Impact of Reformulation of OxyContin in the US on Opioid Dispensing Patterns Near the US-Canada Border

Immediately following the introduction of a tamper-resistant formulation of controlled-release oxycodone (OxyContin-OP) in the US, dispensing of the original formulation of OxyContin increased fourfold on the Ontario side of the Detroit-Windsor Tunnel.

What does this mean?

- After regulatory authorities warned physicians and pharmacists in April 2011, dispensing rates declined to those observed in early 2010.

Policy Implications

- Considerations should be given to providing timely notification to Ontario prescribers and pharmacists of cross-border changes in opioid formulations to prevent.
- The allowance of generic formulations of the original OxyContin tablet in Canada could have substantial implications on drug seeking behavior across both provincial and international borders.

How do we know this?

The ODPRN conducted a population-based study from April 2010 to February 2012 of retail pharmacies in three Ontario cities near six of the highest volume border crossings. We found a substantial increase in prescription dispensing of the original OxyContin formulation per 1000 population near the Detroit-Windsor Tunnel, but no similar increase at other border crossings. Near the Detroit-Windsor Tunnel, pharmacy dispensing of OxyContin was stable between April 2010 to July 2010, followed by a fourfold increase between August 2010 and February 2011 from 505 to 1,969 tablets per 1000 population. This increase occurred at the same time as the August 2010 introduction of OxyContin-OP, the tamper-resistant formulation on the US market and was estimated to translate into nearly 250,000 excess OxyContin tablets dispensed. From April 2011 to November 2011, rates declined until they returned to baseline levels observed in early 2010; this drop coincided with warnings provided to prescribers and pharmacists in March/April 2011 about potential drug-seeking activity from the US.

Gomes T, Paterson JM, Juurlink DN, Dhallia IA, Mamdani MM. Reformulation of OxyContin and pharmacy dispensing patterns near the US-Canada border. Open Medicine, 2012; 6 (4): 141-145

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