Indoor air quality and sick building syndrome in Malaysian buildings.

ABSTRACT

This study was done to investigate the association between sick building syndrome (SBS) and indoor air pollutants in two different buildings (old and new). Hundred and seventy six office workers were randomly selected in this study form April to September 2008. One office from Tower 1, in one private building at Kuala Lumpur City Center (KLCC) categorized as Building A (old building), while another government building, Malaysia Energy Center categorizes as Building B (new building). Modified IAQ and Work Symptoms Survey, NIOSH Indoor Environmental Quality Survey (1991) was used to measure the SBS occurrence. Measurement of IAQ was performed according to IAQ Code of Practice, Department Occupational Safety and Health, (DOSH, 2005) Malaysia. Building A and B recorded 93 and 83 respondents respectively. Ventilation rate were significantly higher in Building B compared to Building A with median 21.10 cfm/person and 18.60 cfm/person respectively (z = -11.70, p < 0.001). Higher prevalence of SBS recorded in Building A, compared to Building B.

Keyword: Indoor air quality (IAQ); Sick building syndrome (SBS); Old and new building; Indoor Air Pollutants (IAP); KLCC; PTM.