

Rates of Inappropriate Drug use in the Chronic Pain Population:



An Update

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Abstract

With increasing misuse and abuse of controlled substances, urine drug monitoring is an important method to assess patients' likely compliance with medication regimens and to identify patients using illicit substances. A subset of urine samples, N=922,440, tested by Ameritox between October 1, 2009 and October 1, 2010 were reviewed for overall results as well as illicit use. Samples were evaluated (using a proprietary methodology) to assess the likelihood that the patients were taking their medications as prescribed. Eleven percent of the samples were found to have illicit drugs present, 31% were missing the prescribed drug, 29% had a drug present that was not on the requisition accompanying the sample, 15% were found to have normalized values above the expected range, and 18% were below the expected range. Only 31% of samples were considered to be normal, defined as: No illicit or non-prescribed medication present, confirmed presence of prescribed medications, and normalized urine values within the expected range. Of the 104,905 samples that were found to have illicit drugs present, marijuana was the most common (81,983), followed by cocaine (22,367), and methamphetamines (5,926). The remainders were found to have various other drugs including heroin, ecstasy, and PCP. Comparison of this data with a previous study with 938,420 samples tested between January 2006 - January 2009 (Couto, 2009) shows that the rates of illicit drugs found and medications found that were not on the requisition remained relatively stable. The incidence of patients likely taking their medications as prescribed rose from 25.5% to 31.2%, while the samples missing the prescribed medication decreased from 38% to 31%. This study shows inappropriate drug use remains prevalent in the population of chronic pain patients. In spite of the increasing focus to use risk assessment methods in order to reduce the numbers of patients misusing their medications, urine drug testing results show that the incidence remains relatively stable.

Objectives

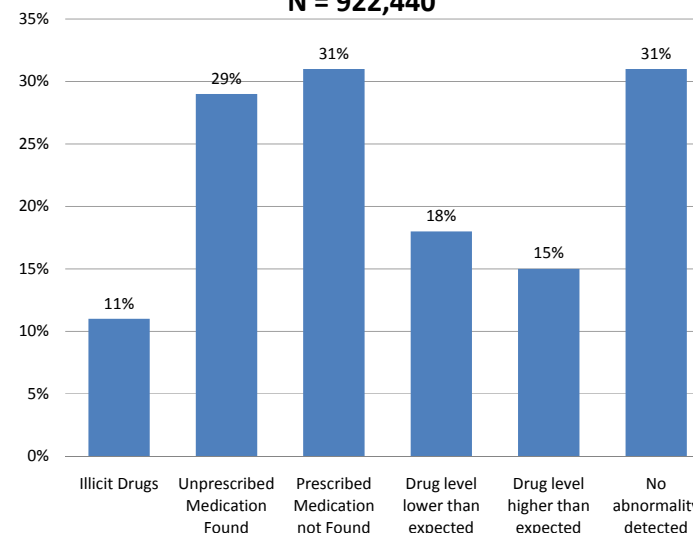
1. To update the rates of inappropriate utilization, abuse and diversion in a population of patients who were prescribed chronic opioids as measured by urine drug testing (UDT) in the clinical setting. Initial data on 938,586 samples was presented in 2009. This new data set encompasses 922,440 subsequent samples
2. To identify changes in the rates for various categories of UDT outcomes
3. To further breakdown the illicit drugs found on UDT from the most recent dataset.

Methods

A subset of urine samples, N=922,440, tested by Ameritox between October 1, 2009 and October 1, 2010 were reviewed for overall results as well as illicit use. Samples were evaluated (using a proprietary methodology) to assess the likelihood that the patients were taking their medications as prescribed. This dataset was then compared with a dataset previously reported.

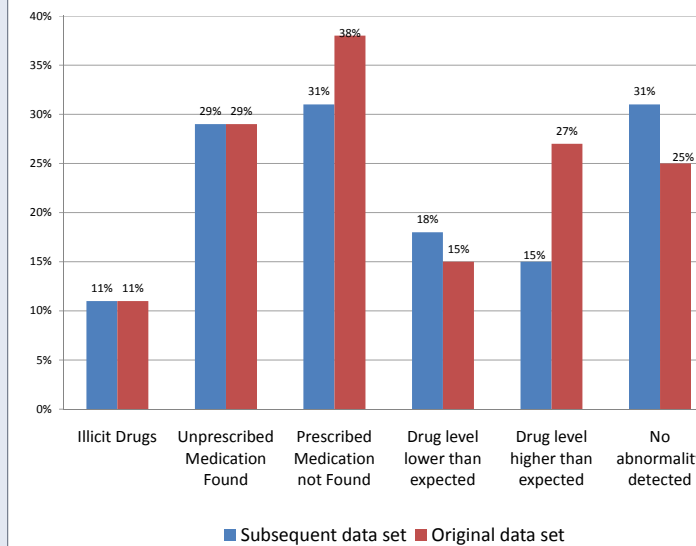
Results

Subsequent Data Set
N = 922,440

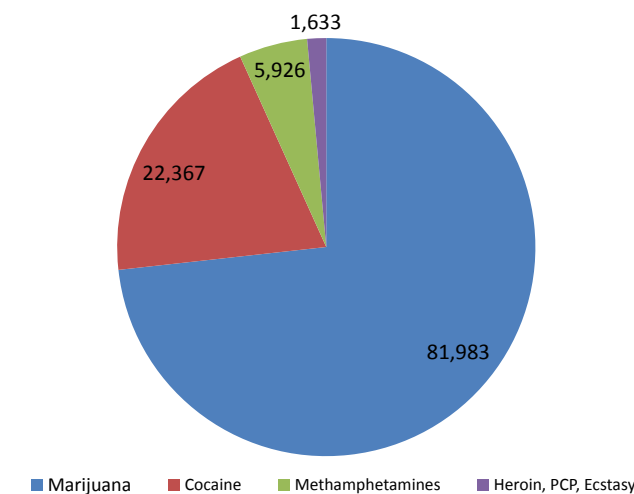


Results Continued

Comparison of Data Sets



Illicits Found
N=104,905



Discussion

Only 31% of samples were identified as normal. Sixty-nine percent of patient samples showed various abnormalities. Eleven percent of samples had illicit drugs present which is consistent with the percentage found in the prior dataset. No detectable level of prescribed medication was found in 31% of samples, down from 39%. Finding non-prescribed drug in the sample remained at 29%. Fifteen percent were found to have a drug level higher than expected, and 18% had drug levels lower than expected.

The presence of illicit drugs was found in 104,905 samples. Marijuana was the most common, followed by cocaine and methamphetamines. The incidence of marijuana potentially could be even higher than found in this data as some clinics do not test for this compound when ordering UDT.

Conclusions

This most recent dataset does not reflect any substantial change in the pattern of results for UDT between the sampling times of the two datasets. In spite of the emphasis on risk assessment, identification of aberrant behaviors and increased awareness of prescription drug misuse, abuse and diversion in COT patients, high rates of inappropriate drug use persist.

Limitations

These results may not be reflective of UDT in the overall population of COT patients as physicians may test patients suspected of medication misuse more frequently. The sample reflects unique samples and not unique patients. As categories of UDT results are not mutually exclusive, the samples with multiple abnormal results may be contributing to an overstatement of the problem

References

Couto J., et al., High Rates of Inappropriate Drug Use in the Chronic Pain Population, *Journal of Population Health*, 12(4), 2009.