clinicians can substantially improve influenza vaccination rates among this susceptible and hard-to-reach population.
Funding: None
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Presentation Type:
Poster Presentation
A Conceptual Framework for Understanding How and Why People Take Antibiotics Without a Prescription
Larissa Grigoryan, Baylor College of Medicine; Osvaldo Alquicira, Baylor College of Medicine;
Susan Nash, Baylor College of Medicine Juanita Salinas, Baylor College of Medicine; Melanie Goebel, Baylor College of Medicine; Barbara Trautner, Baylor College of Medicine

Background: The reported prevalence of nonprescription antibiotic use in the United States varies from 5% among socioeconomically and ethnically diverse primary care patients to 66% among Latino migrant workers. Reports indicate that people obtain and take antibiotics from stores or flea markets in the United States, friends or relatives, and leftover antibiotics from previous prescriptions. This unsafe practice may lead to unnecessary and inappropriate antibiotic use and increases the risk of antibiotic resistance. As groundwork to develop an intervention to decrease nonprescription antibiotic use, we mapped reported drivers of nonprescription use to the Kilbourne conceptual framework for advancing health disparities research. **Methods:** The Kilbourne framework consists of 3 phases: (1) detection of health disparities and identification of vulnerable populations, (2) understanding why disparities exist, and (3) reducing or eliminating disparities through interventions. We focused on the first 2 phases and mapped the identified drivers of nonprescription antibiotic use onto the key domains of the Kilbourne conceptual framework: patient, healthcare system, and clinical encounter factors. We also conducted brief field research to explore anecdotal reports regarding availability of nonprescription antibiotics in our community. **Results:** We found 8 studies addressing factors related to nonprescription antibiotic use in the United States. These studies were primarily qualitative and included Spanish-speaking Hispanic and Latino immigrants. Figure 1 shows the proposed factors that may directly or indirectly predict nonprescription antibiotic use. Key potential factors are individual factors, psychosocial factors, resources, healthcare system factors, and clinical-encounter factors. For example, patients with inadequate health literacy may have poor access to care because of difficulty finding providers and choosing or navigating insurance plans; thus, they may be at risk for nonprescription use. At the same time, patients with inadequate health literacy may be at risk for using nonprescription antibiotics for a viral infection because of difficulty understanding medication labels or package inserts. The relevance of resources (availability) to nonprescription antibiotic use was supported by our research team's purchase of amoxicillin, tetracycline, and metronidazole without prescriptions from a flea market in Houston, Texas. **Conclusions:** The Kilbourne conceptual framework provides a strong, comprehensive basis for research and intervention in the challenging problem of nonprescription antibiotic use. Ongoing research will test the proposed relationships between patient, healthcare system, and clinical-encounter factors and nonprescription antibiotic use outcomes. We are conducting a survey among both indigent and insured patient populations to identify the relative importance of these factors and to validate our proposed conceptual framework of nonprescription antibiotic use.
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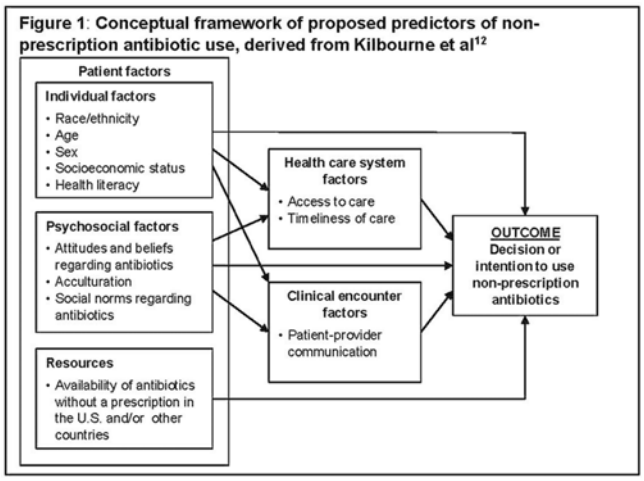

Fig. 1.

Presentation Type:
Poster Presentation
A Decade in Trying to Increase Hand Hygiene—Finally Success
Linda Huddleston, Floyd Medical Center; Sheila Bennett, Floyd Medical Center; Christopher Hermann, Clean Hands - Safe Hands

Background: Over the past 10 years, a rural health system has tried 10 different interventions to reduce hospital-associated infections (HAIs), and only 1 intervention has led to a reduction in HAIs. Reducing HAIs is a goal of nearly all hospitals, and improper hand hygiene is widely accepted as the main cause of HAIs. Even so, improving hand hygiene compliance is a challenge. **Methods:** Our facility implemented a two-phase longitudinal study to utilize an electronic hand hygiene reminder system to reduce HAIs. In the first phase, we implemented an intervention in 2 high-risk clinical units. The second phase of the study consisted of expanding the system to 3 additional clinical areas that had a lower incidence of HAIs. The hand hygiene baseline was established at 45% for these units prior to the voice reminder being turned on. **Results:** The system gathered baseline data prior to being turned on, and our average hand hygiene compliance rate was 49%. Once the voice reminder was turned on, hand hygiene improved nearly 35% within 6 months. During the first phase, there was a statistically significant 62% reduction in the average number of HAIs (catheter associated urinary tract infections (CAUTI), central-line–acquired bloodstream infections (CLABSIs), methicillin-resistant *Staphylococcus aureus* (MRSA), multidrug-resistant organisms (MDROs), and *Clostridiodes difficile* experienced in the preliminary units, comparing 12 months prior to 12 months after turning on the voice reminder. In the second phase, hand hygiene compliance increased to >65% in the following 6 months. During the second phase, all HAIs fell by a statistically significant 60%. This was determined by comparing the HAI rates 6 months