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Methods

Recruitment period for 2018-2019 season:

January 3 to May 31, 2019

Out of a total of 47083 subjects screened, 1326 subjects met the predefined set of conditions for admission diagnosis of whom 677 subjects were enrolled.

A total of 119 influenza cases (Influenza A: 151, Influenza B: 6, Influenza C:2) 50 RSV cases and 8 Mixed viruses cases (3 mixed A (AIN+AH1N1; AIN+AH3N2; A+H1N1+AH3N2), 1 mixed B(BIN18-71Victoria) Mixed FLU A+H1N1+FLU C, 3 mixed FLU A and RSV) were detected in all sites during this season.

There was no difference in the severity of symptoms upon presentation between Influenza and non-influenza cases among different age groups assessed by the O2 supplementation requirement, vasopressor support, lethargy and fever.

Results

Conclusions:

Influenza A virus was the most commonly detected virus among hospitalized patients with ILI symptoms during 2019 in Lebanon.

Influenza A/H1N1 and A/H3N2 circulated equally but there was a large fraction of A viruses that could not be subtyped (they could be either H1N1 or H3N2 but had mutations in their respective primer binding sites).

There was no difference in age and sex distribution among hospitalized subjects with positive influenza testing.

Subjects with co-morbidities accounted for 93 out of the 166 influenza-associated hospitalizations.

The elderly were more likely to be admitted to the ICU and to receive mechanical ventilation.

Conclusions and challenges

During 2019 season we had limited capturing of all the influenza cases for the following reasons:

1. Late start of subjects enrollment due to missing cases admitted between Oct-Dec
2. Abiding by the ILI criteria resulting influenza cases with only respiratory or generalized symptoms
3. Suboptimal close monitoring of screening and data collection process at non-AUBMC sites.
4. At AUBMC, parallel surveillance for influenza was being run by the Infection Control Program, which was reporting its findings to us on a daily basis. We discovered that some influenza positive cases were being missed.

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