SELF-MEDICATION AND ILI ETIOLOGIES AMONG INDIVIDUALS PRESENTING AT PHARMACIES WITH INFLUENZA-LIKE ILLNESS: GUATEMALA CITY, 2018 INFLUENZA SEASON

ABSTRACT

Objectives: We aimed to characterize the proportion of clients presenting to community pharmacies with influenza-like illness (ILI) and the severity of their illness; the proportion with detectable influenza A, influenza B, and other pathogens (i.e., parainfluenza I, II, and III, adenovirus, respiratory syncytial virus, human metapneumovirus); and to describe their self-medication practices.

Methods: A cross-sectional study was conducted in six pharmacies in Guatemala City. Study personnel collected nasopharyngeal and oropharyngeal swabs from participants who met the ILI case definition and who were self-medicating for the current episode. Participants were tested for influenza A and B and other pathogens using real-time RT-PCR. Participants' ILI-associated self-medication practices were documented using a questionnaire.

Results: Of all patients entering the pharmacy during peak hours who responded to a screening survey (n = 18,016) 6% (n = 1029) self-reported ILI symptoms, of which 45% (n = 470/1029) met the study case definition of ILI. Thirtyone percent (148/470) met inclusion criteria, of which 87% (130/148) accepted participation and were enrolled in the study. Among 130 participants, nearly half tested positive for viral infection (n = 55, 42.3%) and belonged to groups at low risk for complications from influenza. The prevalence of influenza A was 29% (n = 35). Thirteen percent of the study population (n = 17) tested positive for a respiratory virus other than influenza. Sixty-four percent of participants (n = 83) reported interest in receiving influenza vaccination if it were to become available in the pharmacy. Medications purchased included symptom-relieving multi-ingredient cold medications (n = 43/100, 43%), nonsteroidal antiinflammatory drugs (n = 23, 23%), and antibiotics (n = 16, 16%). Antibiotic use was essentially equal among antibiotic users regardless of viral status. The broad-spectrum antibiotics ceftriaxone and azithromycin were the most common antibiotics purchased.

Conclusions: During a typical influenza season, a relatively low proportion of all pharmacy visitors were experiencing influenza symptoms. A high proportion of clients presenting to pharmacies with ILI tested positive for a respiratory virus. Programs that guide appropiate use of antibiotics in this population are needed and become increasingly important during pandemics caused by respiratory viral pathogens.

Keywords:

Influenza Like Illness, Antibiotics, Pharmacy based study

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