

# Youth Suicides in Florida: Association with Psychotropic Drugs

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Presentation to Suicide Prevention Task Force

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# Trends and Risk Factors for Youth Suicide

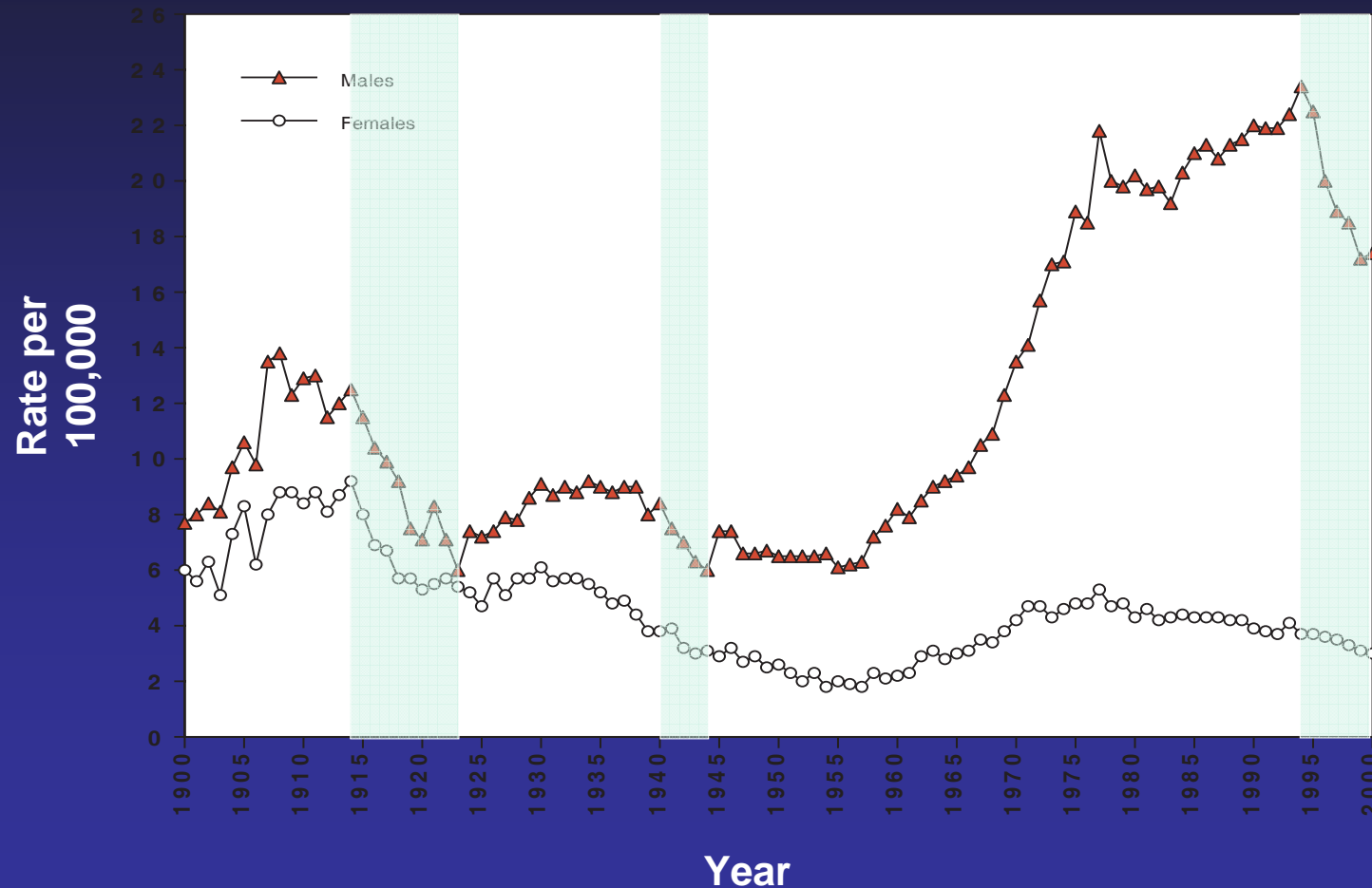
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- Third leading cause of death in 15 -24 year olds
- Some decline since 1995
- Risk Factors
  - Depression
  - Substance abuse



# 20th-Century - Changes In Youth Suicide Rates

— UNITED STATES, AGES 15–24 —



Anderson 2002, CDC Wonder 2003, USDHEW 1956, Vital Statistics U.S. 1954–1978

# Youth Suicides in Florida

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- In a widely circulated report, Ken Kramer claims that psychotropic drugs or mental health treatment were responsible for the majority of youth suicides
- Conceptual and multiple methodological problems with this report
  - Even if 100% of cases had been prescribed psychotropics, this is not proof of causality anymore than antibiotics should be blamed for pneumonia deaths – may simply reflect treatment resistance of the illness.

# Ken Kramer's Methodology

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- Public records from 2000 – 2004 (5 year period) of all deaths  $\leq$  18 years by suicide
- Obtained ME reports and attempted to contact next of kin
- Total cases identified = 252, all with ME reports
- Law enforcement reports obtained in 231
- Scientology questionnaire in 5, phone calls in 3

# Ken Kramer's Results and Conclusions

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- 96 cases were identified that were “positive” for psychotropic drug use
- This represents 38.1% of the entire sample
- He claims that an additional 35 cases had a history of psychiatric treatment so that 52% had either psychotropic drugs or psychiatric treatment
- Does not specify how many of total were abusing drugs or alcohol

# UF Reclassification of Data

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- Used exactly same data set as supplied by Kramer as starting point
- Cases were counted as positive if:
  - Psychotropics were being prescribed for the subject  
*AND*
  - Evidence that subject was currently taking it by either report or confirmed toxicology

# Ken Kramer's Methodology: Inappropriate Inclusion of Cases as Psychotropic Positive

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- Incorrectly includes illicit drugs such as methamphetamine as prescribed psychotropics
- Does not distinguish between psychotropics that were being prescribed for the victim versus
  - Obtained through diversion to abuse (e.g., stimulants and benzodiazepines)
  - Taken from someone else and used to OD (e.g., TCA)
- Does not attend to whether victim was compliant with psychotropics or not
  - Includes cases that were clearly non-compliant and were taking psychotropics in distant past
  - Cases with negative toxicology results for psychotropics were counted as positive if the narrative suggest decedent psychotropics were prescribed
- Ignores context of substance abuse
  - For example, would count a case as psychotropic drug positive if benzodiazepine was present on toxicology despite presence of cocaine and opiates as well

# Examples of Flawed Reporting and Erroneous Conclusions:

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- All Counted as Positive Association with Psychotropics
  - Case 3. Self-inflicted gun shot. Unknown medication had been prescribed. Live in boyfriend says subject not taking meds.
  - Case 8. Hanging. “Had been off Atarax for years”. Hydroxyzine is an antihistamine sometimes used as an anxiolytic.
  - Case 16. Hanging. Included because questionnaire said he was taking antidepressants even though toxicology was negative
  - Case 20. OD by stealing bottle of father’s antidepressant.
  - Case 25. Self-inflicted gun shot. Incorrectly included illicit methamphetamine (by toxicology) as prescribed amphetamine. No other psychotropic.
  - Case 58. Included Versed as psychotropic although this was given in ER in attempt to resuscitate patient
  - Case 68. Suicide by jumping. Counts Ritalin although autopsy report says took it for short time 7 years ago because of side effects.

# 2004 Cases: 16 positive according to Kramer, only 3 verified

Kramer Case #	Kramer Report	Comments
1	drug report provided	<b>Venlafaxine</b> positive
4	no drug report	Drugs -- none detected
7	drug report provided	Unconfirmed Benzodiazepines in Urine; Relevant findings redacted
14	no drug report	Urine -- Cannabinoids positive
17	no drug report	Drugs -- none detected
21	drug report provided	Blood/Urine -- <b>Bupropion</b> metabolite positive
26	drug report provided	Blood -- <b>Atomoxetine and Methylphenidate</b> positive
28	drug report provided	Plasma -- Ethanol 0.12; Urine -- Alprazolam & Cannabinoids
30	drug report provided	Blood -- Benzoylcegonine, Diazepam & Nordiazepam
45	no drug report	Blood/Bile -- Ethanol positive (decomp); Drugs -- none detected
60	no drug report	Urine -- Cannabinoids positive
63	drug report provided	Blood/Urine -- Cocaine and Alprazolam
67	drug report provided	Blood/Urine -- Oxycodone and Alprazolam
80	no drug report	Drugs -- none detected
95	drug report provided	Unconfirmed TCAs in Urine; Relevant findings redacted
96	no drug report	Drugs -- none detected

# UF Reclassification of Data: All Psychotropics

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- So far, at least 45 of the 96 Kramer cases have been eliminated as incorrect
- At most, 20% of the suicides were taking prescribed psychotropics; at least 80% were not.

# UF Reclassification of Data: Antidepressants

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- At most, 35 cases were being prescribed and taking antidepressants
- This represents 14% of the total of 252 cases
- If use more stringent requirement of toxicology confirmation, only 12 cases (5%) were taking their prescribed antidepressants at the time of death
- This toxicology confirmed rate is similar to the 7% show by Leon et al, 2004 in a study from NYC

# Conclusions

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- The methodology of Kramer was flawed in a number of ways that inflated the incidence
- These problems included:
  - Over-inclusive and erroneous identification of illicit, diverted or stolen (for OD) as prescribed psychotropics
  - Ignoring or redacting information that clearly indicated the patient was non-compliant
- Will concede the point that many victims of youth suicide are suffering from a mental illness
- The most plausible explanation for presence of prescribed antidepressants (or other psychotropics) in youth suicide is the failure of the medication to alleviate the underlying problem, not the cause of the suicide
- Substance abuse is a major contributing factor to youth suicide that the Kramer report leaves out
- The toxicology data for 2004 suggest that at least 2 of the individuals being prescribed antidepressants were non-compliant with treatment – failure to take their medications may have been contributory

**The risk of suicide from untreated depression is undoubtedly higher than the risk of suicidality from antidepressants.**

**Efforts to restrict access of children and adolescents to mental health evaluations will lead to an increase in youth suicide.**