

eP512

ePoster Viewing

Antibiotic stewardship programmes

**INTERNATIONAL ANTIMICROBIAL STEWARDSHIP PHARMACIST MENTORING PROGRAM:  
UNITED WE STAND DIVIDED WE FALL**

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**Purpose:** Antimicrobial resistance is a global public health crisis. Our goal is to develop a collaborative international pharmacist mentoring Antimicrobial Stewardship Program (ASP) to overcome the shortage of infectious disease (ID) trained pharmacists and improve the ID knowledge and skills necessary for pharmacists in resource limited countries.

**Methods:** ID pharmacists from an established ASP at a large academic medical center in the United States (US) partnered with the Federation of Infectious Diseases Societies of Southern Africa (FIDSSA) in 2012 to mentor pharmacists from 2 public and 2 private sector hospitals in South Africa. Multidisciplinary members of FIDSSA selected the pharmacists for mentorship. Online resources (ID Podcast app) and Making a Difference Infectious Diseases (MAD-ID) online ASP certification program were used in the first year to increase pharmacists' ID knowledge. Hang time (time elapsed from written antibiotic order to time of administration) protocols with pharmacist interventions for ICU patients with sepsis were recommended. An ASP assessment document was completed by each hospital, providing a baseline for measurement. In 2013, US ID pharmacists went to South African hospitals and worked with the ASP teams. A skills assessment report of each pharmacist and recommendations to advance their ASPs was made. Two South African pharmacists worked for 2 weeks at the US hospital to learn additional ASP skills. Mentoring in research methodology was included to increase scholarly work. In year 3, US-based mentoring of the final 2 pharmacists will take place. To increase global public health awareness of antimicrobial resistance, social media (Twitter) was employed.

**Results:** In the 1<sup>st</sup> year, 100 hours of podcasts were listened to and 12 pharmacists received MAD-ID ASP certification documenting their improved ID knowledge. With increased self-confidence and mentoring by local managers, pharmacists implemented hang time protocols in 39 ICUs. Compliance with hanging antibiotics within 1 hour of sepsis diagnosis, improved from 41% to 82% ( $p < 0.001$ ). Pharmacists presented 8 ASP posters at the 5<sup>th</sup> FIDSSA Conference. In the second year, the first 2 pharmacists completed the 2-week US hospital-mentoring program. Participation in multidisciplinary patient care rounds and physician-pharmacist mentoring enhanced their clinical skills. Scholarly work included an ASP mentoring podcast accessible on the web and YouTube, an ASP comic book to engage and educate additional South African pharmacists, and submission of 2 abstracts to the 2014 International Congress on Infectious Diseases. Public health awareness was increased with 242 ASP tweets and 175 new followers in the first month of pharmacists using twitter. Skype conference calls will be used to sustain the mentoring program.

**Conclusion:** A collaborative pharmacist-mentoring ASP between the US and South Africa improved pharmacists ID knowledge, clinical skills, scholarly work, and increased global public health awareness of antimicrobial resistance.