Abstract

Premature mortality among individuals with substance use disorders in Los Angeles County

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BACKGROUND:

Several studies have reported that individuals with substance use disorder (SUD) have much lower average age at death and higher all-cause mortality rates than the general population, disproportionately affecting gender and race subgroups. However, very limited data is available to determine whether these associations extend to Los Angeles County (LAC). The main objectives of this study are to estimate and characterize the burden of SUD on the LAC population overall as well as among different demographic subpopulations via the mortality indicators.

METHODS:

Individuals who received at least a unit of publicly funded SUD treatment between 2004 and 2014 were identified in the Los Angeles County Participant Reporting System (LACPRS) and matched with death records from California DPH Death Statistical Master Data. Between 2004 and 2014, 9,460 individuals who received SUD services died-1.5 percent of the total deaths**.** General population who died without any publicly funded SUD treatment records were used as the comparison group (n=644,311). We calculated average age at death, age-adjusted mortality rates by applying the 2000 standard US population weights to crude death rates (per 100,000), and years of potential life lost (YPLL) by determining the difference between the age at death and the expected life of 75 years. These measures were stratified by gender, race, and their interaction terms.

RESULTS:

Individuals with SUD died at an average age of 50 years, 22.2 years younger than the general population. In addition, 87% of the SUD patients died before the age of 65 years compared to 28% of the general population. Latinos had the lowest average age at death among both SUD patients (45.4 years) and the general population (65.0 years). The overall age-adjusted mortality rate for SUD patients was 1,801 per 100,000 SUD patients compared to 638 per 100,000 population for the general population. Premature death among SUD patients resulted in 237,528 years of potential life lost during 2004-2014. SUD patients on average lost more years of potential life (25.9 years) compared to the general population (19.5 years), particularly Latino males (30.6 years). Alcohol or drugs were listed as a cause of death (either underlying or other cause of death) for 35% (vs. 4% in the general population) of deaths among SUD patients.

CONCLUSIONS:

The great extent of premature death among individuals with SUD substantiates substance abuse as an important public health in LAC, impacting one's quality of life and societal costs.

Epidemiology Public health or related research