Background. In our country, snoring in children has not been concerned as a serious health problem. The children with habitual snoring can suffered from obstructive sleep apnea (OSAS). The prevalence of OSAS in Indonesian children is still unknown. The clinical course of OSAS includes day-symptoms such as sleepiness, learning difficulties, behavior disturbance and night-symptoms such as sleep apnea, air hunger, and enuresis. If OSAS happens in a long time, the children can suffered from severe malnourished, cognitive abnormalities and cor-pulmonale disease.

Objective. This study is a preliminary study which wants to know the prevalence of OSAS in children with habitual snoring and risk factors of OSAS in children.

Methods. The children complained of habitual snoring (more than 3 episodes in a week) were performed polysomnography (PSG). OSAS is established if the PSG showed AHI (apnea-hypopnea index) more than 1. Nutritional status and adenoid radiography were assessed to identify the risk factors.

Results. There were 17 children (age 3-12 years) performed PSG. Male proportion is three times bigger than female (3:1). Among those subjects, 12 children (70.6%) were diagnosed OSAS while 5 of them were not. Based on AHI, 5 children categorized as mild OSAS (AHI 5-15); 3 children were moderate OSAS (AHI 15-25) and 4 children were severe OSAS. Obesity was found in 11 children and from radiography 12 children showed the hypertrophy adenoid.

Conclusion. The prevalence of OSAS among children with habitual snoring is high (70.6%). The proportion of male, obesity and adenoid hypertrophy is higher in children with OSAS.