European Respiratory Society
Annual Congress 2012

Abstract Number: 4972

Publication Number: P4658

Abstract Group: 7.6. Paediatric Respiratory Epidemiology

Keyword 1: Bronchiolitis **Keyword 2:** Infections **Keyword 3:** Viruses

Title: Viral etiology of respiratory infections in children under 2 years old in Blida, Algeria

Prof. Rachida 30797 Boukari rachida_boukari@hotmail.com MD [1], Prof. Chawki 30798 Kaddache chkaddache@yahoo.fr MD [1], Dr. Fawzi 30799 Derrar f_derrar@yahoo.fr MD [2], Dr. Souad 30800 Touri n.touri1978@yahoo.fr MD [1], Dr. Salima 30801 Fedala S.fedala@yahoo.fr MD [1], Dr. Nadia 30802 Ait-Sadi ninaaitsadi@hotmail.com MD [1] and Dr. Djoher 30821 Hanoun hannound@yahoo.fr MD [3]. [1] Pediatric Department, Teaching Hospital, Blida, Algeria, 9000 ; [2] Virology Department, Pasteur Institute Algiers, Algiers, Algeria, 16000 and [3] National Public Health, National Public Health Institute, Algiers, Algeria, 16000 .

Body: Acute respiratory infection (ARI) is a leading cause of morbidity and mortality in children especially in developing countries. Viruses are known as the predominant causative agents of ARI. In Algeria, few data concerning these agents are available. The aim of our study was to investigate the incidence of 10 viruses in children under 2 years old admitted with ARI and to study demographic and clinical differences among different virus. METHODS: Children were prospectively enrolled between December 2010 and April 2011. A standardized questionnaire was used and a nose swab sample was collected. These samples were tested for the detection of RSV, Influenza virus (A/B),hRhinovirus,hMetapneumovirus,hCoronavirus,Adenovirus, Parainfluenza 1-3 by RT-PCR. Demographic,clinical and laboratory data were obtained. Outcome measurements were age,breastfeeding history,clinical severity score,chest radiological findings. RESULTS: 117 children,median age 3 months,were recruited.A virus was detected in 82,9 % of cases.The most frequently detected viruses were RSV(48 %),hRhinovirus (23 %),hMétapneumovirus(22 %),Adenovirus(7,5%),Influenzea (5 %), parainfluenza 3 (2,5 %). Co-infections were detected in 25 children (21,4 %). Clinical features associated with RSV infection were similar to those of other respiratory viruses.Presenting symptoms between the RSV positive and RSV negative groups were similar. CONCLUSION: This study underlines the importance of viral pathogens in ARI hospitalized children < 2 years old. RSV was the most frequently identified virus.HMPV and RV are also important cause of ARI in children in Algeria. Longer surveillance studies are needed to better understand the epidemiology of viral ARI.