

Estimating Excess Mortality among Mental Health or Substance Abuse Treatment Recipients

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intended for citation, quotation, or other use in any form.

Purpose of the Study

- To see if program clients die prematurely compared to the general population
- To see if program clients disproportionately die from different causes than the general population

Method

- Data
- Population Categories
- Clinical Classification
- Statistical Analysis

Data

- CPMS - Program clients who received at least one unit of MH or Substance abuse treatment service between 1/1/1996 and 12/31/2003
- Vital Statistics – All deaths between 1/1/1999 and 12/31/2003
- Matching
 - SSN when available
 - Gender – DOB – Name Index
 - Otherwise

Population Categories

- The Study population 15 or older
- Program clients
 - MH only
 - Substance only
 - Both MH and substance
- The study population
 - Clinical classification – based on ICD 10-as assigned by the NCHS

Statistical Analysis

- Estimating YPLL
 - YPLL is the number of years the person would have lived in the absence of premature death.
 - $YPLL = \text{Current expected life} - \text{age at death}$
 - Current expected life – the number of years the person is likely to live beyond age X given that he/she is alive at age X.

Results

- Study population by Category
- Gender Composition
- Average Age at Death
- Percent Dying at 50 or Younger
- Primary Cause of Death
- Average Years of Potential Life Lost

Study Population by Category

Category	Count	Percent
Study population	147,760	100%
Program clients	13,534	9.2%
MH only	9,200	68%
Substance only	2,793	20.6%
Both MH & Substance	1,541	11.4%

Gender Composition

Category	Male	Female
Study population	49%	51%
MH only	43%	57%
Substance only	83%	17%
Both MH and Substance	64%	36%

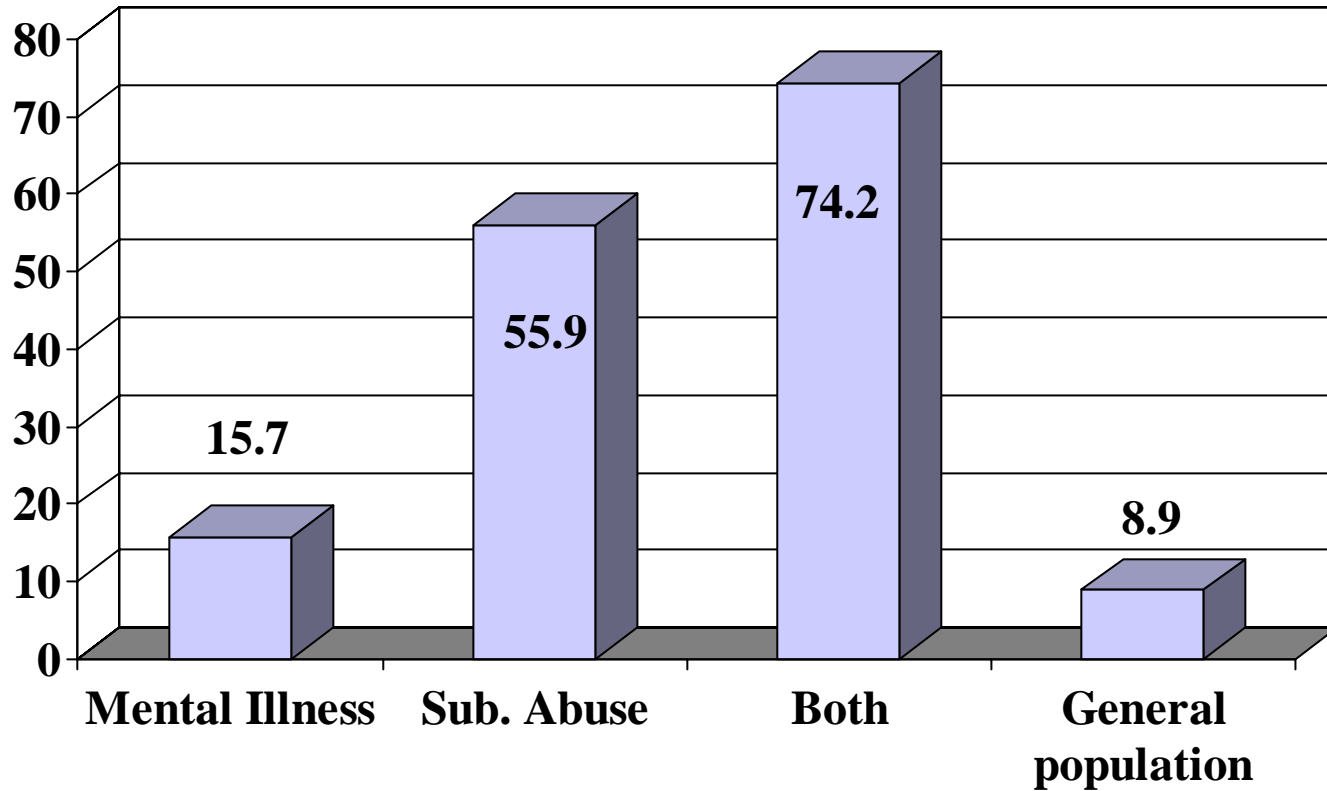
Primary Cause of Death

- Program clients with substance abuse problems are,
 - 9.2 times more likely to die of poison,
 - 7.8 times more likely to die of substance related causes,
 - 4.8 times more likely to die of homicide than those who did not receive treatment.

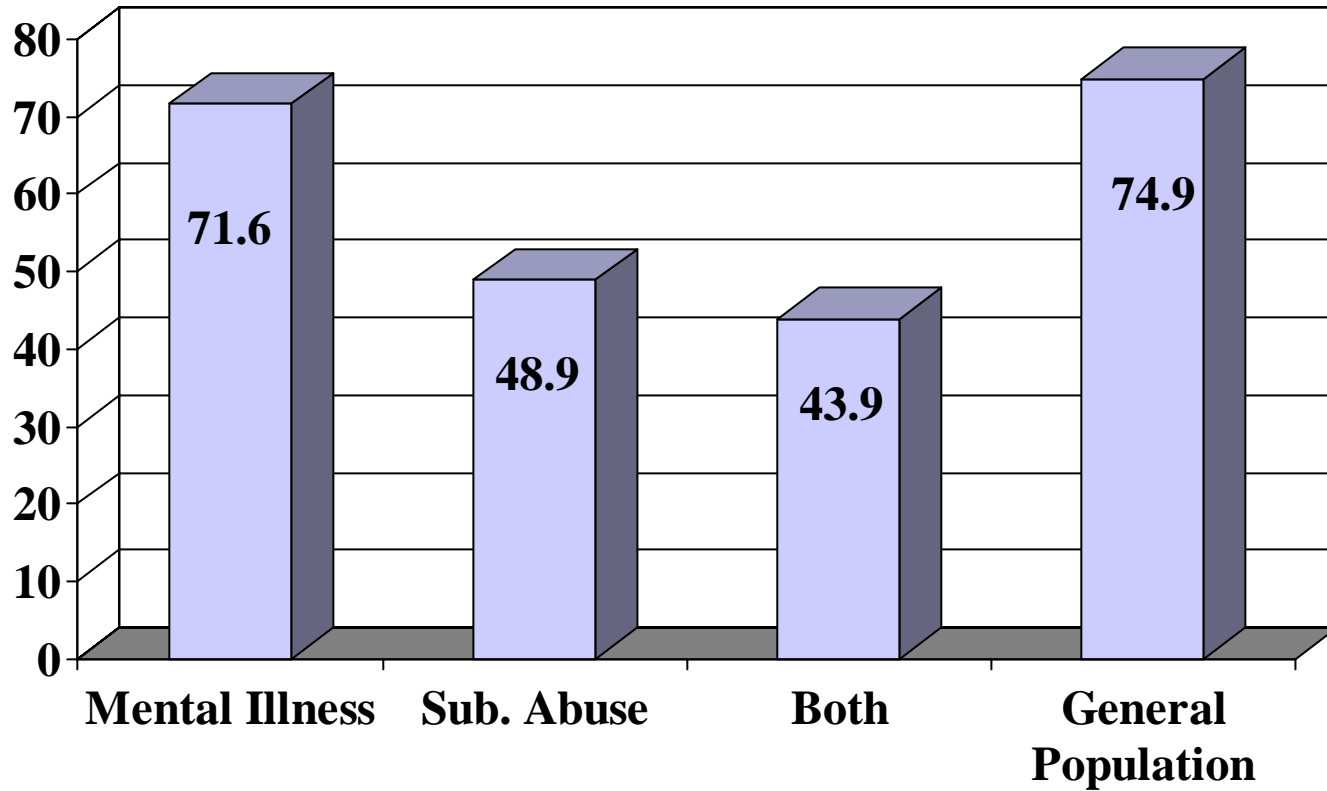
Primary Cause of Death (cont.)

- Program clients with both mental illness and substance abuse problems are,
 - 15.8 times more likely to die of poison,
 - 8.2 times more likely to die of substance related causes, and
 - 4.5 times more likely to die of suicide, than those who did not receive treatment

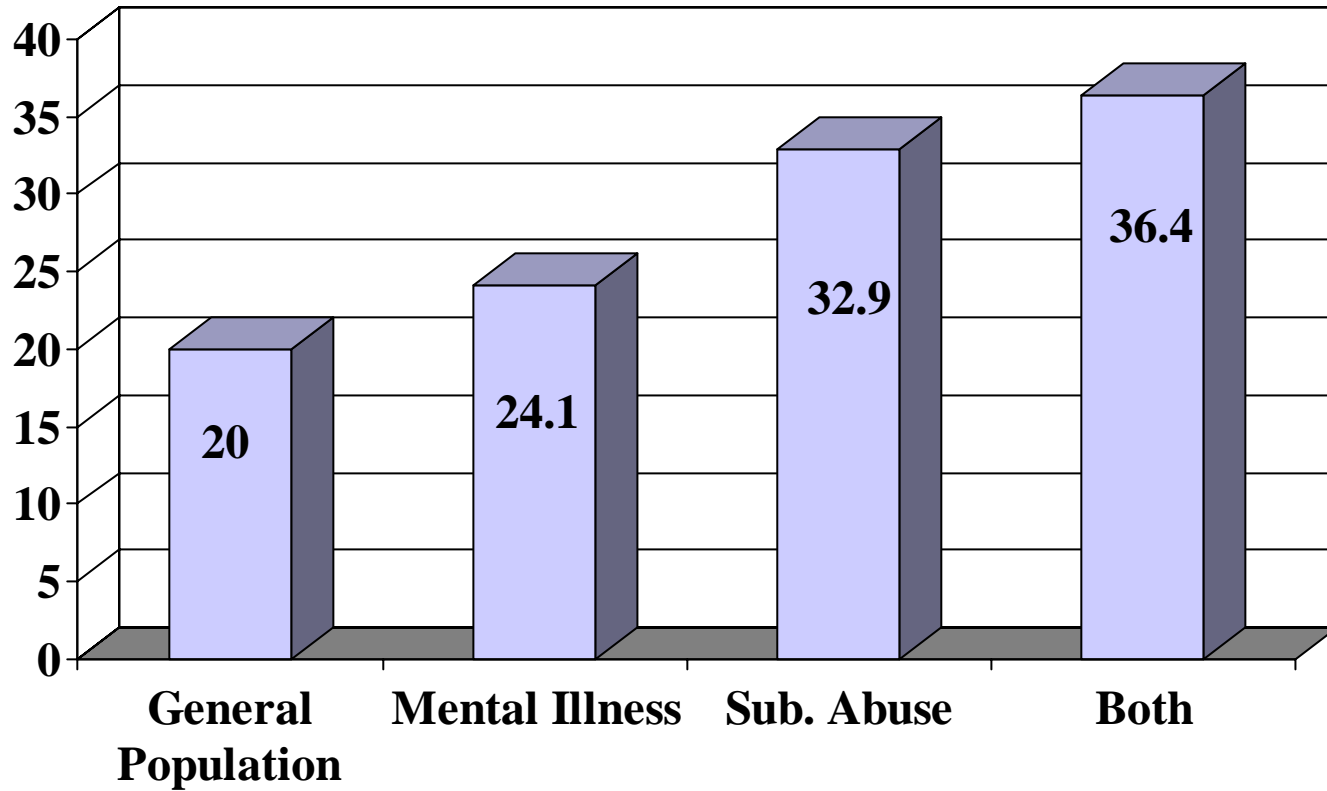
Percent Dying at 50 or Younger



Average Age at Death in Years



Average Years of Potential Life Lost



Conclusion

- Program clients, particularly those with substance abuse or both substance abuse and mental health problems are more likely to die prematurely than the general population.
- Program clients also die disproportionately from non-biological or external causes including poison, suicide, homicide.

Implications

- Society suffers from loss of productivity due to premature death
- Substance abusers or those with both mental illness and substance abuse problems are dying at their prime age from non-biological generally preventable causes
- Minimizing deaths from these external causes provides an economic rationale for expanding and sustaining mental health and substance abuse treatment services.