

Suicidal behaviors with prescription drugs in individuals over 50 years of age as identified by the RADARS® System Poison Center Program

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Abstract:

Suicidal behavior in individuals over 50 who self poison with prescription medication may be different then behavior frequently reported with other age groups. Commonly it is noted that males have a higher risk of suicide completion then females. Data analysis was performed using intentional drug misuse and abuse cases over the age of 50, and associated medical outcomes reported to the RADARS System Poison Center (PC) Program.

The RADARS PC Program captures weekly drug exposures and covers 44 states. PCs use a standard electronic system to record calls, and the RADARS System personnel perform quality control checks to verify coding accuracy. Cases from 1st quarter 2009 through 2nd quarter 2010 were analyzed

Multivariate logistic regression was used to asses associations of intentional suspected suicide versus other intentional exposures between opioid drug types and stimulants, and associations with death between drugs within the group who attempted suicide. Covariates included were general opioid drug exposures, methadone drug exposures, multiple drug exposures, gender and age. 8,667 individuals contacted poison centers with intentional exposures to one of these drug types. 5,365 were suicide exposures of which 66 had death as an outcome. Associations with attempted suicide included; female gender OR= 1.32 (95%CI 1.21-1.45), a decreasing with age per year effect OR=0.984 (95%CI 0.979-0.989), and methadone, OR=0.618 (95% CI 0.490-0.780). Multiple drug exposures OR= 2.39 (95%CI 1.27-4.51) were associated with death.

Interestingly, in this population, males do not have a higher suicide completion risk than females but do have a lower risk of suicide attempt.

Learning Areas:

Public health or related research

Learning Objectives:

- 1. Identify the associations of suicide versus other intentional exposures between opioid drug types and stimulants, and associations of death between drugs for suicide attempts
- 2. Evaluate risk factors for attempted suicide and suicide completions involving prescription opioids and/or stimulants, using poison center data in a population over the age of 50.
- 3. Understand Poison Center data collection methodology.