







Abstract: 492

Keywords: Epidemiology, Hospitalization and Immune response

# Epidemiology of admissions with influenza and the impact of underlying patient characteristics on the risk of admission with influenza during the 2013/14 season in the GIHSN participating sites

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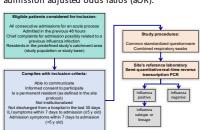
# Background

This was a multicentric study performed by the Global Influenza Hospital Surveillance Network (GI HSN). A total of 9,507 consecutive eligible admissions were screen ed for inclusion in 19 hospitals in Russia, Turkey, China and Spain, following a prospective, active surveillance, approach aimed to describe the epidemiology of admissions with influenza.



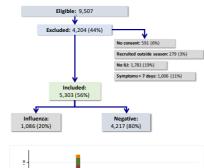
## Methods

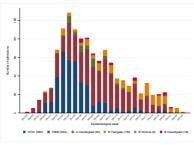
Epidemiological data was collected in consecutive admissions using a common case definition. Influenza was confirmed by RTPCR. We used multivariate logistic regression models to estimate influenza admission adjusted odds ratios (aOR).

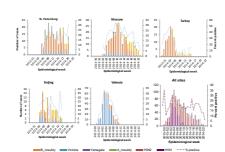


### Results

We included 5,303 admissions, 1086 were influenza positive: 534, A(H3N2), 362, A(H1N1), 130, B Yamaga ta lineage, 3, B Victoria, 40 and 18, A and B, were not subtyped.

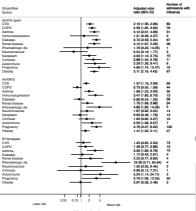


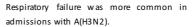




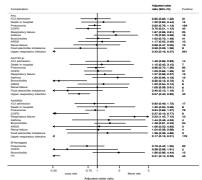
Sixty percent of influenza admissions were in patients with no comorbidity.

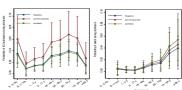
Patients with cardiovascular disease aOR, 1.6 (95%CI, 1.3 to 2), asthma, 2.3 (1.7 to 3.0), immunosuppression, 2.3 (1.2 to 4.1), renal disease, 2.1 (1.5 to 3.0), liver disease, 1.9 (1.2 to 3.2), autoimmune disease, 3.9 (1.6 to 5.6), and pregnancy, 3.8 (2.5 to 5.9) were at an increased risk regardless of influenza virus. For chronic obstructive pulmonary disease, 2.6(1.9 to 3.6), diabetes, 3.7(2.6 to 5.3), and obesity, 3.1 (2.24.4), the risk of severe disease was preferentially related to A(H1N1)pdm





Influenza vaccination, 0.6(0.4-0.8) lowered the risk of confirmed influenza.





We observed a non significant trend for influenza A(H1N1)pdm to increase the need of intensive care and for A(H3N2) the risk of in-hospital death.

#### Conclusions

Influenza was associated with disease needing admission in person with and without risk factors. Underlying comorbidity increased the risk of influenza and pregnancy was an outstanding risk factor. Our results support influenza vaccination as a risk reducing measure.

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