

## Abstract

Antibiotics are one of the most commonly prescribed drugs in the United States. The use of antibiotics is the main driver in creating selective pressure for the emergence of antibiotic-resistant bacteria. Despite a high probability of viral etiology, acute respiratory tract infections (ARTI's), such as bronchitis, pharyngitis and sinusitis, account for 75% of all antibiotics prescribed by office-based providers. In the last decade, bacteria resistance has increased and many bacterial infections are becoming resistant to commonly prescribed antibiotics. In retail clinics, it is exceedingly common for patients to ask for an antibiotic for a viral illness. Patients lack the knowledge about antibiotic resistance when receiving antibiotics for viral illnesses. The clinical problem of inappropriate antibiotic use for viral upper respiratory infections (URIs) in retail clinics is nationwide, which has been addressed by the Center for Disease Control and Prevention (CDC), noting the use of antibiotics is an important factor leading to antibiotic resistance in the world. Based on a literature review, an educational intervention was designed to increase patient knowledge of inappropriate antibiotic use for viral URIs and improve patient attitudes concerning not obtaining antibiotics for viral infections. The educational intervention consisted of a Power Point presentation with information from the CDC about antibiotic use and viral URI's. The participants that viewed the educational presentation had a mean 27.5 point increase in knowledge and a mean 11.5 point increase in attitude. The data analysis revealed the project outcomes were achieved.

*Key words:* antibiotics; antibiotic resistance; viral upper respiratory infections; patient knowledge; patient attitudes; retail health clinics