



D35 Age and Gender Differences in Suicide Trends in Puerto Rico: 1999-2007

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After attending this presentation, attendees will learn about demographics, age, and gender-specific differences in suicides in Puerto Rico from 1999 to 2007.

This presentation will impact the forensic community by showing the changes in suicide trends, and the age and gender specific differences provide forensic and public health officials important information for the identification of high risk populations and the development of targeted public health interventions.

Suicide is an important public health problem throughout the world. Approximately one million people committed suicide every year, with a global increase of 60% in the last 50 years. In 2004, suicide was the 15th leading cause of death in Puerto Rico and the third leading cause of death among males ages 15 to 29. With the purpose to further understand changes in the frequency and distribution of suicides in Puerto Rico we evaluated suicide trends by age, gender, method, and geographical distribution from 1999 to 2007.

Annual suicide data were obtained from all cases investigated at the Puerto Rico Institute of Forensic Sciences (PRIFS) from 1999 to 2007. PRIFS receives all suspected suicides from Puerto Rico for investigation. Descriptive statistics were used to characterize the study population. U.S. Census population estimates were also used as denominators in suicide rates calculations. Suicide mortality rates during the nine-year period were age-adjusted to the 2000 standard population for Puerto Rico and stratified by gender and age for analysis. The annual percent change (APC) from 1999 to 2007 in suicides rates was calculated.

From 1999 to 2007, the PRIFS analyzed 52,122 cases of which 2,792 (5%) were classified as suicides. The mean annual number of suicides was 310 per year. The age-adjusted suicide mortality rates ranged from 8.5 per 100,000 population in 1999 to 7.9 per 100,000 population in 2007. No significant changes on the suicide rates occurred during the study period (APC -0.35, no statistically significant). The mean suicide rate for males was seven times the rate for females (14.6 suicides per 100,000 population vs. 2.0 suicides per 100,000 population, respectively). Most suicides occurred in persons from 25 to 54 years (57%). However, the cumulative suicide mortality rate was highest in persons older than 75 years (28 suicides per 100,000 population) followed by persons aged 45 to 54 years (24 suicides per 100,000 population) in both genders.

Overall, the method most commonly used to commit suicide was hanging (64.5%), followed by fire arms (14.1%), solids or liquid poisoning (13.4%), jumping or falling (2.7%) and burning (2.7%). Gender-specific analysis showed that although hanging was the preferred method for both men (67.4%) and women (44.3%), the second most common method for men was fire arms (15.3%) vs. poisoning (32.1%) for women.

Higher suicides rates than the expected for the population (>7.9 cases per 100,000 population) were observed in several rural and low- income municipalities in Puerto Rico.

Although the rates of suicide in Puerto Rico have remained stable from 1999 to 2007, gender and age specific differences were identified. Understanding changes in suicide trends and the age and gender specific differences provides forensic and public health officials important information for the identification of high risk populations and the development of targeted public health interventions. In addition this presentation will impact the forensic community by presenting trends, and age and gender differences in a Hispanic community in the United States.

Suicide, Trends, Hispanics