Global Influenza Hospital Surveillance Network

Results of season 2016 - 2017

Czech Republic, Europe

J Kynčl[1], M Havlíčková[1], H Roháčová[2], Z Manďáková[1], H Šebestová[1], R Králová[1], K Herrmannová[2], T Rudová[2]

[1]National Institute of Public Health, Prague, [2]Hospital Na Bulovce - Dept. of Infectious diseases, Prague

Site presentation

One hospital - Dept. Of Infectious Diseases of Hospital Na Bulovce in Prague – refferal and tertiary care centre serving for capital Prague and Central Bohemian Region

Catchment area : 2,5 million population,

general population, adults only included

Main influenza season: December to March (April)

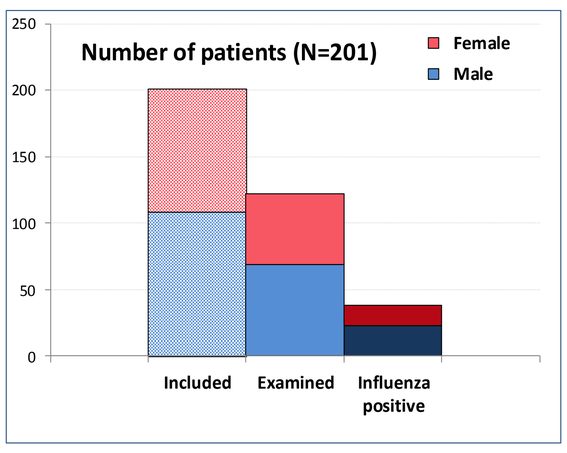
Methods

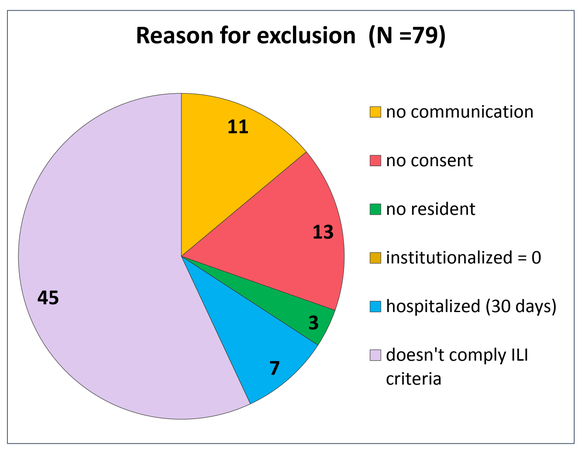
Patients > 18 years who have met enter criteria according to ”core protocol“ were included.

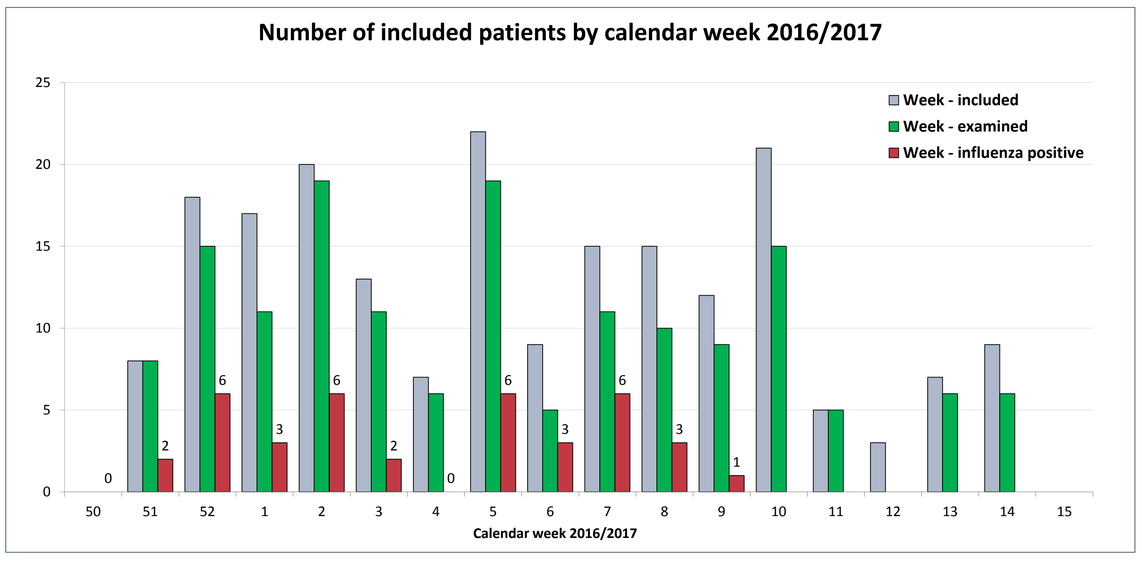
A nasopharyngeal and pharyngeal swabs were obtained from each patient, both swabs were collected on the same tube. All samples were kept at least at -20^{0}C until sent to reference laboratory in NIPH. q-PCR was performed on the samples to detect the presence of: influenza A (H1 and H3), influenza B (B/Yamagata, B/Victoria).

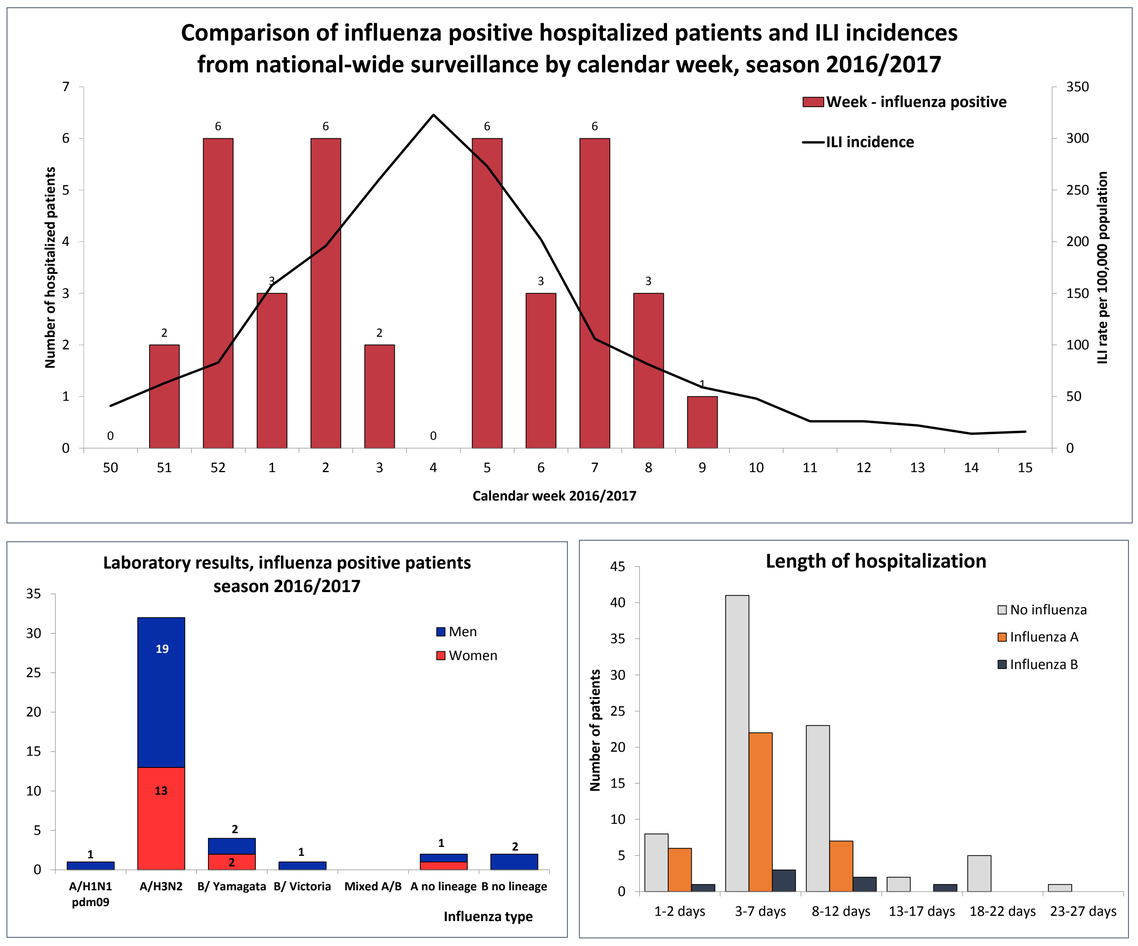
Completed questionnaires were processed in NIPH Prague at Department of infectious disease epidemiology.

Results - I

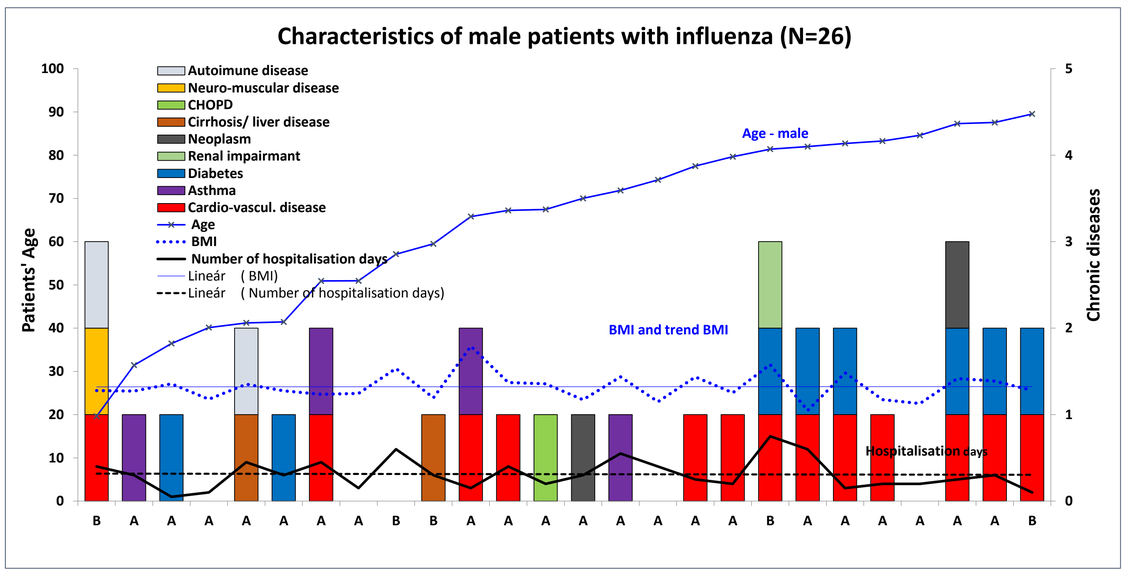


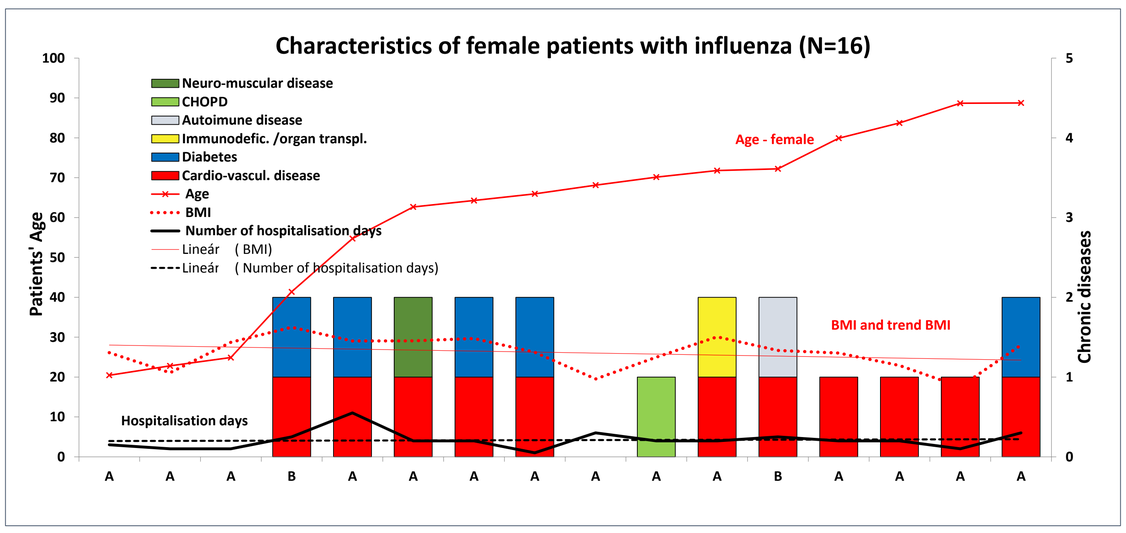


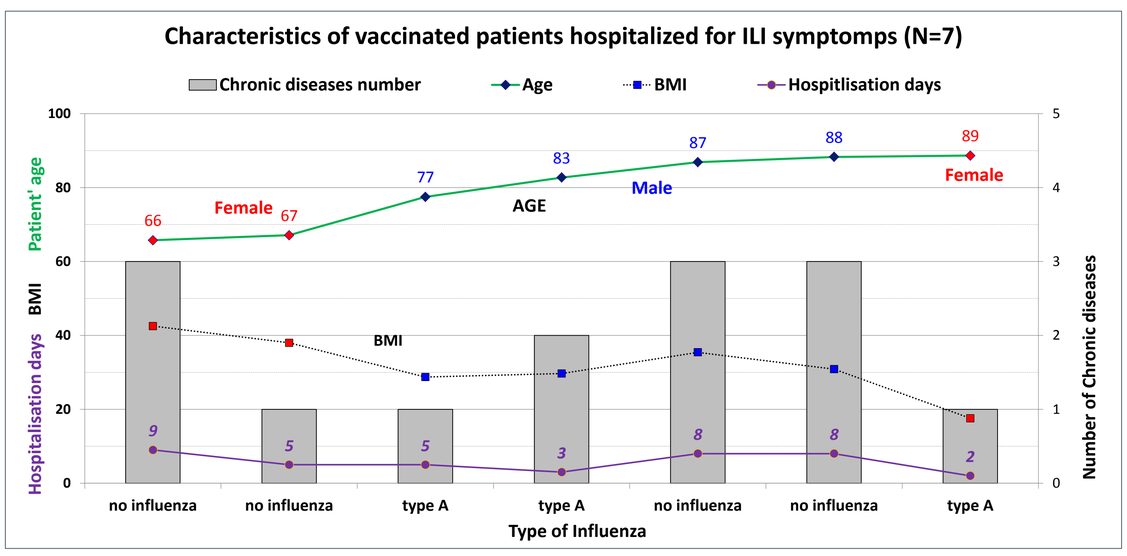




Results - II







Key aspects & challenges

- GIHSN 2016/17 flu season lasted from 22 Dec 2016 to 7 Apr 2017 in the Czech Republic
- Predominance of influenza A/H3N2
- Hospitalization with influenza occurred also in healthy and young/middle aged adults (median of age 67.8 years, min. 20.5, max. 89.5)
- High proportion of obese patients (BMI median for examined group 26.2, for influenza positive subgroup 26.4)
- In our study group three vaccinated patients (of age 77, 83 and 89 years) suffered from influenza
- Vaccination effectiveness: hardly impossible to assess due to low vaccine coverage in the Czech Republic in general (in our study group vaccination 5.7%), not existence of vaccination registry and relatively low sample size
- Data from the project can improve understanding of influenza epidemiology to better inform public health policy decisions
- Assessing the influenza disease burden might also serve as a first step towards developing targeted interventions to increase vaccine coverage

Contacts: phone number: +420-267 082 891, +420-267 082 922

email: jan.kyncl@szu.cz, zdenka.mandakova@szu.cz

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