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Abstract (poster session)

**Contribution of influenza viruses, human metapneumovirus and respiratory syncytial virus to acute respiratory infections in children in northern Greece, 2008-2011**

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Influenza viruses, respiratory syncytial virus (RSV) and human metapneumovirus (hMPV) are the most common pathogens that cause acute respiratory disease in children. The aim of this study is to present the contribution of the above three pathogens to influenza-like illness (ILI) in children, aged <6 years old during 3-year (2008-2011) influenza seasons in N. Greece. It is worth mentioning that 2008-2009 was a pre-pandemic influenza season, 2009-2010 was the pandemic period, while 2010-2011 was the post pandemic season. 685 pharyngeal swabs from children younger than 6 years, presented as ILI infections during the last three influenza seasons (2008-2009, 2009-2010 and 2010-2011) were examined for influenza A and B viruses, RSV and hMPV, by one step Real-time RT-PCR. Influenza viruses were detected in 235 (34.3%) of the 685 specimens, RSV in 49 (7.14%) samples and hMPV in 29 (4.2%). RSV and influenza viruses' co-infections were observed in eight cases, RSV and hMPV co-infections in four cases and hMPV with influenza viruses was found in one case. The majority of the patients (67.7%) were between 3 and 6 years old. Our results demonstrate that influenza viruses, RSV and hMPV contribute to ILI presenting infections at a rate of 45.6% in children younger than 6 years old. It is remarkable the fact that during the post pandemic period, 2010-2011, only 0.15% and 0.03% of the young patients were positive for RSV and hMPV infections respectively. Further research is needed to elucidate the quantitative and qualitative importance of them, especially RSV and hMPV infections, their seasonal distribution, the groups at risk of severe complications and strategies for their diagnosis, treatment and prevention.