

P1118

Paper Poster Session

Prevention of hospital and healthcare-associated infection

The PIRASOA® programme: implementation and first outcomes of an infection control programme based on educational intervention bundle in all hospitals of the public health system of Andalusia, Spain

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Background: It has been estimated that 1 in every 25 inpatients has a hospital-acquired infection (HAI). PIRASOA® programme is an institutional programme focused on surveillance, outbreak investigations, laboratory research, and prevention of healthcare-associated infections. Our objective is to describe and report the implementation of this programme involving all public hospitals in the region of Andalusia, Spain, and to provide preliminary data about its impact.

Material/methods: Design: Descriptive ecological study. Study period: The programme started on January 1st 2014. Data on indicators (see below) are prospectively recorded quarterly (here we present data until June 30th 2015). Setting: The program was carried out in all 34 Andalusian public centers (8 regional hospitals, 9 specialty hospitals and 17 district hospitals) attending 8.4 million population. Intervention: The PIRASOA® program (Institutional Programme for the Prevention, Control of Healthcare-Associated Infections and Appropriate Use of Antimicrobials) is a clinical-based, quality programme aiming at reducing the rate of hospital-acquired infections and improving antibiotic use. The key principle of the HAI part of PIRASOA is a multidisciplinary team-based professional leadership in surveillance, prevention and control of HAIs and institutional involvement in each of the centres. Feedback was provided to every hospital quarterly, allowing benchmarking and each centre own evolution. The indicators measured included indicators of process on prevention and control (for instance hand hygiene adherence) and results indicators (for instance HAIs prevalence, incidence density of infections related procedures, and selected multiresistant pathogens).

Results: The HAI part of PIRASOA was locally adapted in all hospitals. Adherence to indicators collection increased from 81% to 96% (N=77 indicators). The overall rate of adherence to hand hygiene recommendations and to contact precautions has improved from 51% and 64% in the first quarter to 59% and 81% in the last one, respectively. The overall HAIs prevalence in Andalusia has been 7.1% in large hospitals and 6.1% in medium-sized hospitals. The average rate of central line-associated bloodstream infections for large and medium hospitals was 2.4‰ and 4.3‰ respectively. The evolution of incidence density of carbapenemases in enterobacterial infections showed a trend to

decrease throughout the six quarters: 0.17; 0.33; 0.25; 0.24; 0.11 and 0.13 cases/1000 occupied bed days (OBD).

Conclusions: An Infection Control Programme has been successfully implemented in Southern Spain. The preliminary outcomes showed a trend towards improvement in those actions conducted to prevent and control HAIs.