



Three in Five Americans Misuse Their Prescription Drugs, Finds National Study of Prescription Medication Lab Testing

April 27, 2012

Quest Diagnostics Health Trends(TM) analysis finds many women and men of all ages, income levels and health plan coverage use pain and other prescription medications contrary to clinician orders, potentially putting their health at risk

MADISON, N.J., April 27, 2012 /PRNewswire via COMTEX/ --Results of a national study of nearly 76,000 laboratory tests for monitoring prescription drug use indicate that the majority of Americans tested misused their prescription drugs, including potentially addictive pain medications. The results show that more than three in five patients, or 63%, tested through Quest Diagnostics (NYSE: DGX) were inconsistent with clinician orders. The findings suggest many Americans take prescription medications in ways, from missing doses to combining medications with other drugs without a clinician's oversight, which put their health at risk.

The study found high rates of inconsistency with clinician orders among all specific drug classes tested, including opioid pain medications, such as oxycodone (including OxyContin®) (44%), central nervous system depressants like alprazolam (including Xanax®) (50%), and the stimulant amphetamine (such as Adderall®) (48%). High rates of misuse were found in women and men across all ages, income levels and government and commercial health plan coverage.

"The current study from Quest Diagnostics, involving a large nationally representative sample of patients undergoing urine drug testing, suggests that many patients do not take potentially dangerous prescription medications as prescribed," said Keith Heinzerling, MD, Assistant Professor with the UCLA Department of Family Medicine and UCLA Center for Behavioral and Addiction Medicine. "The study provides a unique perspective on the problem of prescription drug misuse by comparing what the doctor indicates is the patient's prescribed medication to what is actually in the patient's urine test.

"These results are sobering, and suggest that changes in prescribing medications -- and educating patients in appropriate prescription drug use -- are urgently needed," said Dr. Heinzerling.

The Quest Diagnostics Health Trends(TM) Report *Prescription Drug Misuse in America, Laboratory Insights into the New Drug Epidemic* is based on an analysis of 75,997 de-identified urine lab test results of patients of both genders in 45 states and the District of Columbia performed by the company's clinical laboratories in 2011. Patients were tested for the presence of up to 26 commonly abused prescription medications and illicit drugs, such as cocaine and marijuana.

The entire report is now available at www.QuestDiagnostics.com/HealthTrends.

Clinicians use periodic laboratory urine drug testing to monitor patients for appropriate drug use. A clinician's test orders specify medications prescribed by her or him and other clinicians and drugs to be tested. Consistent results indicate that only the prescribed drug(s) for the patient was detected. Inconsistent results suggest that the patient did not take the specified drug(s), took the drug with other non-prescribed drugs, or took drugs not indicated by the clinician.

Prescription drug misuse takes many forms, including selling or giving away medications (diversion), combining drugs and patient failure to take a medication as directed by a clinician due to financial constraints, confusion or forgetfulness. Misuse can lead to dangerous drug combinations, fuel addictive drug use or compromise patient response to a medication prescribed to treat a health condition.

More than 36,000 people died from drug overdoses in 2008, and most of the deaths were caused by prescription drugs, according to the U.S. Centers for Disease Control and Prevention.

Other study findings include:

Age: As many as 70% of children 10 to 17 years of age and 73% of adults 18 to 24 years of age were inconsistent with clinician orders. Older patients were also at risk of misuse, with inconsistent results found in one in two (50%) adults 65 years of age or older tested.

Gender: Men and women were as equally likely to misuse drugs, with inconsistency rates of 63%, although males used illicit drugs more, with two in ten (21%) testing positive for cocaine, marijuana or PCP compared to 15% of females.

Income: Inconsistency rates were similar for low-income areas (median income of \$29,000 or less) and high-income areas (median income of \$80,000 or more). However, among patients with inconsistent results, 42% at the lowest income level had no reportable drug in their specimen compared to 35% at the highest income level. The findings suggest that less affluent Americans may be more likely to limit or forgo using their prescribed medications for financial reasons. Median income was based on 2010 U.S. Census data by ZIP code.

Health Plan Coverage: Evidence of misuse was found in 72% of samples of Medicaid beneficiaries, compared to 60% of patients in Medicare and 62% in a private health plan.

"We were surprised by the scope of the drug misuse problem, spanning all age groups, income levels and type of health plan coverage, according to our data," said Jon R. Cohen, M.D., Senior Vice President and Chief Medical Officer, Quest Diagnostics. "Everyone is at risk."

"Unfortunately, some doctors may react to this study's results by refusing to prescribe certain medications, thereby denying patients who do not misuse drugs the potential benefits of treatment," said Dr. Heinzerling. "Instead, clinicians need new tools to assist them in identifying prescription drug misuse and abuse and providing treatment in a safer manner. They also need tools for educating patients about the dangers of drug misuse."

Quest Diagnostics is a leader in prescription drug monitoring and workplace drug testing. The company's Drug Testing Index(TM) (DTI) is widely considered a benchmark in national trends of drug use by U.S. workers.

Study Strengths and Limitations

The study's strengths are its size and scope. The study analyzed 75,997 de-identified urine lab test results of up to 26 drugs performed in 2011 on patients of both genders 10 years of age and older in 45 states and the District of Columbia. All positive drug screens were confirmed by mass spectrometry, the most advanced drug testing method. Other strengths include analysis of results of tests ordered by a diverse range of clinicians that may be expected to prescribe pain medications, including primary care physicians, pain hospitals and clinics, and specialists, such as neurologists and osteopaths. The analysis did not include results of drug rehabilitation clinics, which may be more likely to exhibit unusually high rates of drug inconsistency.

Study limitations include geographic disparities (only 25 states had more than 1,000 specimens), inability to confirm drug misuse through access to medical records or clinical evaluation, and technological factors and patient variations, such as drug metabolism and hydration state, that may affect the reliability of a minority of results. Because Quest Diagnostics does not provide services to all clinicians in the U.S., the results are not broadly representative of all patients taking prescription medications in the U.S. It is also possible some clinicians tested patients due to appropriate suspicions of drug misuse, and that some clinicians omitted to specify on a test order all drugs the clinician knew were prescribed for the patient.

The analysis by income is based on U.S. Census data of median income by ZIP code, not by the annual income of patients, whose income may vary on an individual basis.

About Quest Diagnostics Health Trends(TM) Reports

Quest Diagnostics Health Trends Reports identify trends in disease and wellness based on analysis of de-identified test results from Quest Diagnostics, which maintains the largest private clinical laboratory database in the United States. Quest Diagnostics Health Trends Reports are published in peer reviewed medical journals and by the company as a public service. Previous reports have focused on allergies and asthma, chronic kidney disease, diabetes, heart disease, H1N1 (2009) Influenza, rotavirus and workplace wellness. Visit QuestDiagnostics.com/HealthTrends.

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