

Reducing Suicide: A National Imperative

Every year approximately 30,000 people in the United States and one million worldwide die as a result of suicide. Over the last 100 years, suicides have out-numbered homicides by at least 3:2. Concerned with high suicide rates, several federal agencies joined together and asked the Institute of Medicine to convene the Committee on Pathophysiology and Prevention of Adolescent and Adult Suicide to examine the state of the science base, gaps in our knowledge, strategies for prevention, and research designs for the study of suicide.

Risk and Protective Factors

Biological, genetic, psychological, and cultural factors significantly impact the risk of suicide in any individual. Risk factors associated with suicide include serious mental illness, alcohol and drug abuse, childhood abuse, loss of a loved one, joblessness and loss of economic security, and other cultural and societal influences, while resiliency and coping skills can reduce risks. Further, social support and close relationships serve as protective factors. However, despite advances, we still do not understand how these factors work in concert, either in inducing suicidal behavior or preventing it.

Treatment and Prevention

Suicidality can be treated. Pharmacotherapy and psychotherapy can be effective, particularly when used in combination. Continued contact with a health care provider has proven effective in reducing the risk of suicide, especially in the early weeks after discharge from a hospital.

A number of prevention programs show promise for reducing incidences of suicide and suicidal behaviors. Programs that address risk and protective factors at multiple levels are likely to be most effective.

Many of those who commit suicide visit a non-mental health clinician within the last month of their lives. This finding points to the important role primary care providers can play in identifying risk factors for suicide and in referring patients with suicidal intentions.

Enhancing the Database on Suicide

Because suicide is a low base-rate event, special efforts are needed to ensure collection of sufficient data to allow for meaningful analysis of risk factors and interventions. Currently, the reporting of suicide is non-uniform across jurisdictions, and the quality of data collected on suicide attempts is even more tenuous than that of completed suicides. Thus, improved surveillance is necessary.

Clinical trials of psychoactive medications usually exclude participants at risk for suicide. Unfortunately, this practice precludes evaluation of treatments that could potentially improve outcomes for suicidal individuals. With appropriate safeguards, patients at risk for suicide can be safely and ethically included in clinical trials.

Next Steps

The report provides a blueprint for addressing the tragic and costly problem of suicide. Recommendations aim to improve the monitoring of suicide, to increase recognition of key risk factors for suicide in primary care, and to expand efforts in prevention. The committee also recommends enhancing the research infrastructure by creating population research centers to conduct long-term, inter-disciplinary efforts that will lead to improved research, prevention, and treatment interventions.

**COMMITTEE ON PATHOPHYSIOLOGY AND PREVENTION OF ADOLESCENT
AND ADULT SUICIDE**

WILLIAM E. BUNNEY, JR., M.D., (*Co-Chair*), University of California, Irvine, California
ARTHUR M. KLEINMAN, M.D., (*Co-Chair*), Harvard University, Cambridge, Massachusetts
CARL C. BELL, M.D., Community Mental Health Council and University of Illinois, Chicago, Illinois
DAVID A. BRENT, M.D., Western Psychiatric Institute and Clinic, University of Pittsburgh, Pittsburgh, Pennsylvania
LEONA EGGERT, PH.D., FAAN, University of Washington, Seattle, Washington
JAN FAWCETT, M.D., Rush Institute for Mental Well-Being, Chicago, Illinois
ROBERT D. GIBBONS, PH.D., University of Illinois, Chicago, Illinois
KAY REDFIELD JAMISON, PH.D., The Johns Hopkins University School of Medicine, Baltimore, Maryland
JILL E. KORBIN, PH.D., Case Western Reserve University, Cleveland, Ohio
J. JOHN MANN, M.D., New York State Psychiatric Institute and Columbia University, New York, New York
PHILIP A. MAY, PH.D., University of New Mexico, Albuquerque, New Mexico
CHARLES F. REYNOLDS, III, M.D., Western Psychiatric Institute and Clinic, University of Pittsburgh, Pittsburgh, Pennsylvania
MING T. TSUANG, M.D., PH.D., Harvard Medical School, Boston, Massachusetts

Liaison to the Board on Neuroscience and Behavioral Health

RICHARD G. FRANK, PH.D., Harvard Medical School, Boston, Massachusetts

Institute of Medicine Staff

TERRY C. PELLMAR, PH.D., Board Director, NBH
SARA K. GOLDSMITH, PH.D., Study Director (until April 2002)
SANDRA P. AU, Research Associate (until June 2001)
DARIA K. BOENINGER, Research Associate (since July 2001, until March 2002)
ALLISON M. PANZER, Senior Project Assistant
LORA K. TAYLOR, Administrative Assistant (until July 2001)
CATHERINE A. PAIGE, Administrative Assistant (since October 2001)
JENNIFER CANGCO, Financial Associate (until August 2001)
ROSA POMMIER, Financial Associate (since December 2001)
MIRIAM DAVIS, PH.D., Consultant



Reducing Suicide: A National Imperative is available for sale from the National Academy Press, 2101 Constitution Avenue, N.W., Box 285, Washington, DC 20055; call (800) 624-6242 or (202) 334-3313 (in the Washington metropolitan area), or visit the NAP's on-line bookstore at www.nap.edu. For more information about the Institute of Medicine, visit the IOM home page at www.iom.edu.

© 2002 by the National Academy of Sciences

Permission is granted to reproduce this report brief in its entirety, with no additions or alterations.