Title:	Suicidal behaviors with prescription drugs in individuals under 50 years of age as identified by the RADARS® System Poison Center Program
Authors:	Davis J, Miller H, Winter E, Dart RC
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Abstract:

Relationships between suicide attempts and completed suicides using prescription opioids and stimulants may vary across age and gender. Data analysis was performed using intentional exposure cases involving individuals under the age of 50, and associated medical outcomes reported to the RADARS System Poison Center (PC) Program.

The RADARS System PC Program captures weekly drug exposures, covering 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 assess associations of intentional suspected suicide versus other intentional exposures between opioid drug types and stimulants, and associations of death between drugs within the group who attempted suicide. Covariates included were general opioid exposures, methadone exposures, multiple drug exposures, gender and age.

43,638 individuals contacted poison centers with intentional exposures to one of these drug types. 23,813 were suicide exposures, of which 110 had death as an outcome. Associations with attempted suicide included; female gender OR=1.9 (95%CI 1.83-1.98), an increasing age per year OR=1.031 (95%CI 1.029-1.033), and methadone, OR=0.58 (95%CI 0.53-0.63). Associations with death included; methadone OR=3.2 (95%CI 1.6-6.2), male gender OR=1.54 (95%CI 1.1-2.2) and increasing age per year OR=1.04 (95%CI 1.021-1.061).

In this population, males have a lower risk of suicide attempt, but have a higher risk of suicide completion. Interestingly, methadone is not more of a risk factor for suicide attempt, but is a substantial risk factor for suicide completions.

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
3. Differentiate trends of suicide attempts and suicide completions by gender and increasing age
4. Understand Poison Center data collection methodology