

## Sick building syndrome among hospital workers in central Bangkok

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**Background/Aim:** The sick building syndrome (SBS) describes a range of symptoms linked to spending time in a certain building, most often in a workplace including hospital. SBS is a major concern because of the many people potentially at risk. Signs and symptoms of the SBS are varied. This study aimed to examine the prevalence and factors associated with SBS among workers in Rajavithi Hospital, a tertiary referral hospital in Bangkok, Thailand.

**Methods:** A cross-sectional study was conducted in 1,580 workers. Eligible participants had worked in the current position at least 1 year, and informed consent was obtained. The data were collected of self administered questionnaires assessing symptom of the eyes, nose and throat, respiratory system, skin, fatigue, and headache, as well as difficulty concentrating, personal, psychosocial, and workstation factors. The binary logistic regression was employed for factors associated with SBS. The ethics committee of Rajavithi Hospital approved this study.

**Results:** The majority of the participants were female (80.8%) with mean age ( $\pm$ SD) 39.3 $\pm$ 11.6 years. Almost 35% of the participants were nurses and supportive staffs. Most of them have bachelor's degree. The prevalence of SBS was 70.8%. The three most frequency symptoms were headache and difficulty concentrating (47.1%), eyes (38.0%) and nose (33.6%). Factors associated with SBS were female (OR = 1.51; 95%CI: 1.03-2.20), age<45 (OR = 1.55; 95%CI: 1.15-2.07), alcohol consumption (OR = 1.77; 95%CI: 1.18-2.66), poor sleep quality (OR = 4.80; 95%CI: 3.30-6.99) and chemical use for work (OR = 1.34; 95%CI: 1.01-1.79).

**Conclusions:** The prevalence of SBS is high compared to other studies. Headache, eyes and nose were most common symptoms. Female, middle-age, alcohol consumption, sleep quality and chemical use were associated with SBS. These workers should pay attention to minimize SBS and health services should provide health promotion plan to them. Well-designed ergonomic work environment is recommended.

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