

**SMARTPHONE PSYCHIATRY**

In many ways, psychiatry is the laggard that has fallen far behind other disciplines in medicine. Unlike all other specialties, most psychiatric diseases have no objective biomarkers to diagnose or monitor treatment. Distressed that classical psychiatry research was leading nowhere, Thomas Insel, Director of National Institute of Mental Health left his 3000 strong team to join a mental health venture of Google called 'Verily' with one staff assistant.

Insel is one of the leaders of the smartphone psychiatry movement. Though heavy smartphone usage may actually be contributing to rising psychological problems in teenagers, the answer may also lie in this technology. The smartphone has the potential to record huge amount of the user data, including daily activities like sleep, exercise, location as well as collect subtle data that can reflect mood and behavior. Changes in typing speed, voice tone, word choice, videos watched, all can signal potential trouble. There may be more than 1000 smartphone clues for depression. Now researchers are racing ahead to develop apps that can use artificial intelligence to predict depressive episodes and prevent self-harm.

Last year, after a live streamed suicide on Facebook hit the headlines, remedial measures were instituted. Facebook now uses its artificial intelligence systems to pick-up words or phrases that could indicate self-harm. The next step for smartphone psychiatry is to offer real-time help with automated text messages, links to helplines, or digital alerts to parents or first responders.

About one in seven of the world's 7.5 billion people is estimated to have a psychiatric disorder. In the absence of universal access to quality psychiatric services, a smartphone may come handy.

*(The Hindu 5 January 2019; Int J Bipolar Disord. 2018;6:9)*

**INFANTILE HEMANGIOMAS – GUIDELINES**

The American Academy of Pediatrics has published the first clinical practice guidelines on the management of infantile hemangiomas. There has been a paradigm shift from the laissez-faire approach that has been the norm in the past. It is now acknowledged that some of the infantile hemangiomas may cause permanent scarring or significant functional impairment. It is now well recognized that significant growth of the hemangiomas occurs between 1-3 months of age, and ceases by 5 months. Hence the recommendation is to start treatment before one month of age in select infantile hemangiomas. Propranolol is used for treatment at a dose of 2-3 mg/kg/d for atleast 6 months and preferably 12 months. Topical timolol may be used for thin superficial lesions. Surgery or laser may be used for residual scarring.

Indications for treatment are life-threatening complications (e.g., airway and hepatic lesions), functional impairment, risk of ulceration, or risk of permanent scarring. Airway hemangiomas may be suspected in infants with beard distribution of the lesion with biphasic stridor. Screening for hepatic lesions is required in infants with  $\geq 5$  cutaneous hemangiomas. Functional impairment may occur in infants with lesions causing mechanical ptosis or oral lesions interfering with feeding. Scalp and perineal hemangiomas are at risk for ulceration and bleeding. Infants with segmental hemangiomas measuring  $>5$  cm are at risk for PHACE syndrome, and need further evaluation with magnetic resonance imaging. The guidelines are very detailed and thorough, and will be useful for practitioners.

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**OBESITY AS A RISK FACTOR FOR ASTHMA**

In adults, the link between asthma and obesity has been well-studied. A recent article in Pediatrics has tried to quantify the risk of asthma attributable to obesity in children. The study found that about 10% of all asthma in children in the US can be prevented by correcting obesity. This means obesity may become the first modifiable risk factor, offering an opportunity for primary prevention of asthma.

The study included 507,496 children, half who were overweight or obese and half who had a healthy weight, from more than 19.5 million doctor visits from the PEDS net clinical data research network from January 2009 to December 2015. The adjusted risk for incident asthma was increased among children who were overweight (RR 1.17; 95% CI 1.10-1.25) and obese (RR 1.26; 95% CI 1.18-1.34). An estimated 23% to 27% of new asthma cases in children with obesity was directly attributable to obesity.

Other studies have shown that obesity-related asthma differs from the garden variety of allergen-mediated asthma. Initial investigations into the mechanisms have identified a role of truncal adiposity, metabolic abnormalities including insulin resistance and dyslipidemia, and obesity-mediated systemic inflammation. All these mechanisms are notable for the lack of a role of allergy. There is consistent evidence that obesity-related asthma in children is nonallergic, severe, and poorly responsive to medications in comparison to asthma in children with normal weight. Unlike allergic asthma, there are no targeted therapies for nonallergic asthma.

This important study highlights the need for clinicians to monitor children for obesity with measurements of body mass index and waist circumference during routine visits.

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