An Analysis of Suicides in St. Tammany Parish for the Year 2014

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Introduction

Suicide rates are on the rise globally, nationally and locally here in St. Tammany Parish. Suicide in St Tammany Parish has been a topic of concern for many years with local government and community leaders proactively combating this disease. However, in 2014 we saw an alarmingly high suicide rate. Forty seven people took their own lives in 2014 in St. Tammany Parish which translates to 19.4 per 100,000. The purpose of this analysis is to look beyond the numbers for trends that can be used to educate the public to help combat this needless loss of life.

Methods

A prospective list of suicides is maintained by the St. Tammany Parish Coroner's Office. This list was used to pull each of 47 case files for review. An initial retrospective review was performed of these cases to derive a set of data points that would be included for analysis. These data points are: date of death, age, race, gender, cause of death, city of occurrence, past psychiatric history or psychiatric complaint such as depression, documented current psychiatric treatment, a suicide note or text, prior verbalization of suicidal intent, a prior suicide attempt, judicial contact, a documented inciting event or "other" circumstances. Toxicology screens were also reviewed for the presence of alcohol, opiates, antidepressants, benzodiazepines or illicit drugs. After the initial derivative review, an Excel spreadsheet was constructed and the case files were reviewed a second time and data collected. The data was then analyzed by column which revealed how any people in the study population were positive for a particular data point, and by row which revealed how many data points were positive for an individual in the study population.

Results

The population consisted of 33 men and 14 women that ranged in age from 20 years old to 76 years old. The mean age was 46.32 years old, the median age was 51 years old and the mode was 52 years old. In terms of race, there were 45 Caucasians, 1 African –American and 1 Asian. The most common cause of death was gunshot wound (n=29, 62%), followed by asphyxiation (hanging or suffocation) (n=13, 28%), poisoning (n=4, 8%) and 1 person (2%) that bled to death.

The geographic distributions are reflected in figure 1. Results of analysis by column (population) and row (individuals) are reflected in Tables 1 and 2 respectively. This data will help to identify trends.

The raw data will not be published in its entirety because it might too easily be used to identify individual decedents, however I will discuss some recurrent themes.

Figure 1.

Geographic distribution of suicides in St. Tammany Parish in 2014

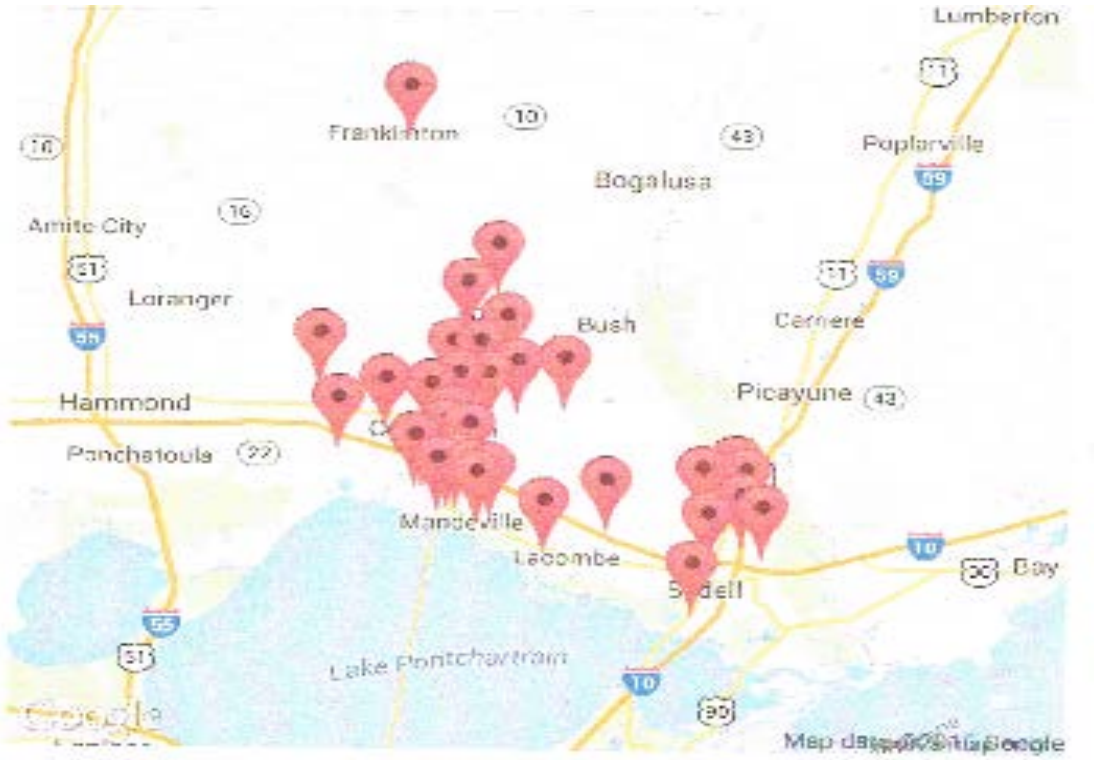


Table 1

Positive data points for the population (columns) in order of frequency

Data Point	Number of positives
History or complaint of psychiatric illness	30
Inciting event	27
Alcohol	24
Antidepressant	17
Benzodiazepines	15
Illicit drugs	14
Verbalization	14
Note or text	13
Prior attempt	9
Opiates	7
Judicial contact	6
Current psychiatric treatment	4

Table 2

Number of positive data points per individual decedent (rows)

Number of positive data points	Frequency in population
0	0
1	5
2	9
3	12
4	8
5	7
6	3
7	2
8	1

One of the striking paradoxes is that only 4 of 47, (8%) people in the study population were identified as "having current treatment for mental illnesses", yet 30 of 47, (64%) had either a history of, or a current complaint of a symptom of mental illness. The complaints included depression (n=23, 49%), substance abuse (n=7, 15%), "hearing voices" (n=1, 2%) and bipolar/ schizophrenia (n=1, 2%). Also notably, 17 of 47 (36%) tested positive for antidepressants.

I think it is also notable that 27 of 47 (57%) cases were reported to have an inciting event. In 10 of the 27 (37%) that were identified as having an inciting event, that event was an argument with a

loved one. In this subgroup of 10 victims of completed suicide that were involved in an argument with a loved one, 7 of 10 (70%) died of a gunshot wound, 3 of 10 (30%) died of asphyxiation due to hanging.

Thirteen people (28%) either left a suicide note or sent a suicide text. Fourteen people (3%) reportedly made some verbalization prior to completing the suicide. Nine victims (19%) had a history of a prior incomplete suicide and 6 people (13%) had a judicial contact, either an arrest or conviction of a crime.

In review of toxicology screens, alcohol was the most common substance (n=24, 51%), followed by antidepressants (n=17, 36%), benzodiazepines (n=15, 32%) and opiates (n=7, 15%). Fourteen people (30%) were noted to have illicit drugs, 10 with marijuana, 2 with cocaine and 2 with synthetic drugs. Twenty-two cases (47%) were positive for more than one substance at a time.

Limitations

The paramount limitation to this analysis is that it is a retrospective review of records. Some historical data points that were reported as negative may have just not been recorded by the medicolegal death investigator or may have been unknown to the interviewee. Additionally, since the cases were hand abstracted by one reviewer, it is possible that key information may have been overlooked, over classified or under classified. There is also the possibility of bias by the reviewer. Moving forward, the investigators at the coroner's office are aware that this is an area of special concern and have been encouraged to gather complete information in the MDILog system now used at the office. The use of the computerized program would help to efficiently search the data base and remove investigator bias.

Discussion

A comprehensive discussion of the topic of suicide is beyond the scope of this review. Suicide is reported by the Center for Disease Control and Prevention (commonly known as the CDC) as the 10th leading cause of death in America. To create a bit of perspective, in 2011, heart disease, the number 1 cause of death in the United States, had a mortality rate nationwide of 173.7 deaths per 100,000 and the suicide rate was 12.3 deaths per 100,000. The disturbing phenomenon is that we are seeing a decrease in mortality from the top 9 causes of death, but the mortality from suicide continues to rise. I view all of these deaths as potentially preventable.

According to CDC research, common risk factors for suicide include previous suicide attempts, history of depression or mental illness, alcohol or drug abuse, family history of suicide or violence or physical illness. Often people who complete suicide have expressed feelings of being alone, a burden to loved ones, and "disconnected" from society.

Our population revealed a high number of people with psychiatric complaints (n=30, 64%) and a low number of people receiving "treatment" (n=4, 8%) but almost one third of the study population tested positive for antidepressants (n=17, 36%). Alcohol and/or an inciting event was noted in over half

the cases. In 10 of the 27 (37%) cases in which the inciting event was reported, it was reported to be an argument with a loved one, 70% had a positive toxicology screen for alcohol and 70% died from a self-inflicted gunshot wound.

Combating suicide is a complex problem that requires a concerted effort on many fronts. Public education about firearms safety, encouraging the use of trigger locks and gun safes may diminish some impulsive responses to interpersonal conflict. We should encourage public awareness of the dangerous combination of alcohol and anger. Continued support of organizations such as the St. Tammany Outreach for the Prevention of Suicide (STOPS) to help educate citizens to identify and reach out to people at risk for suicide will likely have a positive impact. Experts have shown that people with suicidal thoughts and actions are ambivalent about dying and that a connection to life, the living and the future can be lifesaving. Public resources such as 211 or the National Suicide Prevention Hotline at 1-800-273-TALK (8255) are readily available and can be as critical a lifesaving tool as a defibrillator is in the case of a heart attack. Most importantly, I think, we need to publicly continue the conversation about suicide and encourage early intervention for those considering this devastating decision.