

# The Epidemiological Pattern of Seasonal Influenza in Four Sentinel Sites in Iraq

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## Abstract

**ABSTRACT** Introduction: Influenza is an acute viral infection with significant morbidity and mortality. Its occur annually each winter is called seasonal influenza and is preventable through safe vaccine. Aim: To know the epidemiological pattern of patients with seasonal influenza in Iraqi sentinel sites. Methods: A cross- sectional study carried out on records of patients who attended four sentinel sites and registered to have influenza-like illness (ILI) or severe acute respiratory infection (SARI), and laboratory investigated. Results: The total number of cases was 1124, 36.2% of them aged 19-39 years; 53.9% were female; 74.9% lived in urban areas; 64.3% diagnosed as ILI and 35.7% as SARI. 15.9% had diabetes, 12.7% had heart disease, 4.8% had asthma, 3% had a chronic lung disease, and 2% had hematological disease. 94.6% did not get influenza vaccine. About COVID-19 vaccine, 69.4% did not vaccinated, 3.5% get only 1 dose, and 27.1% completed 2 doses. Only the SARI cases needed admission, among them 95.7% were cured. 6.5% were diagnosed as influenza- A virus, 26.1% had COVID-19, and 67.5% were negative. Among those with influenza, 97.3% had H3N2 subtype, and 2.7% had H1N1 pdm09. Conclusions: The percentage of influenza virus in Iraq is relatively small. The age, classification of case (ILI or SARI), having diabetes, heart disease, or immunological disease, and taking COVID-19 vaccine have a significant association with influenza. Recommendations: It's needed for similar sentinel sites in other health directorates and for rising health education about seasonal influenza and its vaccine.

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