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## **A SURVEY OF SICK BUILDING SYNDROME PREVALENCE AMONG THE INHABITANTS OF EKBATAN IN TEHRAN**

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### **Abstract**

In this study, Sick Building Syndrome (SBS) is surveyed in the residential buildings of Ekbatan, a district in the Western part of Tehran. A number of 330 individuals were selected randomly. It was investigated whether factors such as the physical conditions of the sampled buildings, occupation and lifestyle-related behavior such as smoking were associated with the intensification of irritation and mental symptoms. The symptoms of SBS were observed positive in 56.4% of the cases. The worst symptoms among residents included: eye irritation while using computers (8.8%), throat (8.5%) and nose (6.4%) irritation around garbage chutes. The results showed that the residents of buildings without natural sunlight and suitable central air-conditioning systems ( $P=0.04$ ,  $OR=1.60$ ) show a higher likelihood of developing SBS symptoms than the residents of buildings enjoying sunlight and with good air-conditioning systems ( $P=0.001$ ,  $OR=2.41$ ). No significant relationship was found between the prevalence incidence of SBS and gender, smoking habits, occupation, and age. The results showed that the prevalence incidence of SBS is fairly high among the residents of Ekbatan. Factors affecting SBS in this district were: inadequate central air-conditioning systems, double glazed windows, improper operation of the garbage chute system and the proximity of Ekbatan to pollution-producing areas such as West Terminal in Azadi Square and Mehrabad International Airport.

*Key words:* buildings, Ekbatan, residents, sick building syndrome, symptoms

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