Abuse of Tapentadol Among Individuals Entering Treatment for Opioid Use Disorder

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INTRODUCTION

• Tapentadol is a centrally acting analgesic thought to have dual mechanisms of action: mu-receptor agonism and inhibition of norepinephrine reuptake.
• Tapentadol is a schedule II opioid available as an immediate-release (IR; NUCYNTA®) and extended-release (ER; NUCYNTA ER®) formulation.

RESULTS

• There were 8,001 valid surveys completed: prevalence of tapentadol abuse was 0.17% (n=14), tramadol abuse was 6.95% (n=556), oxycodone abuse was 25.60% (n=2,048), and hydrocodone abuse was 18.40% (n=1,472).
• The prevalence of primary drug of abuse endorsements was 0.15% (n=12) for tapentadol, 2.56% (n=205) for tramadol, 18.87% (n=1,510) for oxycodone, and 11.34% (n=907) for hydrocodone.
• The adjusted abuse prevalence (per million prescriptions) was 0.80% (95% CI: 0.47% to 1.35%) for tapentadol; greater than tramadol (0.57%, 95% CI: 0.52% to 0.61%), similar to hydrocodone (0.72%, 95% CI: 0.68% to 0.75%), and less than oxycodone (1.36%, 95% CI: 1.30% to 1.41%).
• Among tapentadol abuse cases, 14.28% (n=2) identified tapentadol as a primary drug of abuse, 2.56% (n=205) for tramadol, 18.87% (n=1,510) for oxycodone, and 11.34% (n=907) for hydrocodone.
• Abuse of NUCYNTA (n=2) and NUCYNTA ER (n=4) was low (<0.1% of prescriptions dispensed). Among tapentadol abuse cases, 14.28% (n=2) identified tapentadol as a primary drug of abuse, 2.56% (n=205) for tramadol, 18.87% (n=1,510) for oxycodone, and 11.34% (n=907) for hydrocodone.

METHODS

• Researched Abuse, Diversion and Addiction-Related Surveillance (RADARS®) System Treatment Center Programs Combined.
• Respondents entering treatment for opioid use disorders were asked about prescription medications abused in the past month and about their primary opioid drug of abuse (drug used the most prior to entering treatment).
• We compared abuse and primary drug prevalence across the following opioid molecule: tapentadol, tramadol, oxycodone, and hydrocodone in 2019.
• Unadjusted prevalence and abuse prevalence adjusted for prescription dispensed (per million) were estimated for NUCYNTA®, NUCYNTA ER®, IR hydrocodone, IR single-entity (SE; not in combination with acetaminophen) oxycodone, and IR oxycodone combination ingredient using data from 2019.
• Prescriptions dispensed estimates were obtained from the IQVIA® (Danbury, CT) U.S.-Based Longitudinal Patient Data.

CONCLUSIONS

• Abuse of tapentadol was infrequent relative to other opioids among individuals entering treatment for opioid use disorders.
• Relative to prescribing however, tapentadol abuse was greater than tramadol, similar to hydrocodone, and lower than oxycodone.
• Tapentadol is less likely to be endorsed as a primary drug of abuse than tramadol, oxycodone, and hydrocodone.
• NUCYNTA abuse prevalence was lower than all comparator drug groups. NUCYNTA ER abuse prevalence is less than all drug groups except IR hydrocodone after adjusting for prescriptions dispensed.

LIMITATIONS

• Abuse estimates are based on self-report and no adjustments were made for differences between opioid molecules in missing data.
• These results look at a specific period of time and may change over time when more data is available.

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