

Evaluating Programs for the Prevention of
Suicide

U Rochester Grant

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Support

SM57405-01 (Wyman, Brown) SAMHSA
Evaluating Success of a Gatekeeper Program in
Linking Suicidal Students to Treatment

R01-MH40859 (Brown) NIMH NIDA CDC
Methodology for Mental Health/Substance Abuse
Prevention & Early Intervention

R34MH071189-01 (Wyman, Brown) NIMH
RCT of Gatekeeper Training for Suicide Prevention

P20MH071897-01 (Caine, Brown) NIMH
Developing Center On Public Health and Population
Interventions For The Prevention Of Suicide

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CDC's Youth Suicide Prevention Programs: A Resource Guide

Proactively Identify High-Risk Individuals

School Gatekeeper Training (*)

Community Gatekeeper Training

Screening Programs

Intervene on Entire Population

General Suicide Education *

Peer Support Programs

Crisis Centers and Hotlines (*)

Means Restriction

Intervention After a Suicide

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Youth Suicide Prevention Programs: A RESOURCE GUIDE



SEPTEMBER 1992

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Declining 15-19 Male Suicide Rates 1994 - 2000

YOUTH SUICIDE RISK AND INTERVENTIONS

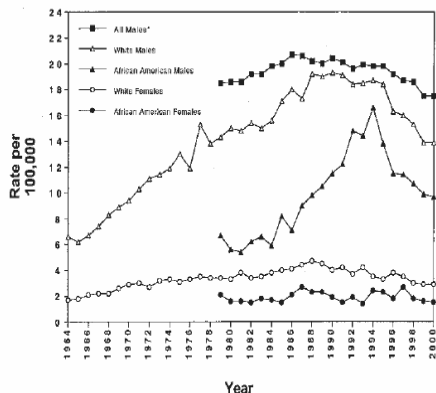


Fig. 1 Teen suicide rates, 1964–2000: United States, ages 15–19 years. Sources: Anderson, 2002; CDC, 2002; National Center for Health Statistics, 1999. *Crude rates; prior to 1979, African-American data not broken out.

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Randomized Trial as A Fair Comparison First Proposal in Health for equal comparison groups

1662 Van Helmont

Let us take out of the hospitals...200 or 500 poor people, that have fevers, pleurisies. Let us divide them into halves, let us cast lots, that one halfe of them may fall to my share, and the other to yours; I will cure them without **bloodletting** and sensible evacuation; but you do, as ye know...We shall see how many funerals both of us shall have.

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Randomized Trials as Scientifically Rigorous

Grades of Evidence (Canadian, US Preventive Task Forces '92)

1. Multiple, repeated randomized clinical trials
2. Single randomized clinical trial
3. Non-randomized experiment
4. Pre-post design w/o control
5. Expert opinion

Primary Challenges to Evaluating Population Suicide Prevention Programs

Evaluating Program Impact on suicide itself

Requires lots of people and/or long time periods

1 Million Person Years at risk

1,000,000 people for one year

100,000 people for 10 years

Belief that a rigorous design is inappropriate, unethical, or unmanageable

Randomized Trials Can Identify Programs that Do Not Work

High Risk Strategy

Suicide attempters who had been hospitalized

Failures to reduce self-harm

Green Card, Admission

Inpatient only CBT, Insight Therapy

Continuity of Care

Weekly debriefing

Randomized Trials that Look Successful High-Risk Groups

Suicide attempters who had been hospitalized

Successes in reducing self-harm

In person vs phone follow-up

4-month in-home monitoring

10 sessions CBT + case mgt

1-year DBT for BPD

Successes in reducing suicide

Motto & Bostrom 2001 – continued personal letters

3000 depr/suicidal hospitalizations

Reduced suicides for 2 years, not 5 years

C. Interventions with Entire Population

SOS

General awareness of suicide
Brief depression screening

Aseltine, DeMartino 2004

Trial 2100 students, 5 high schools

Randomly assigned health ed classes

Reduced attempts (ideation), knowledge, attitudes

Randomized Trial for Proactively Identifying High-Risk/Suicidal Youth

Georgia Gatekeeper Trial

Peter Wyman (UR), Hendricks Brown (USF)

Brown, Wyman, Guo, Peña (2006).

Dynamic wait-listed designs for randomized trials: New designs for prevention of youth suicide

Design of The Georgia Gatekeeper Trial

Testing a Gatekeeper Training Program aimed at school staff improving the rate of referrals for suicide

50,000 Middle and High School Students in 32 schools

Schools Randomly Assigned to “Wait-Listed” Design

Training Summary

Trained 75% of the Staff in Schools
QPR Training

Improved Staff ***

Knowledge about Suicidal Risk Factors

Attitudes about Suicide

How to refer in your school

Self-reported ability to refer youth

Wait Listed Design

Random Half of the Schools Receive Intervention Training Immediately (1/04-5/05)

Remaining Half Receive Training in Second Phase (8/05-5/06) -- These are also randomized into 4 different times

Advantages

Everyone gets intervention just as quickly as it would take the school district to complete all training

The randomized time of intervention allows rigorous comparison of intervention versus control

Classic and Dynamic Wait-Listed Design

Year	Time Block	Wait-Listed Design		Dynamic Wait-Listed Design	
		Intervention	Wait-Listed	Intervention	Wait-Listed
1	1	16	16	4	28
	2			8	24
	3			12	20
	4			16	16
2	5	32	0	20	12
	6			24	8
	7			28	4
	8			32	0

Other Opportunities for Randomized Trials

1. Gatekeeper Training for African American Churches in Washington DC

Randomize Timing of intervention

2. Preventive Interventions that target Risk Factors for Suicide

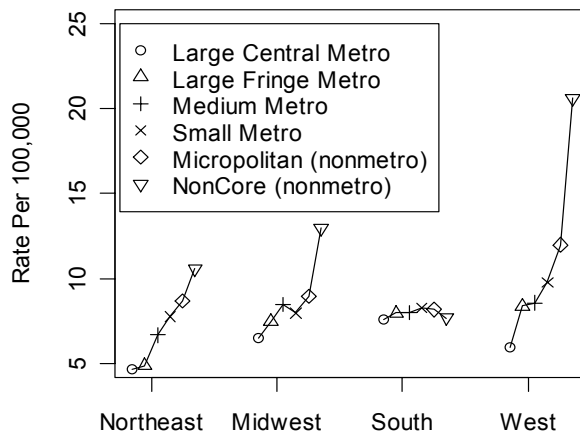
Over 100,000 youth randomized, over 10
years

3. Suicide Prevention among Youth in Rural/Frontier Areas
~ 100 Counties

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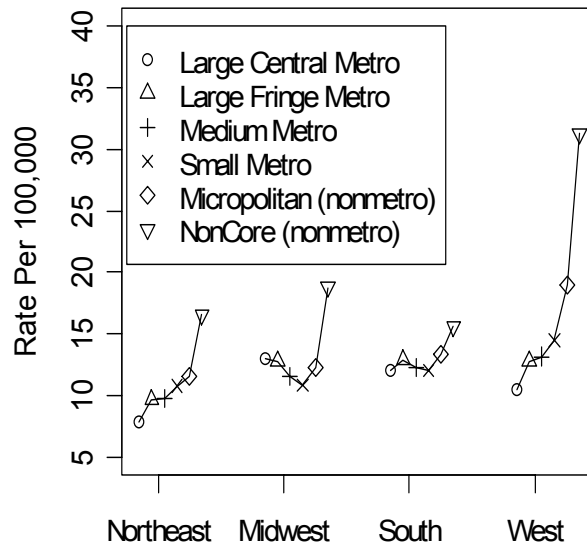
**Suicide Rate for 15-19 Year Olds
from 1999-2003 by Region and Rurality**



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Suicide Rate for 20-24 Year Olds from 1999-2003 by Region and Rurality



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Requirements for a Trial to Prevent Youth Suicide in Rural Areas

Partnerships

Communities/States/Researchers/Funders

Valuable Question to be Answered

Statistical Considerations

Enough Rural Counties (100)

Random Assignment of One Intervention
Component to allow Systematic Variation in
What Counties Receive

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