

Developmental Paediatrics



-the need of the day

Science is the study of special knowledge. According to the law of nature, a baby develops into a mature adult on its own, as long as there is no obstacle to this natural evolution. But when this process gets interfered with, expertise of its special knowledge is called upon. If a child's development is hindered, one needs a specialist who knows what to do with it. That person is a Developmental paediatrician.



Child development can be seen as a progress in various domains of essential life skills, vis-a-vis Gross Locomotion, Fine Locomotion, Eye, and Hand Coordination, Hearing and Speech Skills, Cognitive or problem solving Skills, personal-social skills and self-care social skills. Science has been able to standardize these for specific ages.

For example, a toddler depends on its caregiver for dressing – undressing. But by the time it is accessing primary Education, it has learnt to perform all these complex tasks by itself. When the natural course is unabated, such complex skills are attained without much hassle. But only when it is tampered with, one can appreciate how valuable all these natural process are to our everyday life.

You will realize this if for any reason (like, for having a broken hand) you could not use one of your hands for a couple of weeks or you could not use your eyes (like for having conjunctivitis) for days on end. For some children, this is an everyday occurrence. They are the children with disability. On top of that, children also face the burden of poor understanding of the extent of their suffering by the adults –the very people on whom they depend so heavily for support, care and understanding. A child with Cerebral palsy, for example, has high muscle tone as a core feature of its condition. In this condition different muscle groups are affected in varying degrees. For this reason, they develop spasticity and some joints remain folded (like their hands may remain fistled as the small flexor muscles of that hand have higher muscle tone than their extensors). If this folded posture remains in that abnormal posture for too long, then permanent changes will occur (due to fibrosis) called ‘contractures’. Once contractures set in, reversing the process to an acceptable posture- adequate for normal functioning-becomes much harder.

A major handicap that a child with cerebral palsy faces is that many adults assume that this child is mentally retarded. In a large number of children, who have cerebral palsy, their ability to think remains age appropriate?

In short, they are not mentally retarded. People assume them to be mentally retarded as they have difficulty in moving their muscles, including their muscles for speech production. Therefore, they move slowly and awkwardly to talk slowly and in an awkward way.

Now imagine yourself trapped in a body which does not move as you want it to move. You are trying your best to talk but what is coming out sound awkward, hilarious and horrendous! On top of that, the labour of uttering a normal word, let alone a sentence, is making it all rather painful and tiring. But you can think and you can see. Now, what you get to see is that where you are trying very hard to communicate and suffering from the strenuous efforts as its consequence, either people find it hilarious and mock you insensitively or find it worthy of pity and they avoid communicating with you. Nobody helps you to communicate. You see the doctors and health professionals are talking about you, in front of you, without paying much regard to you! No one is talking to you. Nobody is waiting for you to complete a sentence. You have thought of a brilliant solution to a problem that your friends are discussing in front of you, but you were not noticed or you were not given the chance to put it across! Like any child who is able-bodied, you also would have liked to walk, jump and play. Instead of helping you to make that happen, people are just abandoning you and pitying you.



But science has thought of and it forged ahead with scientific advances. There are specialized methods which can be used to enable a child with physical disabilities’ to communicate. Professor Stephen Hawking is probably the best visible example of such a marvel. Due to his medical condition (called motor Neurone Disease), he cannot move almost any of his muscles. He can blink and he can shift his fingers for a few millimetres only. But because his thinking ability did not reduce, he

continued to produce scientific theories and complex mathematical calculations of the finest nature to explain the truths of the universe and teach the world how to move towards a more modern scientific thinking. He was using the most sophisticated version of Argumentative communication system. He has been able to type every word by shifting his finger a few millimetres only. Scientists



have worked ceaselessly to develop this system which sensed the tiniest variations of his finger movements to produce the type version of his agile mind. Imagine what would happen if we did not augment his communication abilities. He would have been treated as a mentally retarded by a few generations at least! Professor Hawkins probably would have burst with frustration to see that despite having the best knowledge of the world, he was being taken for a disabled!

There must be scores of such children whose pain, agony and frustrations are being brushed aside day after day, month after month and sometimes years on end! But this does not have to be so. There are fine centres of excellence even in India as we speak. These centres are child Development centres of various names and descriptions. A high quality child development centre (CDC) will have a Developmental paediatrician and highly specialized team of health care professionals. Depending on the quality of this team, a child will receive highly standardized and validated set of targeted activities which are coordinated to maximize the impact in helping children with disabilities to acquire skills in a non-pressurized, non-threatening and pleasant way in the earliest possible opportunity for their visible and invisible disabilities.

- **Cerebral palsy is one of the most visible kinds of disability. Hidden disabilities include Autism, ADHA (Attention Deficit Hyperactivity Disorder), Learning Delays (General and specific e.g., Dyslexia) and various rare and uncommon conditions of childhood.**

In reality, they are not that uncommon really! For example, nearly one in 150 children nowadays show Autistic features. There are highly standardized sets of assessment and intervention available for them. High quality input produces remarkable improvements in most of these conditions including Cerebral Palsy.

Even high quality child Development interventions are also not that costly in most cases. But awareness that these are "real" conditions like typhoid or diabetes is still very poor in India. But the cases are picked up more and more every day. Therefore, the Indian Academy of paediatrics has dedicated one entire issue of their national magazine to the theme of 'child Development Centre-an emerging need for the nation.'

At Apollo Gleneagles Hospital (AGH), Kolkata, we have been able to create a private centre for excellence at the child Development Centre. We have both trained paediatric physiotherapist,

who has been trained in South Africa, Occupational Therapist, trained in sensory Integrations (SI) techniques, Floor Time techniques for children with Autism, a score of high quality psychologist, a Child and Adolescent psychiatrist, and a Developmental Paediatrician trained in Griffiths' Schedule of Growing Skills (Mental Development Tools) and ADI and ADOS (Gold Standard Autism Diagnostic Tool sets).



The CDC at AGH is collaborating internationally in research by World Health Organization in developing Care Standards for children internationally, including developed nations, with Cerebral palsy. Its team members are involved in research with Cambridge, UK on Autism. Collaborative research with Calcutta University on Child Development issues are on its way. Quality matters. That is why we have been so successful in producing results and improvements in problem children at our CDC, AGH. But one CDC, AGH, will not do. We need to impact this quality across the metropolis through Apollo Education Forum initiatives (Apollo Clinical Excellence Forum) and across the country through various Apollo service and entities, like Apollo Primary Care Model.

A select list is as follow (if one is sufficiently worried about even one of these, specialist evaluation is called for):

- Very naughty
- High level of activity
- Always on he go
- In a world of his own
- Ignores what is said to him from time to tune
- Repeatedly flaps hands when excited or afraid
- Puts hands in ears from loud noises or for any other reason
- Bangs his head
- Very angry in nature
- Destructive in nature
- Throws large temper tantrums
- Talks a lot , but talks gibberish
- Avoids eye contact



- Largely repeats what is being said to him
- Repeatedly says the same words, sentences, phrases often out of context or in inappropriate situations
- Does not point at things by index (second)finger
- Plays largely by lining up cars or toys
- Excessive avidity to computers socially reclusive
- Plays on his own alongside other children
- Tends to touch or sniff everything
- Excessive interest in objects spinning
- Plays with parts of the toy, rather than the hole toy
- Inventing new words (neologism) out of context or in odd way
- Educational difficulties
- Declining educational grades
- School phobia
- Gone quite
- Unusually gifted in a skill but not across the board, e.g. knows multiplication at the age of three, can draw minute details from memory, can memorize whole phrases verbatim etc.

If you or anyone else has any worry of the above nature about your child, it is not prudent to “wait and watch.” In another article published in this issue, I have elaborated on the merits of “ Early Intervention.” I refer the reader to that section.

The bottom line is, you. Need an expert evaluation, if you have worry about any oddity or educational /developmental delay or difficulties in your child. The first evaluation is better done by an expert in this field, until our professional become more aware and more trained in these special areas of knowledge and training.

Developmental and community paediatrics has become an essential component of core paediatric Training for the paediatric Doctors undergoing post graduate training in the UK .The Indian Academy of paediatrics has picked up this issue as one of the most important aspects of newer service development need in paediatrics .

Concerted efforts from all corners can go a long way in preventing preventable tragedy. High quality care is available in India. It is proving to be highly effective. We need high quality service to spread across the country. Low quality efforts, however well meaning have given the discipline its bad name. A lot of parents and doctors disgruntled with many well meaning but half –backed half-abled efforts in this direction. Now is the time for high quality efforts to start. We have these high quality models with unprecedented success around them by now. To save that child out there, who is suffering from his disability at no fault of his own, we all must raise above ourselves to promote, advocate and disseminate the right message:

The burden of childhood disability is highly reducible. There is no scope for despair, we fail our children ourselves .There is always something to be done .There is always something that can be done and there is always something that must be done. If we fail our children, they suffer due to our lack of efforts. There is lot of services available to take advantage of. These are standardized and validated methods all across the globe. The sooner we pick up a problem, the quicker we can fix it. The more specialized help we get at the outset, the least intervention and the least cost all have a duty to constantly try to improve our standard of care. 26 years ago, when Apollo Hospitals started, there were fewer believers than sceptics. But the Apollo Hospitals Group has stood tall because “if there is a will, there is a way.” We do not have a choice in the matter of our children’s Development. We must do the right thing. The work must go on.

Interchangeable terms for behaviour disorder conduct

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CHILD DEVELOPMENT CENTRE

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