



**Dr. Duru Shah**

MEDICAL DIRECTOR, GYNAECOWORLD CONSULTANT, OBS & GYN - BREACH CANDY HOSPITAL, JASLOK HOSPITAL AND RESEARCH CENTER, SIR HN HOSPITAL AND RESEARCH CENTER. WWW.GYNAECOWORLD.COM

## The Digital Tsunami... Does It Impact Your Child's Brain?

**T**hree major revolutions have impacted the way we live today: the Agricultural Revolution that helped us generate enough food for all, the Industrial Revolution that helped us use machines to enhance our muscular power, and the Digital Revolution that helped us communicate globally with a small chip, merely by using our fingertips!

The Digital Revolution, however, has been like a Tsunami - invading our lives completely, and that too faster than any other technology has in the last 500 years. So much so that even

toddlers at the age of 1 are learning on iPads! It has influenced the developing brain, its behaviour, and emotions along with effects on motor skills, language, cognition and perception of visual objects. In the UK, 95% of people between the age group of 16-24 years own a smart phone and check it on an average of every minute. Whilst 20% of all adults are online for more than 40 hours/week, 4.57 billion people worldwide have access to the Internet, with an exponential increase in the last decade. Hence, we need to take into consideration the cost benefit ratio of this ever-growing technology!

There is no doubt that the digital

maturing till they reach their maximum potential between the ages of 11 and 13. There are other regions that mature even further - well into our twenties.

Children who are exposed to increased screen time, beyond what is recommended by the WHO, do have a higher risk of developing ADHD and reduced emotional capacity. In the US, Assembly Bill 27 has been passed to restrict smart phone usage as per WHO guidelines:

- Infant (less than 1 year of age): Screen time is not recommended.
- 1-2 years of age: Less than an hour.
- 2-4 years old: No more than 1 hour.

Sedentary behavior due to increased



medium has a huge impact on the way children learn, are entertained and gain more knowledge - all of which are definite positives. But does it have any negative effects on a child's or on an adolescent's brain?

After 2 years of age the brain of a child does not grow in size, it only matures further. The brain has plasticity - the more it learns, the more it matures. There are specialized regions in the brain that are more developed for various functions such as social behaviour, emotions, motor skills, language, analytics etc. These regions keep

screen time by youngsters has been identified as a risk factor for obesity which then leads to many chronic diseases in adulthood. Early childhood is a period of rapid development and a time when family lifestyle patterns can be adapted to promote health gains. Hence, it is best to achieve good health for a child by doing what is best for them right from the beginning of their lives.

So while it is not technology that is bad, incorrect use and overuse of this technology in children is what is not right!

