

ORAL PRESENTATION

Open Access

The concordance of European and US definitions for healthcare-associated infections (HAI)

S Hansen^{1*}, D Sohr¹, C Geffers¹, P Astagneau², A Blacky³, W Koller³, I Morales⁴, ML Moro⁵, M Palomar⁶, E Szilagyi⁷, C Suetens⁸, P Gastmeier¹

From International Conference on Prevention & Infection Control (ICPIC 2011) Geneva, Switzerland. 29 June – 2 July 2011

Introduction / objectives

In Europe comparison of infection rates of HAI is restricted since some countries are using CDC definitions while others use HELICS (Hospitals in Europe Link for Infection Control through Surveillance) definitions. As part of the harmonization process of surveillance, ECDC outsourced a study to analyze the concordance between the definitions.

Methods

A group with experts from 7 European countries was set up to realize the study. Agreement for bloodstream infection (BSI) and pneumonia (PN) was estimated by Cohens kappa.

Results

The study was performed on 47 ICUs and 6506 patients, 180 PN and 123 BSI cases. Agreement for PN was $k=0.99$ (CI95 0.98;1.00). When PN cases were divided in clinically and microbiologically defined PN, kappa values were 0.90 (CI95 0.86;0.94) and 0.72 (CI95 0.63;0.82) respectively. Diagnosis of PN varied among countries: 4 countries predominantly surveyed microbiologically defined PN whereas the others recorded mainly clinically defined PN. Agreement for BSI was $k=0.73$ (CI95 0.66;0.80), BSI cases secondary to another infection site (42% of all BSI) were missed by CDC definitions. BSI concordance was perfect ($k=1.00$) when only primary BSI cases (HELICS BSI with origin “catheter” or “unknown” and CDC BSI) were analyzed.

Conclusion

Although other methodological differences exist between the two protocols, case definitions per se do not

compromise comparability of results and should not be an obstacle for harmonization of European surveillance.

Disclosure of interest

None declared.

Author details

¹Charité - University Medicine Berlin, Berlin, Germany. ²Université Pierre & Marie Curie, Paris, France. ³Medical University Vienna, Vienna, Austria. ⁴Scientific Institute of Public Health, Brussels, Belgium. ⁵Agenzia Sanitaria e Sociale Regione Emilia Romagna, Bologna, Italy. ⁶Hospital Vall d'Hebron, Barcelona, Spain. ⁷National Centre for Epidemiology, Budapest, Hungary. ⁸ECDC, Stockholm, Sweden.

Published: 29 June 2011

doi:10.1186/1753-6561-5-S6-O2

Cite this article as: Hansen et al.: The concordance of European and US definitions for healthcare-associated infections (HAI). *BMC Proceedings* 2011 **5**(Suppl 6):O2.

Submit your next manuscript to BioMed Central and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at
www.biomedcentral.com/submit



¹Charité - University Medicine Berlin, Berlin, Germany
Full list of author information is available at the end of the article