G40 Characterization of Recent Cocaine and Methadone-Related Death Trends in Caddo Parish, Louisiana, With Comparison to National Trends

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After attending this presentation, attendees will recognize recent trends in drug-related deaths, specifically cocaine and methadonerelated.

Cocaine has dominated the picture in drug-related deaths presenting to the forensic pathologist. Recently, there has been a trend toward decreased cocaine-related deaths and increased methadonerelated deaths. Unlike cocaine, methadone is not ordinarily considered an illicit drug, as it is regularly prescribed to heroin users (methadone maintenance programs) and to those with chronic pain. The forensic pathologist will become aware of the increase in methadone-related deaths in general, and the community-specific demographics with respect to each drug.

This study explored a local trend in cocaine and methadone-related deaths for years 2000 through 2002, with comparison to those seen in the major U.S. metropolitan areas. The general local trend in decreased cocaine-related deaths with concurrent increased methadone-related deaths paralleled that in many of the major metropolitan areas in which drug data was available. Discrete local trends were noted with respect to age, race, sex and marital status.

A recent increase in methadone-related deaths has been documented in medical and forensic literature, as well as in the mortality data from the Drug Abuse Warning Network (DAWN). A preliminary assessment of drug-related deaths presenting to the Caddo Parish Coroner's Office in Shreveport, LA, revealed a similar trend, therefore a comparison of local and national demographic data was performed to further characterize this trend.

We conducted a search of cases presenting to the Caddo Parish Coroner's Office between 2000 and 2002 in which death was attributed to drug use. Drugs found on toxicological analysis, as well as demographic information were documented. Finally, we compared our local demographic data with that provided in the most recent available (2000 and 2001) DAWN mortality analyses.

The search of local records yielded 22 cases, all listing either cocaine (13) or methadone (9) as contributing to death. Polypharmacy was documented in 2 of the cocaine-related deaths and in 5 of the methadone-related deaths; however, this was not pursued further as the cocaine/methadone-related mortality trend was the focus of this study. The results are listed in the table below.

Drug	Year	No. Cases	Mean Age (yrs)	Race		Sex		Marital	Status
				B	W	M	F	M	S
Cocaine	2000	7	34	5	2	5	2	0	7
	2001	4	57	3	1	3	1	2	1
	2002	2	51	1	1	1	1	1	unk
Methadone	2000	1	32	0	1	1	0	1	0
	2001	2	37	0	2	1	1	1	1
	2002	6	37	1	5	3	3	4	2

M=married S=single (never married, divorced, widowed)

These results show a gradual transition from greater cocaine-related deaths to greater methadone-related deaths in the years 2000 to 2002. Cocaine-related deaths were seen more often in a younger population of black males (mean 34 years) in 2000, with an increased age seen in subsequent years (mean age 57 and 51 years in 2001 and 2002, respectively). Methadone-related deaths were seen more often in a younger age group (mean age 35 years) and whites in all years. Another demographic trend that emerged and perhaps warrants further investigation was that of marital status. Eight (61%)of the cocaine-related deaths were single (never married, divorced, widowed), while 3 (23%) were married. Marital status of 2 decedents was not known. Three (33%), of the methadone-related deaths were single, while 6 (67%) were married.

A review of the most recent available DAWN mortality data (2000 and 2001) revealed that methadone was one of the top ten drugs reported in 25 of the 33 major metropolitan areas studied and cocaine was one of the top ten drugs reported in all areas. A comparison of the 2000-2001 data revealed an increase in methadone-related deaths by 7 to 72% (median 36.5%) in 17 of the 25 areas. Ten of the 17 experienced a concurrent decrease in cocaine-related deaths, similar to that observed in Caddo Parish, LA. Additionally, 9 of the 10 areas were located within the regions traditionally described as southern (4), midwestern (1),

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and western (4) United States.

These results indicate a recent trend toward fewer cocaine-related deaths, with concurrent increase in methadone-related deaths in both the region of study and in specific national regions. While local demographic trends were noted with respect to age, race, sex, and marital status, comparison of local trends to national trends was not possible, as the data provided by DAWN does not include specific drug-related demographic information. Additionally, since our study area has less population density than those included in the DAWN analyses, it would be desirable to compare our local data with that of similarly populated areas.

Cocaine, Methadone, Mortality

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