ABSTRACT

Background: Antibiotic resistance is recognized as a major threat to public health worldwide. Antimicrobial stewardship (AMS) has been shown to optimize antimicrobial use, curb antibiotic resistance, improve clinical patient outcomes, and decrease healthcare costs. There is limited data about AMS practices in Latin American hospitals. The purpose of this cross-sectional study was to describe the current AMS practices in Latin American hospitals.

Methods: We conducted a web-based survey adapted and modified from the Checklist for Core Elements of Hospital Antibiotic Stewardship Programs (published in 2014 by the U.S. Centers for Disease Control and Prevention). The survey had 82 questions distributed in 7 core sections: clinician leadership, accountability and program oversight, data and feedback, antimicrobial acquisition and use, antimicrobial resistance, and reporting of information to staff on improving antibiotic use and resistance, and education on AMS. The survey was sent by email or posted online as a Google Forms questionnaire, to clinicians responsible for the AMS activities in the targeted hospitals in Latin American countries.

RESULTS

• The survey was completed by 27 respondents from different hospitals in 10 Latin American countries (Figure 1).
• Teaching hospitals were 19 (66.7%). Seven (25.9%) hospitals had more than 200 beds.
• Eleven (40.7%) hospitals were teaching hospitals with more than 500 beds.
• Fourteen (51.9%) hospitals reported no financial support for AMS practices by providing information technology tools or training of staff.
• In the cases in which AMS activities were not being led by an infectious disease physician, 11 (40.7%) hospitals were in Latin American hospitals. There were 12 (44.4%) hospitals that did not have their AMS activities reviewed by institutional ethics committees.
• There were the least frequent (27%) professionals in the AMS team (Figure 2). Microbiologists were the most frequently involved in AMS activities. 61 (40.7%) hospitals were able to confirm the AMS practices.
• Broad spectrum agents were found to be the most widely used antibiotics in Latin American hospitals.

Conclusions: Our findings evidence that AMS activities are partially performed in Latin America, especially because of the varied implementation of instruments to support optimal antibiotic use. Institutional support is required for further development and improvement of AMS programs.

BACKGROUND

• Antibiotic resistance is recognized as a major threat to public health worldwide.
• Antimicrobial stewardship (AMS) has been shown to optimize antimicrobial use contributing to the emergence of multidrug resistant organisms, improve clinical patient outcomes, and decrease healthcare costs.

METHODS

• Between October 2014 and April 2015, we conducted a survey adapted and modified from the Checklist for Core Elements of Hospital Antibiotic Stewardship Programs (published in 2014 by the U.S. Centers for Disease Control and Prevention). The survey had 82 questions distributed in 7 core sections: clinician leadership, accountability and program oversight, data and feedback, antimicrobial acquisition and use, antimicrobial resistance, and reporting of information to staff on improving antibiotic use and resistance, and education on AMS. The survey was sent by email or posted online as a Google Forms questionnaire, to clinicians responsible for the AMS activities in the targeted hospitals in Latin American countries.

• Only one responsible clinician of the AMS activities per hospital was included in the analysis.
• The targeted hospitals were selected based on national guidelines or institutional guidelines of infection disease practitioners in Latin American countries, provided by the Pan American Association of Virological Diseases (APAV) and the American Society of Infectious Diseases (APID).
• Questions were validated before data collection.
• Data analysis was performed using descriptive statistics.