

## The impact of law enforcement on the dispensing antibiotics without prescription in Saudi Arabia: findings and implications

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**Background:** Dispensing of antibiotics without a prescription (DAwP) has been widely practised in Saudi Arabia despite being illegal. This is a concern increasing AMR. In May 2018, the law and regulations were enforced including fines up to 100,000 SR (equivalent to US\$26,666) and cancellation of licences. Consequently, we wanted to evaluate the impact.

**Methods:** Mixed method study among 116 community pharmacies in two phases. Pre-law enforcement phase between December 2017 and March 2018 and post-law enforcement phase one year later. Each phase consisted of a cross-sectional questionnaire-based survey and a simulated client method (SCM). In the SCM, clients presented with either pharyngitis or urinary tract infections (UTI) with 3 levels: level 1 – SC asked for something to relieve the symptoms, level 2 – SC asked for something stronger if an antibiotic was not dispensed, level 3 – SC requested an antibiotic. In SCM for each phase, all 116 pharmacies were visited with at least one of the scenarios.

**Results:** Before the law enforcement, 70.7% of community pharmacists reported DAwP was common. 96.6% and 87.7% of participating pharmacies dispensed antibiotics without a prescription for pharyngitis and UTI respectively. After law enforcement, only 12.9% of community pharmacists indicated that DAwP was common, with only 12.1% and 5.2% dispensing antibiotics without prescriptions for pharyngitis and UTI respectively and mostly after level 3.

**Conclusion:** Law enforcement was effective. However, there is still further scope for improvement as community pharmacists are worried patients may go elsewhere if no antibiotic dispensed on request. This could include educational activities.

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