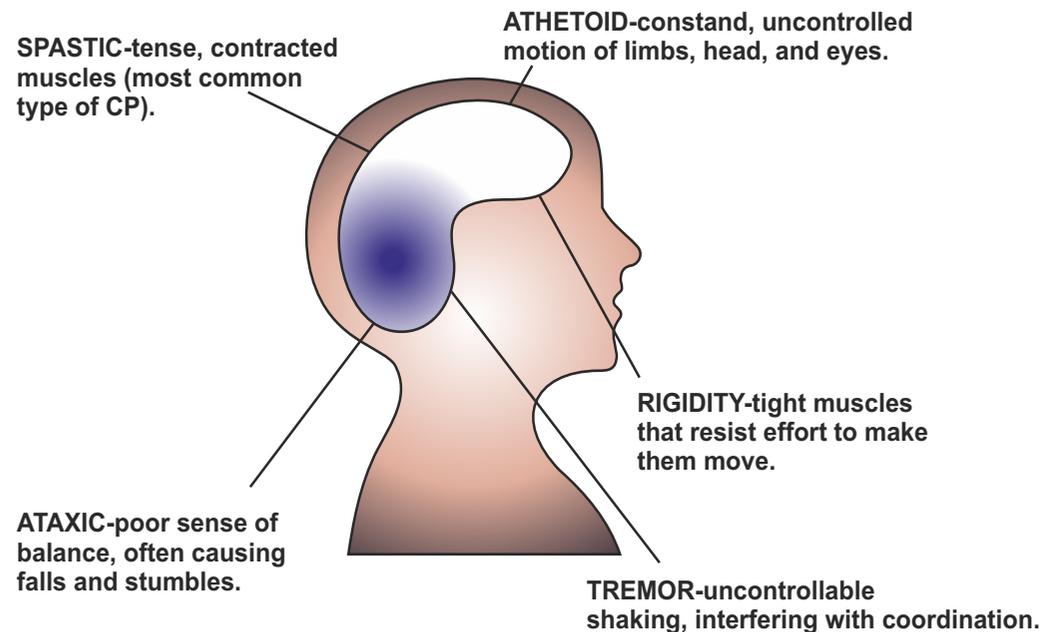
DR N MAHESH., MD(PAED.), DM(NEURO.)
PAEDIATRIC NEUROLOGIST
CHENNAI

Cerebral palsy is a term used to describe a static encephalopathy due perinatal insult due to varied causes. However, in many of the cases, the causes could not be identified. But, it is the rule of thumb that whenever, we see a child with h/o sibling with cerebral palsy, it is advisable to evaluate for a possible genetic disorder.

However, a recent Australian collaborative cerebral palsy research group has found that even cerebral palsy itself could be a genetic disorder! They have found that, in families with an affected child there is 9 fold increase in the incidence of cerebral palsy and similarly, the risk of CP is higher in consanguineous families and in monozygotic twins.

They argue that the prevalence of cerebral palsy remains constant, though there is an improvement in the overall obstetric care. Hence, they investigated further regarding the cause for this discrepancy. Subsequently they have identified atleast six genes that are causative for cerebral palsy.

TYPES OF CEREBRAL PALSY



They postulate that, genes are involved in the maintenance of integrity or development of brain. When they are affected, they alter fetal inflammatory response, alter brain's reaction to vascular insult or any infection and make them susceptible to the environment insult. Scientists have also proved by various studies that birth asphyxia contributes less than 10% of children with cerebral palsy.

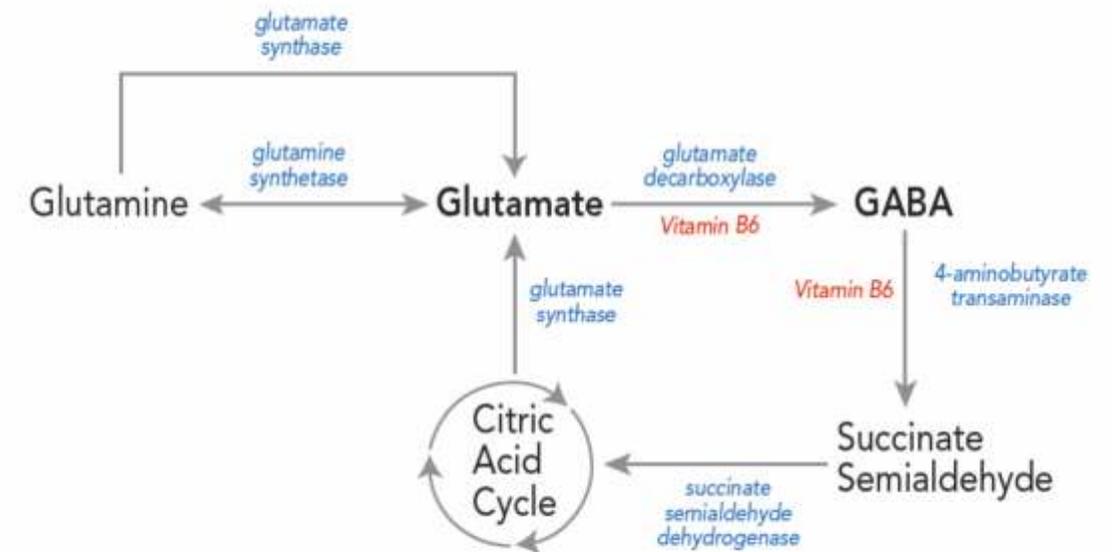
The authorities points out that, apart from prenatal testing, isolation of these genes may help us to know their at risk factor before becoming pregnant. However, prenatal testing is not recommended at this stage.

Systematic family based genome sequencing uncover many of the cerebral palsy genes; However it is essential to find out the abnormalities which are clinically relevant or pathological. It may take some time for these mysteries to be unraveled.

Scientists are hoping that many susceptibility genes to cerebral palsy would be discovered so that it would be possible to screen the embryo, fetus and newborn and formulate personalized therapy targeting these genes like gene editing and gene silencing!

Days are not so far, when cerebral palsy will be considered as a neuro genetic disorder!!!

Metabolic enzymes that are affected in CP



Top 10 biggest Brain Damaging Habits according to World Health Organization:

1. No Breakfast
2. Over-eating
3. Smoking
4. High Sugar Consumption
5. Air Pollution
6. Sleep Deprivation
7. Head Covered While Sleeping
8. Working your brain during illness
9. Lack in Stimulating Thoughts
10. Talking Rarely

Physiotherapy for Special Children

DR SAKTIVELAN MPT
CONSULTANT PHYSIOTHERAPIST
CHENNAI

TYPES OF DISABILITIES AFFECTING CHILDREN AND ADOLESCENTS:

- Attention-Deficit/Hyperactivity Disorder (AD/HD)
- Autism Pervasive Developmental Disorder (PDD)
- Blindness/Visual Impairment
- Cerebral Palsy
- Deaf-Blindness
- Deafness
- Developmental Delay (DD)
- Down Syndrome



Attention-Defecit/Hyperactivity Disorder AD/HD:

Signs and Symptoms :

- Fails to give close attention to details
- Careless mistakes in schoolwork, work, or other activities
- Difficulty sustaining attention in tasks or play activities
- Not following through on instructions
- Difficulty in organizing tasks and activities
- Avoids engaging in tasks that require sustained mental effort
- Loses things necessary for tasks or activities (toys, school assignments, pencils or books)
- Easily distracted by outside stimuli
- Forgetful in daily activities

Physiotherapy measures:

- Functional Gait training
- Group co-ordination exercise
- Fine motor and Gross motor activities
- Training in activities of daily life



ACTIVITIES, EXERCISES AND TOYS THAT CAN ALLEVIATE THE SYMPTOMS OF ADHD IN CHILDREN





ADHD

“ we think more things before breakfast than most people think all day. ”



AUTISM:

Physical Problems:

- Poor coordination and balance
- Low muscle tone (clumsiness, avoids physical activities like running, jumping and hopping, frequent falls, etc.)
- Muscle weakness (scapular winging, hyperextension of the knees and reluctance to lift heavy objects)
- Muscle tightness (neck flexors, pectoral muscles, hip flexors, etc.)
- Generalized hyper mobility of joints (Flat feet, Hyperextension of elbows and knees on passive movement, Poor posture, etc.)
- Postural deviations (lordotic posture while standing, kyphotic posture in sitting and protracted shoulders)

The benefits of physiotherapy :

- Learn to perform the ideation, sequencing, timing and execution components of motor planning
- Improve static balance to improve motor control and attention and decrease impulsivity
- Calming and relaxing effect
- Reduces clumsiness
- Improve postural control to increase stability during fine motor, gross motor, and self-care activities
- Maximize sensory processing and organization skills to put into controlled motor skills

Activities for children with Autism



“ Autism to me is not 'wrong', not sub-human, not a collection of deficits, it is simply 'other'. Another reality. And like anything different, it is going to jar. ”

-Beth Silver

Conclusion:

When the helping community and parents work together to meet the needs of the normal children, they help them thrive in healthy ways, and protect them from suffering the long term negative impact of living around their disabled siblings.

Parenting – A Role Perspective

DR T.SOMASUNDARI, ASSOCIATE PROFESSOR,
ANNA ADARSH COLLEGE FOR WOMEN

“Parents teach the toughest School in the world – The School for making people. They are the board of education, the principal, class room, and the teachers. They are on duty for 24 hours a day, 365 days a year for at least 18 years for every child” said, Virginia Satir a world renowned Family Therapist. It is thus evident that Parenting is the most important responsibility in human life. Parents are the first and foremost teachers educating their children to know life. The role parents play in bringing up children determines their life orientation.

Unfortunately there is neither formal education nor practical training available for parenting. Therefore, a vast majority of them bring up children in the way they were brought up by their parents. But a few of them rear children in a manner they learnt from significant others in life or information gathered over the years. As Parenting is an art, every parent has to learn it without fail to ensure orderly growth of their children.

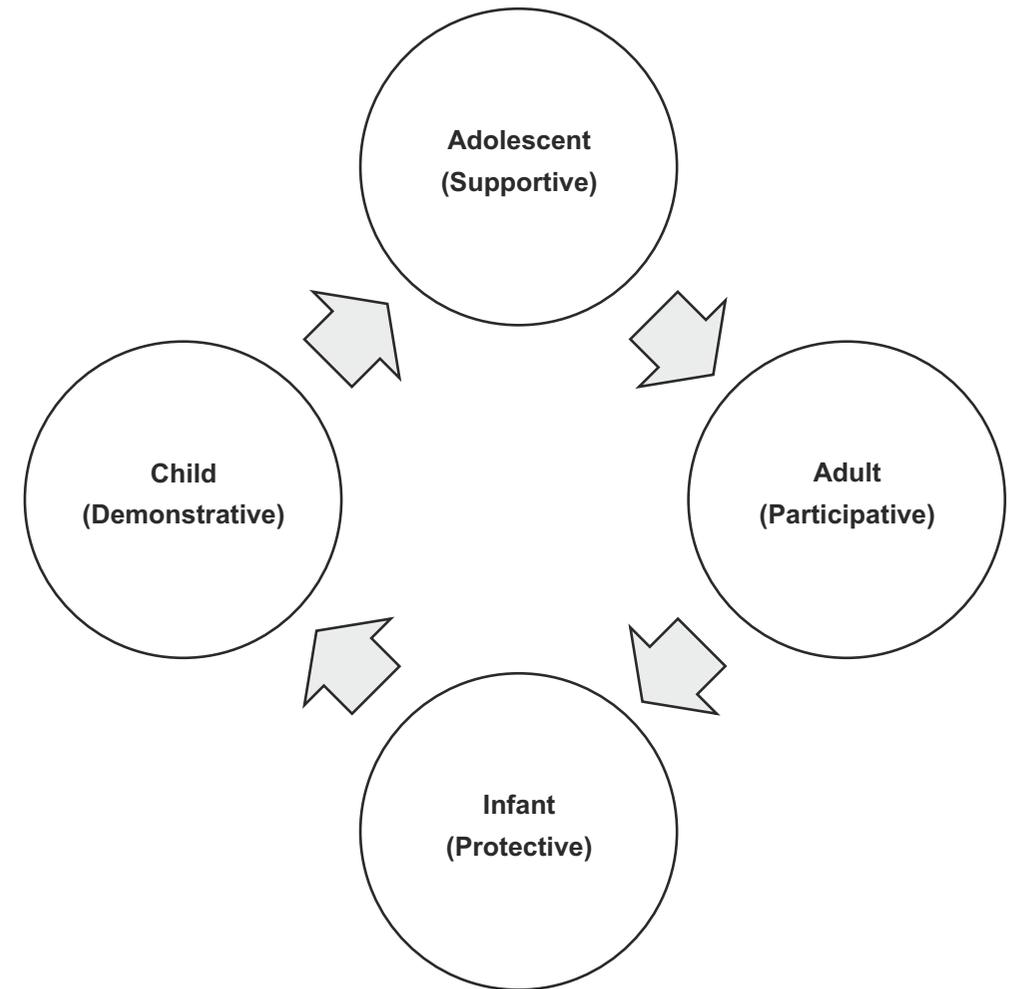
Several studies conducted over a period insist that parental responsibility starts even before a child is born. A woman in the family way should take every effort to keep herself happy so that child gets positive vibrations during pregnancy. It is equally obligatory for her Husband and other family members to create conducive environment to make this happen. It is the duty of the expecting mother to take nutritious food, do regular exercise, listen to good music, develop positive thinking and indulge in self talk with the child in the womb.

Parenting has to do with different phases of human development viz., Infant, Child, Adolescent and Adult. There is divergent view among the scholars on the duration of these phases. However there is unanimity that Parent's approach shall be tailor made to meet the needs in each of these phases. If the parents fail to identify the stage of development and customise their approach, it may lead to either under development or abnormal development of the child.

*“ A careful person I want to be,
A little fellow follows me,
I do not dare to go astray
For fear he will go the same way ”*



DEVELOPMENT CYCLE



During Childhood, every child becomes very inquisitive. He questions everything and demands instant answers. Sometimes, he becomes a nuisance as the questions may be inconvenient for which parents may not have answers. Parents have to play their part diligently. They should have patience to listen and respond appropriately to the temperament of the child. It is the duty of the Parents to celebrate the uniqueness of the child. They must refrain from comparing the child with any other for any reason. As comparison indicates differences, it will result in superiority or inferiority complex of the child. Good Parenting is not about nagging the Child by highlighting the mistakes committed. Instead they are to appreciate the positive side of the Child to

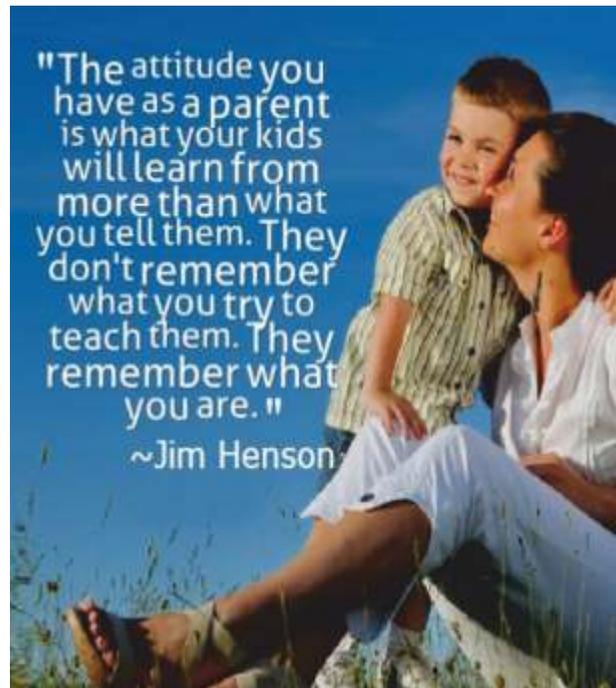
*“ People think about Autism as something with Kids.
Well, those kids Grow up.”*

-Jason Katims

groom him or her in the right path. After all, any behaviour recognised and rewarded will have the tendency to be repeated. The best thing a Parent can do is being demonstrative of what is good or bad.

Adolescence is the span of time between the childhood and Adulthood. It results in rapid growth and change in physique towards attainment of sexual maturity with capability to reproduce. Since new dimensions of life open to them, Adolescents become physically more and more self conscious and get attraction from the opposite sex. As they go through enormous changes both physically and emotionally, Parents should give enough attention, develop expressiveness and spend quality time with them. Adolescents experience new cravings both physical and/or emotional and would like to share this with others. Hence, it is their utmost duty to recognise such expressions and help them handle such changes failing which they may befriend someone from the world and get exploited.

Research suggests that Adolescents who are subjected to frequent parental touch such as a pat on the shoulder, an affectionate hug, a gentle kiss on the forehead etc., will not fall prey to such overtures from outside. There should be constant communication



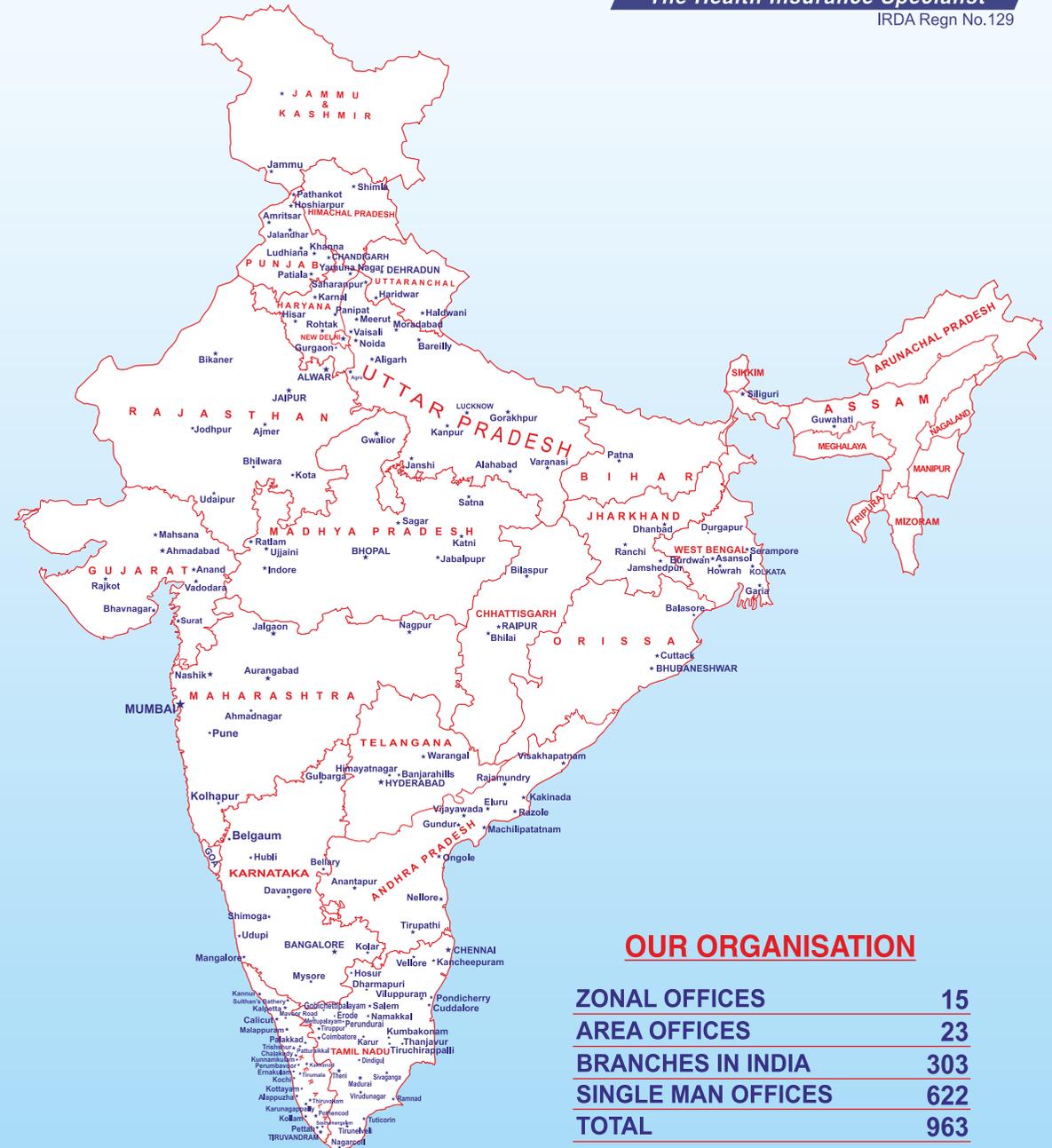
"The attitude you have as a parent is what your kids will learn from more than what you tell them. They don't remember what you try to teach them. They remember what you are."
~Jim Henson

from parent's side which will improve the quality of relationship with Adolescents. Becoming partially independent with exposure to environmental impact, the influence of the parents starts diminishing a little. During this phase, their actions are more prompted by peer pressure or referral group. Parents should become vigilant to understand the company Adolescents keep and the time spent in daily routine. Parents should play a supportive role by appreciating and encouraging them to share information without any reservation.

Parenthood is not something to become eternal. When the child becomes an adult, Parenthood comes to an end. It is time that Parents learn how to withdraw from the life of the Child. It is important to remember the statement of Osho who declared that "Every child grows out of Childhood, but no Parent grows out of Parenthood".



I am not
broken
poisoned
defective
OR
diseased
I AM
AUTISTIC
I need acceptance,
not a cure



OUR ORGANISATION

ZONAL OFFICES	15
AREA OFFICES	23
BRANCHES IN INDIA	303
SINGLE MAN OFFICES	622
TOTAL	963

“A child with Autism is not ignoring you, they are simply waiting for you to enter their world.”