

Variable Mean (95% CI)	Non-Hemodialysis (n = 95)	Hemodialysis (n = 8)	p-value
Age, yrs	40.6 (37.4–43.8)	49.3 (40.6–53.3)	0.13
Female, no. (%)	52 (54%)	2 (25%)	0.10
Initial Serum Creatinine, mg/dL	1.39 (1.18–1.6)	3.56 (0.78–6.34)	<0.001
Initial Lithium level, meq/L	2.42 (2.21–2.63)	5.13 (3.49–8.41)	<0.001
Peak Lithium level, meq/L	2.72 (2.51–2.93)	5.27 (3.63–6.91)	<0.001
Length of Stay, days	4.41 (3.58–5.24)	13 (3.91–22.1)	<0.001

Methods: The Division of Medical Toxicology's database of patient encounters at a tertiary academic medical center was utilized to identify all patients \geq age 13 who presented with acute, acute-on-chronic, or chronic lithium toxicity from February 1, 1998 through August 31, 2013. Demographics, laboratory studies, and outcome data were collected. The primary outcome of this study was return to baseline neurologic function prior to discharge. Secondary outcome was hospital length of stay. Descriptive statistics, Student's t-test, and Fisher's exact test were used to analyze the data where appropriate.

Results: After excluding patients with sub-toxic lithium levels (n = 23) and those whose medical record lacked pertinent data (n = 8), 103 patients were included into the study. See table for Results. All cases initiated dialysis for a high lithium level and some cases had multiple indications which included either altered mental status (n = 2) and/or acute kidney injury (n = 3). All patients in both groups returned to their neurologic baseline prior to hospital discharge.

Conclusions: In this retrospective analysis, all patients in both groups returned to neurologic baseline upon hospital discharge. Based on these results, dialysis does not appear to alter neurologic outcomes. Significantly longer hospital stay was seen in patients who received dialysis which is likely the result of confounding or increased comorbidities (older average age, higher baseline creatinine, and higher peak lithium level) in this group.

Keywords: Lithium, Hemodialysis, Neurotoxicity
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198. Non-medical Use of Prescription and Illicit Drugs in Public versus Private Colleges & Universities

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Background: Non-medical use (NMU) of prescription (Rx) drugs is a growing concern in the United States and is the fastest growing drug problem among young adults. From the Monitoring the Future study, approximately 1 in every 10 persons ages 18 – 25 reported NMU of Rx opioid analgesics in 2003. This age group is at risk for developing adverse drug habits stemming from sustained use during college years. This abstract aims to address whether NMU endorsements of these drugs are different between public and private institutions.

Methods: The Researched Abuse, Diversion and Addiction-Related Surveillance (RADARS®) System College Survey Program

Drug Category	Public N (%)*	Private N (%)*	Odds Ratio	P-value
Any Drug	5,705 (33.1)	1,635 (28.4)	0.85	<0.0001
Opioids	3,130 (18.1)	896 (15.6)	0.88	0.005
Sleeping Aid	1,508 (8.74)	439 (7.63)	0.89	0.079
Stimulant	1,930 (11.2)	562 (9.77)	0.90	0.091
Muscle Relaxer	1,847 (10.7)	502 (8.73)	0.91	0.146
Anti-Depressant	1,521 (8.82)	471 (8.19)	0.97	0.686
Anti-Anxiety	1,779 (10.3)	564 (9.81)	0.99	0.893
Any Illicit Drugs	1,796 (10.4)	552 (9.60)	1.01	0.842

*Multiple endorsements are possible between categories.

collects data from approximately 6,000 respondents annually during the spring, summer, and fall semesters. The online survey inquires about demographics, Rx drug NMU of stimulants, opioids, muscle relaxants, anti-anxiety, anti-depressants, sleeping aids and lifetime illicit drug use. NMU was defined as use without a doctor's Rx or any reason other than prescribed during the last three months. Students attending a public or private 4-year institution from 2010 to 2014 were analyzed. The "Any Drug" categories were created based on endorsements of at least one Rx with or without an illicit drug. Logistic regression was used to determine if NMU was more prevalent in public (reference) or private institutions (adjusted for age, gender, and Greek life status [yes/no]).

Results: Of the 23,000 eligible respondents, 17,248 (75%) reported attending a public school and 5,752 (25%) reported attending a private school. After adjusting for covariates, the odds of endorsing any drug and opioids were lower for private schools compared to public (0.15 and 0.12 times lower, respectively). There were no statistically significant differences among the other drug categories.

Conclusion: Endorsement of at least one drug and the opioid categories provided evidence of a significant difference in NMU between public and private schools. Identifying populations at risk for NMU of Rx drugs can inform targeted prevention strategies. Our study indicates there may be a greater impact of interventions targeted toward public institutions.

Keywords: non-medical use, prescription drugs, college survey
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199. Geographic Differences in Naloxone Use With Prescription Opioid Analgesic Exposures

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Background: Naloxone (Narcan) is an opioid antagonist used to counter the effects of opioids, particularly with opioid overdose. Because of an increase in opioid overdoses and deaths in the US, greater access to naloxone by first-responders and the public has been advocated. Since there are geographic differences in prescription opioid analgesic exposures, similar differences might be expected with naloxone used to treat these exposures. The objective of this study was to describe the geographic pattern of opioid analgesic exposures and naloxone use in a single state.

Methods: Exposures to prescription opioid analgesics reported to a statewide poison center system during 2000–2014 were identified. Included were exposures with a known caller county, with other substances in addition to the opioid analgesic, and with any