Abstract:

**Aim of Investigation**: Nonmedical use of prescription opioids including extended release (ER) oxycodone has been a significant public health problem through the past decade. Purdue Pharma introduced a reformulated ER oxycodone product in August 2010 in the US. This reformulation has physicochemical barriers intended to deter individuals from abusing ER oxycodone through routes that require tampering. The current analysis examined whether the street price in the US of the new formulation of ER oxycodone was lower than the street price for the original formulation of ER oxycodone manufactured by Purdue as an indicator of decline in demand for the new formulation versus the original formulation.

**Methods**: Law enforcement officials participating in the Drug Diversion program of the RADARS® System completed a questionnaire assessing the street price of diverted prescriptions between the first quarter of 2010 and the third quarter of 2011, excluding the second quarter of 2010. The geometric mean street price per milligram (mg) of the reformulation was compared to the price per mg of the original formulation in the post reformulation period. The change from pre to post reformulation in the original formulation was also compared. A repeated measures analysis of variance allowing for correlations within reporting agencies was used.

**Results**: The geometric mean street price of original formulation ER oxycodone was relatively steady at $0.80 per mg before (95% CI: $0.74 to $0.86) and $0.85 (95% CI: $0.80 to $0.91) after introduction of the reformulation. The geometric mean of the price per mg of the reformulation was $0.68 (95% CI: $0.62 to $0.75) per mg, which is 21% lower (95% CI: 10 to 30%, p=0.0003) than the original formulation of ER oxycodone in the period after introduction of the reformulation.

**Conclusions**: These findings suggest that the buyers of illicit prescription drugs on the street are willing to pay more for the original formulation of ER oxycodone manufactured by Purdue than the new formulation. Potential explanations include persistent demand for the original product because it is easier to crush and decreased availability because the original formulation is no longer sold through legitimate channels. In addition, price changes do not reflect change in the volume of sales of ER oxycodone. Additional research is needed to determine whether a reduction in street price reflects a decrease in abuse.