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Examining The Relationship Between Race And Custody Narcotic Related Deaths In Texas Between 2015 – 2019

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Abstract
As public scrutiny of law enforcement's treatment of minority citizens increases, empirical research in the fields of criminal justice and criminology increases as well. Primarily, these empirical studies seek to determine the association between citizen and police, which is most visible – the moment of initial confrontation or arrest. What is examined to a lesser extent is the occurrences between citizens and police after arrests are made. This report intends to examine the occurrences of drug-related deaths of individuals in custody. Particularly exploring the relationship between narcotic type and race. This report employed an uncertainty coefficient measure to determine the relationship between the decedent's race and the form of narcotic noted as a cause of death by the medical examiner. Findings indicate there exists a significant relationship between the race of the decedent in custody and the type of narcotics associated with that individual's death. More specifically, the data finds a statistically significant relationship between Race and Cocaine (P=.022) and Race and Methamphetamine (P= .002). Future research and implications are discussed.

Keywords- *drug overdose, Teas, Methamphetamine, criminal justice*

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I. Introduction

One of the more openly debated topics within the field of criminology, both at the academic level and in the general public, is abuse of power towards a minority group by an authority figure. (Alang et al., 2017). What began as a general distrust of law enforcement by minority populations began to become further scrutinized by the magnified lens of justice reformers (Carter, 2016). Incidents such as in Ferguson (2015) and Baltimore (2016), where the Federal Government informed the public that unconstitutional and unethical practices were being witnessed in these communities, have shaped the current landscape in the world of justice reform. These findings from the federal government continued to fuel the public's discontent with the current relationship between law enforcement and minority groups throughout America. As public scrutiny of law enforcement's treatment of minority citizens increases, empirical research in the fields of criminal justice and criminology increases as well. Primarily, these empirical studies seek to determine the association between citizen and police, which is most visible – the moment of initial confrontation or arrest. Emphasis on fatal incidents such as racially biased police shootings, both for (Moore et al, 2018) and against (Cesario, Johnson & Terrill, 2019).

What is examined to a lesser extent is the occurrences between citizens and police after initial arrests are made. This study seeks to examine incidents of death of individuals while in custody, but with a focus on overdose deaths in Texas, which occur while the decedent was in custody. Specifically, this study intends to investigate what types of drugs are causing overdoses, the frequency of occurrences, and the role that race may play in the types of narcotics or rates of deaths within this population. This study is intended to increase the body of knowledge that are custodial deaths of individuals, with an emphasis on drug-related deaths. Research in the field of general overdoses in America has resulted in While the focus of this study may not be what breaks the news, it is a problem where a solution may be reasonably obtained. Unlike the social problems that plague the abuse of power we are used to discussing, concepts such as systemic racism within departments, corruption, social inequality, lack of diversity, or the general values held in this nation regarding violence and appropriate responses, the problems associated with discrepancies in overdose deaths or overdose deaths in general may be possible resolved through policy and procedural implementations.

Purpose

This report intends to examine the occurrences of overdose deaths that occur to individuals who are in law enforcement custody. In particular, exploring the relationship between narcotic type and race for Texas overdose victims in custody. The purpose of this research is to begin the conversation of what can be done to reduce overdose deaths in Texas and to help identify which demographic of decedents are passing away from specific narcotics.

Significance of the study

This study will impact the forensic science community by increasing understanding of the nexus that exists between race and narcotics-related deaths of individuals in law enforcement custody. This study will also provide continued county and state efforts to increase evidence-based prevention, response, and treatment of overdoses that occur during law enforcement custody in the state of Texas.

Hypothesis

Null: There is no statistically significant difference between Race and either Cocaine, Methamphetamine, Amphetamine, or Other types of drugs.

Alternative: There does exist a statistically significant difference between Race and either Cocaine, Methamphetamine, Amphetamine, or Other types of drugs.

II. Literature Review

Deaths associated with overdoses that occur during police custody have been examined extensively in the medical and public health fields (Hedegaard et al., 2017). The previous studies have focused primarily on comorbidities that occur during overdoses during these circumstances, attempting to identify the internal and external stimulants that may be associated with overdosing deaths during custody. In general, research has indicated that overdose deaths during custody are often associated with violent or bizarre behavior, significant physical exertion, drug intoxication, and the use of restraints (Otahbachi et al., 2010). This combination of variables leads to what medical examiners refer to as excited delirium. When autopsies cannot explain the cause of death, they often attribute it to the clinical syndrome of excited delirium (DiMaio & DiMaio, 2005). While apparently controversial in its practice, with some medical examiners not believing in it entirely, the research into excited delirium as a cause of death during arrest allows for insight into the role that narcotics play when examining deaths during custody. This study will focus on the role that narcotics factor into these deaths that occur during police custody and will reference types of drugs with the racial makeup of the decedents to explore the idea that there may exist a significant relationship.

In a similar study, Ross (1998) examined 61 deaths between 1988 and 1997. Although the intention of the study was to examine deaths attributed to excited delirium during arrests that required physical restraint from the officer, it is an insight into a specific circumstance that this study involves. Ross (1998) concluded that of the 61 deaths examined, 60% of the decedents were intoxicated with Cocaine during the time of their death. Grant et al. (2007) conducted a historical study in the state of Maryland, where the deaths of individuals who passed due to excited delirium during their arrests were examined. The study indicated that the deceased were more likely to be young African-American men and that their deaths were associated with violent behavior, the use of restraints, and drug intoxication, especially with cocaine and other narcotics (Grant et al., 2007). Other research in Maryland on individuals who passed away during an arrest where excited delirium was listed as a cause of death yielded similar results (Southhall and Pestaner, 2003). Of those deceased between 1990 and 2004, 80% of decedents were African American, 76% were positive in toxicology screens for ethanol and illicit drugs, with cocaine being found in 79% of positive toxicology screens (Southhall and Pestaner, 2003).

From a theoretical perspective, if there exists a significant relationship with specific narcotics and a racial group, theories explaining deviance as a socially learned phenomenon may be considered for a theoretical framework. An example can be drawn from Sutherland's Differential Association, which posits that criminal behavior is learned through interactions with intimate personal groups. Sutherland posits that what is learned in these intimate groups is the technique and motives for such criminal behavior (Akers & Jennings, 2016). In this study, Differential Association can potentially explain why certain racial groups may be disproportionally involved with specific narcotics contributing to their causes of death while in custody. As previous research on the topic has noted, Black decedents were disproportionately represented in deaths during custody involving narcotics, with an emphasis on cocaine (Grant et al., 2007, Southhall and Pestaner, 2003).

III. Methodology

The purpose of this study is to examine further the relationship between race and narcotic overdoses, which occur during or immediately after an individual is placed in custody.

In understanding the current canon of research associated with race and overdoses within custody, this report used official data gathered by the Texas Justice Initiative. The data is obtained through the mandatory reporting system between criminal justice agencies in the state of Texas and the Attorney General's Office when a death occurs in their custody. While this reporting has been in practice for decades, it was not until 2005 that it became streamlined and, in 2016, was made open to the public. This study examines deaths linked to narcotic use while in law enforcement custody within the state of Texas for the period of 2015 through 2019. For the purposes of this examination, an assumption is made that the data collected at the State level in Texas share a method of collection among the participating counties.

This study utilizes the Statistical Package for Social Sciences (SPSS) Version 25 for analysis. Data analysis was conducted by examining the causes of death noted by medical examiners for each of the original deaths that occurred within this time frame (n= 2,975). Only 3.5% (n=104) listed a narcotic as a noted cause of death. The dataset breaks down Race by either "Black," "White," "Hispanic," or "Other". For the causes of death, this study only focused on narcotic names that were listed under the cause of death by the medical examiner. In order to capture multiple narcotics listed in some subject's causes of death, a multiple response report is used, and binary variables are created to reflect Cocaine, Methamphetamine, Amphetamine and Other. This report then employed an uncertainty coefficient measure, with the alpha level at P = .05, to determine the relationship between the decedent's race and the form of narcotic noted as a cause of death by the medical examiner. While the Race and Drug types were too far from a uniform distribution to use Chi-Square, the uncertainty coefficient was deployed and the likelihood ratio between race and narcotics gave significant results.

IV. Results

Demographic findings

Similar to the previous research cited in this study, the majority of our decedents were men (91.3%) and relatively young (Mean = 37.78, STD = 9.715). Conflicting with previous research, only 26.9% of our sample were identified as Black, with instead a majority of White representation (51.9%). For reference, data was collected for the State of Texas through U.S. 2019 Census Bureau and compared to the current sample, see Table 1.

Table 1: Demographic information

Race	Sample Total	Sample Percentage	Texas Percentage
White	54	51.9%	41.5%
Black	28	26.9%	12.8%
Hispanic or Latino	20	19.2%	39.6%
Other	2	1.9%	8.3%
Total	104	100.0%	100.0%

For this study, only a very small sample (n= 2) was labeled as "Other" and was therefore omitted from the study, reducing the sample size by two (n=102). As previously stated, binary variables were created in order to incorporate and consider instances where more than one drug is listed as a cause of death by the medical examiner (see Table 2). Unlike previous research, which listed positive toxicology screenings for cocaine in 79% of decedents who died in custody (Southhall and Pestaner, 2003), this study finds that only 21% of decedents tested positive for cocaine. in toxicology screenings. The most prevalent narcotic included as a cause of death for this sample was Methamphetamine, which was mentioned in 45.4% of cases.

Table 2: Drug Causes of Death

	Responses		
Drug COD	**N**	**Percent**	**Percent of Cases**
Cocaine	25	21.0%	24.3%
Methamphetamine	54	45.4%	52.4%
Amphetamine	5	4.2%	4.9%
Other	35	29.4%	34.0%
Total	119	100.0%	115.5%

To determine a direct relationship between Race and drug type, the races were split into binary comparisons. The three variables are White and Non-white, Black and Non-Black, Hispanic and Non-Hispanic. These binary variables intend to determine if there exists a statistically significant relationship between a specific race compared to the other races. The analysis of data conducted in this study indicates that there exists a statistically significant relationship between the race of the decedent in custody and the type of narcotics associated with that individual's death. More specifically, the data finds that there exists a statistically significant relationship between Race and Methamphetamine, Cocaine and "Other" drugs.

Of these relationships, the most significant were Whites to Non-Whites and Methamphetamine causes of death. The findings indicate that 69.8% (n=37) of methamphetamine decedents were White, compared to Blacks at 13.2% (n=7) and Hispanics at 17% (n=9). With the alpha level at .05, the Uncertainty Coefficient P Value was .000. Thus, we reject the null hypothesis and accept the alternative hypothesis that there is a difference between Race and Methamphetamine causes of death. The Uncertain Coefficient Value was .091, meaning that race

explains 9.1% of the variance between the differences between Whites and Non-White Methamphetamine causes of death. See Table 3 below.

Table 3: White vs Non-White Decedents and Methamphetamine Related Deaths

Crosstab

		Meth COD		
		No	**Yes**	Total
Non-White	Count	32	16	48
	Percent	65.3%	30.2%	47.1%
White	Count	17	37	54
	Percent	34.7%	69.8%	52.9%
Total	Count	49	53	102
	Percent	100.0%	100.0%	100.0%

Directional Measures

		Value	Asymptotic Standard Error(a)	Approx. T(b)	Approx. Sig.
Uncertainty Coefficient	Symmetric	0.091	0.049	1.853	.000(c)
	Race Dependent	0.091	0.049	1.853	.000(c)
	Meth COD Dependent	0.091	0.049	1.853	.000(c)

a. Not assuming the null hypothesis

b. Using the asymptotic standard error assuming the null hypothesis

c. Likelihood ratio chi-square probability

When examining Cocaine causes of death, a significant relationship was found between Black and Non-Black decedents. While only making up 27.5% of the sample (n=28), Black decedents accounted for 44% of the Cocaine related causes of death. With the alpha level at .05, the Uncertainty Coefficient P Value was .038, which was lower than our alpha level. Thus, we reject the null hypothesis and accept the alternative hypothesis that there exists a statistically significant difference between Race and Cocaine causes of death. The Uncertain Coefficient Value was .038, meaning that race explains 3.8% of the variance between the two variables. See Table 4 below.

Table 4: Blacks vs Non-Blacks: Cocaine Related Causes of Death

		Cocaine COD		
		No	**Yes**	Total
Non-Black	Count	60	14	74
	Percent	77.9%	56.0%	72.5%
Black	Count	17	11	28
	Percent	22.1%	44.0%	27.5%
Total	Count	77	25	102
	Percent	100.0%	100.0%	100.0%

Directional Measures

		Value	Asymptotic Standard Error(a)	Approx. T(b)	Approx. Sig.
Uncertainty Coefficient	Symmetric	0.037	0.036	1.018	.038(c)
	Race Dependent	0.036	0.035	1.018	.038(c)
	Cocaine COD Dependent	0.038	0.037	1.018	.038(c)

a. Not assuming the null hypothesis

b. Using the asymptotic standard error assuming the null hypothesis

c. Likelihood ratio chi-square probability

V. Discussion

This study intended to examine the relationship between drug overdoses in law enforcement custody and race in the State of Texas. To achieve this, data from the Texas Attorney General's office, collected by The Texas

Justice Initiative, was examined and analyzed. The authors considered the contemporary topic of drug overdoses and narrowed the incidents to 2015 through 2019 deaths that occurred during custody. While this study counted a higher percentage of White respondents compared to previous research, this may likely be due to the states' demographics being compared. The findings indicate a statistically significant disproportionate difference in Black decedents and Cocaine related causes of death (P = .038) but can only explain 3.8% of the variance. Additionally, the findings concluded there exists a statistically significant disproportionate difference in White decedents and Methamphetamine related causes of death (P = .000) and can explain 9.1% of the variance between the two racial binary groups.

The findings of this study were both consistent and inconsistent with previous research. While this study demonstrated a statistically significant disproportionate number of Black decedents and Cocaine related causes of death, it is lower than previous research had indicated. Regarding any policy implications, this study admits that the findings are preliminary, and additional research would benefit and add to the body of knowledge about overdose deaths in custody. This study is, however, introducing the macro concept that specific types of drugs can be attributed to certain racial demographics within the state of Texas. In furthering the understanding and strength of this relationship, research may shape public policy in a manner in which considers this relationship with regard to the justice system's response on the issue. This study finds that there exists empirical evidence to suggest that race plays a factor in the types of drugs that individuals are illegally consuming, thus any prospective policy changes should reflect this reality.

Limitations and Future Research

This study is not without limitations. First, the study examines decedents in the state of Texas, with the assumption that the data collected by the Texas Justice Initiative via the Attorney General's office is an accurate representation of the population. It is possible, however, for there to exist discrepancies in the method of obtaining the data from each county throughout the state. Evidence of this may lie in the number of cases for overdose deaths, which omit or list as unavailable the cause of death. If this impacts a certain county with a higher representation of a certain racial group, it is plausible to assume that the omission of these cases may impact our findings. Secondly, similarly to the first limitation, it is possible that the specific counties throughout Texas may differ in their methodology of obtaining autopsy findings. It is plausible to assume that certain types of decedents may not be tested for certain narcotics based on policy, procedure, or historical practice in that county. Lastly, a limitation can be found in the study where the questions of racial representation come in. While we can examine the racial composition of those who died from an overdose within the state of Texas while in custody, this study does not factoring where these individuals live within the state or the racial composition of their home counties.

Future research may benefit from a macro approach in examining data in a non-Texan state population, multiple states or at a national level. Future research may also benefit from taking a micro approach to this study and examining a region in Texas or a specific county. Narrowing the scope would allow for more accurate demographic representations, which these county-wide agencies could then use to impact change in policy, procedure, or culture. Lastly, future research may benefit in further examining the reason why causes of death are either unavailable or missing from the data collected through the attorney general's office. Any improvement of rates in the retention of data would be valuable to future research on this topic or similar topics, which will ultimately assist in reducing lives lost to such substances.

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