

# Non-medical Use and Injection Use of Prescription Opioids in Spain in the Non-Medical Use of Prescription Drug (NMURx) National Survey

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## Background

Prescription opioid abuse in many countries has become a problem of epidemic proportion and is now associated with more deaths than motor vehicle accidents. Opioid abusers were generally more likely to utilize medical services, such as emergency department, physician outpatient visits, and inpatient hospital stays, relative to non-abusers (Meyer et al., 2014) with high economic burden (Reinhart et al., 2018).

The United States RADARS<sup>®</sup> System is comprised of international networks of poison centers, opioid treatment programs, and law enforcement as well as online surveys to gather data on college students and street price of these drugs. While the RADARS System is well established in the United States as a valuable monitoring tool, there is currently no program in place to evaluate lifetime use of product-specific prescription drugs among adults in Spain.

## Aims

To present data on trends and estimated prevalence of opioid prescription drugs misuse and injection use in Spain. To present data in prescription misuse by active pharmaceutical ingredient.

## Methods

NMURx is a series of cross-sectional online surveys. NMURx collects data from the adult general population on non-medical use (NMU) of prescription drugs, as well as demographics and behaviors. NMU was defined as use in a way not directed by your healthcare provider. NMURx data from Spain (4Q2018, n=9,945) was analyzed. Calibration weights were applied to represent national adult population distributions. National rates of past 12 month NMU of opioid active pharmaceutical ingredients (codeine, tramadol, morphine, oxycodone) were calculated. Intravenous use behaviors were calculated among those who reported last year NMU.

## Results

Estimated rates of opioid NMU in Spain were high. Whereas the most prescribed opioid was tramadol, followed by codeine, oxycodone and morphine (Figure 1), the rate of NMU per population was highest for codeine, with an estimated 12,207 per 100,000 population (95% CI: 11,208-13,145) adults non-medically using codeine in the past year, followed by tramadol 2,931 per 100,000 population (95% CI: 2,489-3,373), morphine 632 per 100,000 population (95% CI: 465-799) and oxycodone 328 per 100,000 population (95% CI: 238-418), see Figure 2.

In the other side, the proportion of NMU by injection was highest for morphine (33%; 95% CI: 22-45%), followed by oxycodone (18%; 95% CI: 8-28%), codeine and tramadol.

Figure 1. Opioid prescriptions in Spain from 2012 to 2018.

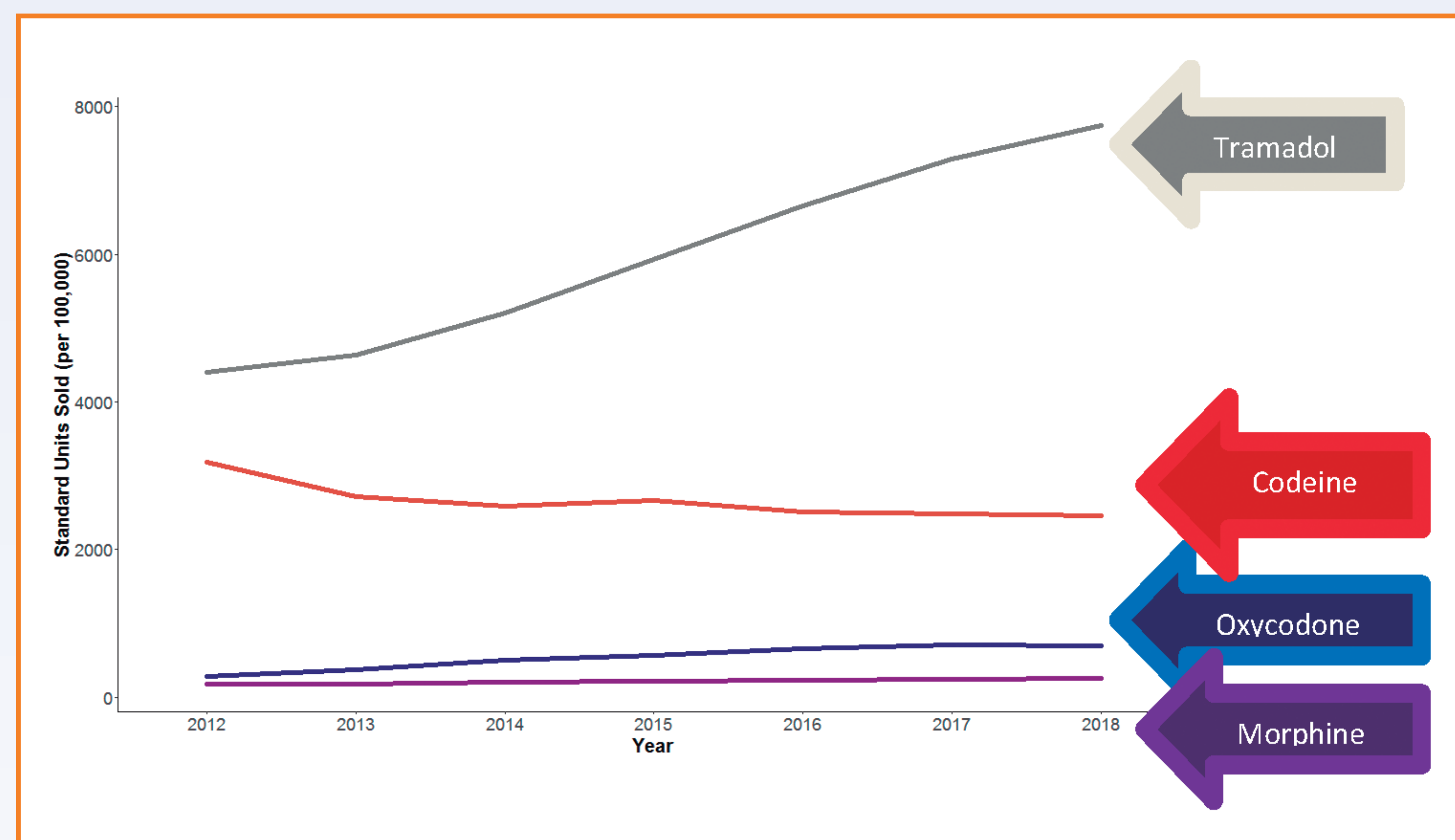
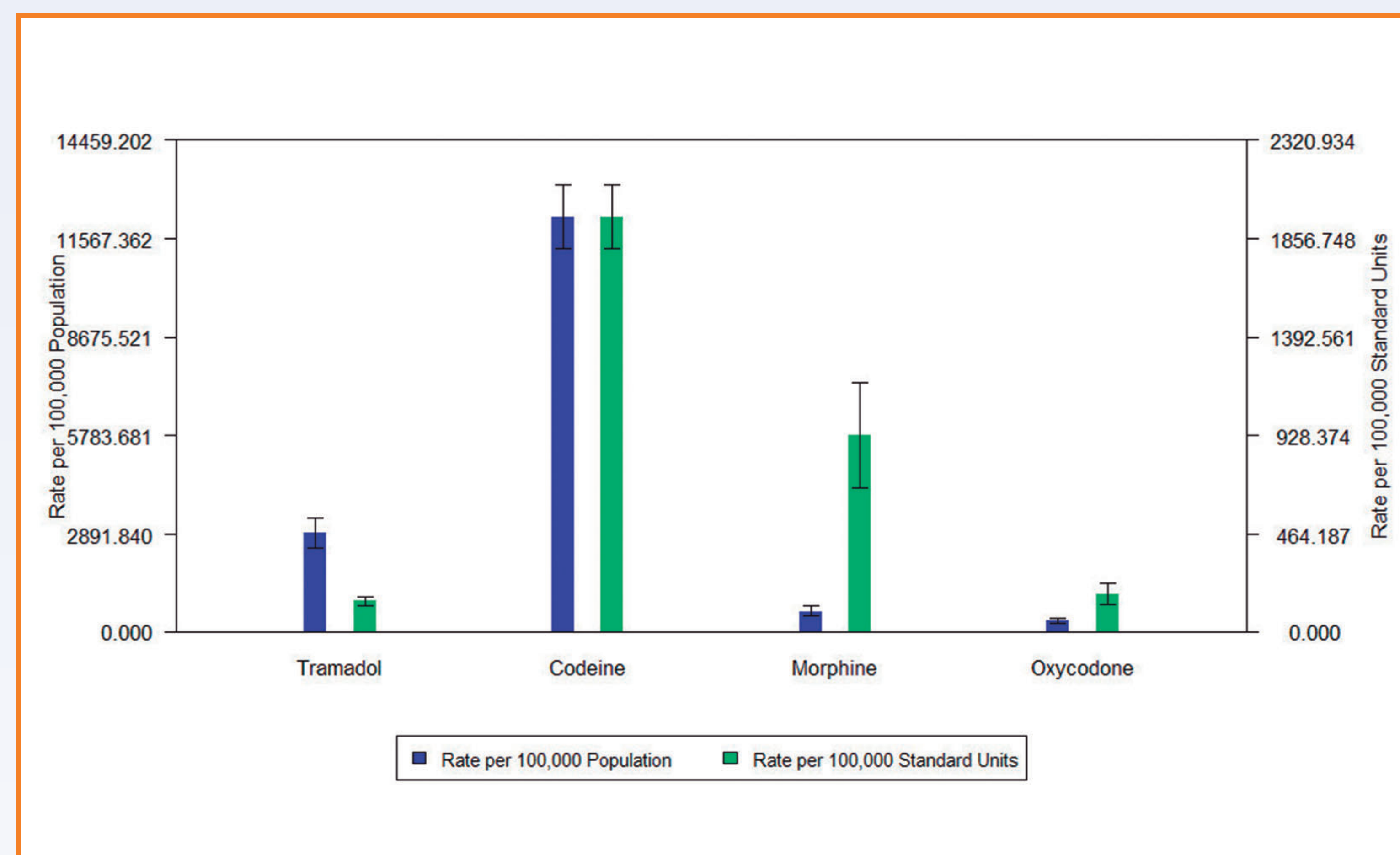


Figure 2. Misuse rate per population of opioids in Spain



## Conclusions

Spain had high rates of NMU of opioids per population. The rate of NMU per population was highest for codeine among the four opioids studied, while morphine and oxycodone had the highest proportion of NMU by injection.

## References:

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- Reinhart M, Scarpati LM, Kirson NY, Patton C, Shak N, Erensen JG. The economic burden of abuse of prescription opioids: a systematic literature review from 2012 to 2017. Appl Health Econ Health Policy. 2018; 16:609-32.

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