INTRODUCTION

- Hospital-based surveillance for severe acute respiratory infection (SARI) cases was established in SKIMS on November 2015.
- We present our results of the continued surveillance of the GIHSN network in Kashmir, India in patients hospitalized for influenza like illness from November 2016 to May 2017.

METHODS

- During the study period from November 2016 till May 2017, all inpatients with suspected respiratory infections who were admitted overnight to the study hospitals were screened daily.
- If a patient met the European Center for Disease Control (ECDC) ILI case definition, a respiratory specimen was tested for influenza and other respiratory pathogens.
- A case report form captured demographics, history of presenting illness, co-morbidities, disease course and outcome.
- Nasal and throat swabs were tested on real-time RT PCR to access the prevalence of influenza and other respiratory viruses by RT PCR using standard protocols.

RESULTS

- From November 2016 to May 2017, a total of 693 patients with suspected respiratory infections were assessed. Of these, 652 (94%) met the ECDC-ILI case definition and were included in the study.
- Of the 652 recruited cases, 322 (49%) were male. Children aged less than 5 years accounted for 14% (n=89) of the eligible patients.
- Of the 652 samples tested, 215 were positive for any virus including 193 single infection and 22 mixed infection.
- RSV was the predominant virus detected in 80 (37.2%) admitted cases followed by Influenza virus (32%) [AH1N1=11; AH3N2=21, B-Victoria=37], Rhino virus (14.4%), para-influenza virus (n=30, 14%), HMPV (11%) and adenovirus (1.8%).
- Patients without co-morbidities accounted for about 24% of the admissions whereas 65.7% of the patients had ≤ 2 co-morbidities and 11% had ≥ 2 co-morbidities.
- The need for intensive care or in-hospital death was not significantly different between virus-positive and virus-negative patients.
- 77 (12%) out of 652 patients were prescribed anti-virals for the current ILI episode.
- The vaccination rate among the patients was found to be 2%.

CONCLUSIONS

- Respiratory viruses are an important cause of illness among hospitalized patients with acute respiratory infection.
- Influenza is an important cause of hospitalization in young children and older adults.
- Vaccine uptake as a whole is poor and sensitization is required to increase the uptake of influenza vaccination among high risk subjects in India.
- Active, prospective, continuous, hospital-based surveillance of influenza and other respiratory viruses is useful in supporting pandemic preparedness for emerging influenza virus infections.

Funding: This study was funded by the Foundation for Influenza Epidemiology.