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Poster Abstracts

5.2. Performance of ECDC ILI case definition and ICPC R80 code for influenza surveillance based on the Portuguese Influenza Surveillance System

Pedro Pinto-Leite ¹
A. Rodrigues ², R. Guiomar ³

¹ Public Health Unit, Group of Primary Care Centres of Almada-Seixal, Almada, Portugal
² Department of Epidemiology, National Institute of Health Dr. Ricardo Jorge, Lisbon, Portugal
³ National Influenza Reference Laboratory, National Institute of Health Dr. Ricardo Jorge, Lisbon, Portugal

Background:
Swift and accurate identification of influenza epidemics can reduce epidemic-related morbimortality and economic burden. It relies upon a sensitive and specific influenza-like illness (ILI) case definition. The impact depends on the virus subtype, individual age group and vaccination status. In this study we took advantage of the Portuguese Influenza Surveillance System (ISS) database to study the clinical factors associated with the laboratory confirmed diagnosis of influenza and to assess and compare the performance of the two main case definitions used in Portugal; the European Centre for Disease Prevention and Control (ECDC) ILI case definition and the International Classification of Primary Care (ICPC) R80 code.

Methods:
We conducted a retrospective, observational cross-sectional study using the ISS database of 6,769 cases with individual clinical symptoms of both case definitions, vaccination status and a nasopharyngeal swab result with virus subtype collected between October 2010 and April 2017. The performance of both case definitions were assessed by their sensitivity, specificity and area under the receiver operating characteristic curve (AUC). We tested the association between a positive result for influenza infection and sex, vaccination status and clinical symptoms with the highest AUC (0.551). The most associated symptoms with a positive result were fever (OR:4.16; 95CI:3.38-5.12), cough (OR:3.17; 95CI:2.57-3.90) and shivers (OR:1.98; 95CI:1.71-2.28) while the sudden onset of symptoms was not associated significantly.

Conclusions:
We suggest using the most sensitive case definition complemented with a specific laboratory test since case definitions per se are not accurate enough to predict influenza infection.

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PRESENTED BY: Pedro Pinto-Leite / pedro.cspl@gmail.com

5.3. Burden of respiratory syncytial virus associated hospitalisation in the first year of life in a major urban city, Lyon, France 2010 to 2016

Jean-Sebastien Casalegno ¹
R. Kramer ², D. Ploin ¹, Y. Gillet ³, E. Javouhey ¹, O. Claris ⁴, M. Ottmann ⁵, M. Valette ⁴, Y. Mekki ⁶, S. Couray-Targe ⁷, A. Myard Dury ⁸, P. Vanhems ¹⁰, S. Bin ¹¹, S. Polazzi ¹², A. Duclos ¹³, B. Lina ¹⁴

¹ CIRI, Centre International de Recherche en Infectiologie, Virpath, Université de Lyon Inserm, U1111, CNRS, UMR5308, École Normale Supérieure de Lyon, Université Claude Bernard Lyon 1, Lyon, France; National Reference Centre for influenza viruses, National Influenza Center (southern France), Laboratory of Virology, Hospices Civils de Lyon, Lyon, France
² European Public Health Microbiology Training Programme, European Centre for Disease Prevention and Control, Stockholm, Sweden; Hospices Civils de Lyon, Laboratoire de virologie, Institut des Agents Infectieux, Groupement Hospitalier Nord des Hospices Civils, Lyon, France
³ Hospices Civils de Lyon, Service d’urgences pédiatriques, Lyon, France
⁴ Hospices Civils de Lyon, Service de réanimation pédiatrique, Lyon, France
⁵ Hospices Civils de Lyon, Service de réanimation néonatologique, Lyon, France
⁶ CIRI, Centre International de Recherche en Infectiologie, Virpath, Université de Lyon Inserm, U1111, CNRS, UMR5308, École Normale Supérieure de Lyon, Université Claude Bernard Lyon 1, Lyon, France
⁷ National Reference Center for influenza viruses, National Influenza Center (southern France), Laboratory of Virology, Hospices Civils de Lyon, Lyon, France; Hospices Civils de Lyon, Laboratoire de virologie, Institut des Agents Infectieux, Groupement Hospitalier Nord des Hospices Civils, Lyon, France
⁸ Hospices Civils de Lyon, Laboratoire de virologie, Institut des Agents Infectieux, Groupement Hospitalier Nord des Hospices Civils, Lyon, France
⁹ Hospices Civils de Lyon, Pôle de Santé Publique, Lyon, France
¹⁰ Hospices Civils de Lyon, Unité d’Hygiène, Épidémiologie et Prévention, Lyon, France
¹¹ Hospices Civils de Lyon, Pôle de Santé Publique, Service des Données de Santé, Lyon, F-69003, France; Université de Lyon, Université Lyon 1, Health Services and Performance Research Lab, Villeurbanne, France
¹² CIRI, Centre International de Recherche en Infectiologie, Virpath, Uni-