

## **Pediatric sleep disordered breathing in mainland China**

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Beijing Children's Hospital (BCH) first established a one-bed sleep lab in 2002 and a new sleep center with 12 beds was opened in 2013. There are several pediatric sleep labs in mainland China now. Besides, sleep services are offered in various departments of children's hospital and pediatric department in general hospitals. Night time snorers are the major population coming for sleep study. Current data showed that sleep disordered breathing (SDB) are common in Chinese pediatric population and sleep disorders can lead to serious morbidity if left untreated. A questionnaire survey performed in children in eight major Chinese cities showed that 27.1% of 28424 children them had sleep disorders. Another questionnaire survey in Shanghai showed a prevalence of snoring of 16% in 1812 children. A positive relationship between the degree of obesity and the severity of OSAHS was reported base on a case-control study. The impact of OSAHS on quality of life and a dramatic improvement in quality of life after adenotonsillectomy was demonstrated by ENT surgeons. The impact of hypoxemia on hearing and cognitive function in OSAHS children were reported as well. Furthermore, a recent study showed a positive relationship between OSAHS and metabolic syndrome. Interestingly, recent studies have demonstrated that an active leukotrienes (LTs) mediated inflammatory response is involved in pathophysiology of SDB, which might provide a theoretical evidence for LTs modify therapy in treating pediatric OSAHS. Besides, the efficacy of various treatments such as surgery, and non-invasive ventilation were also investigated in numerous studies in Chinese pediatric population.

Key words: child, sleep disordered breathing, epidemiology, complication, treatment