

Mental Health and COVID-19

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Diversity

National Institute of Mental Health

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National Institute
of Mental Health

Outline

- COVID-19 and mental health
- Brief review of what we know
- Activities underway at NIH and NIMH

Pandemic Impact Beyond Direct Morbidity and Mortality



- Dramatic alteration to life as we knew it
 - Fear for health
 - Altered health-related behaviors
 - Disruption of the health care system
 - Disruption of social networks
 - Financial insecurity secondary to the economic consequences
 - Disruption to normal routines

COVID-19 in Context of Prior Research

Public Health Perspective

On average, a disaster occurs somewhere in the world each day (flood, hurricane, earthquake, nuclear, industrial, and transportation accidents, mass shooting, peacetime terrorist attack)

There are people living with chronic exposure to traumatic events (war or conflict, famine, neighborhood violence)

Variety of disasters/mass traumas share some common factors with evolving pandemic relevant for mental health

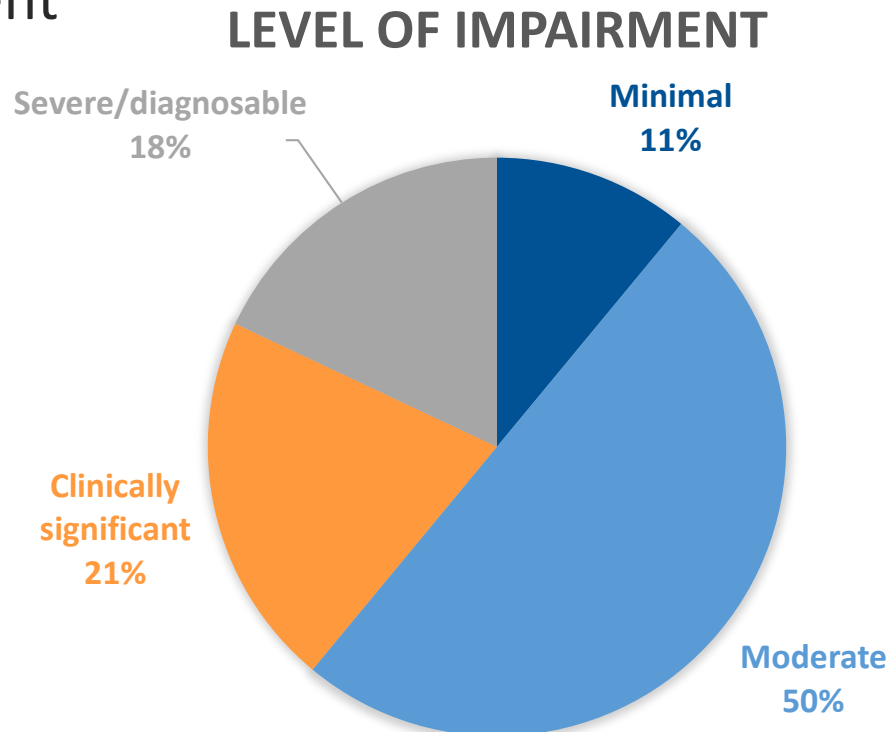
- many people simultaneously experiencing the event
- threat to one's own life and physical integrity
- exposure to the dead and dying
- bereavement
- profound loss
- social and community disruption
- ongoing hardship

Mental Health Impacts: What We Know from Previous Disasters

Psychiatry 65(3) Fall 2002

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- Norris and colleagues (2002) empirical review of 60,000 disaster victims from 160 samples
 - Coded as to sample type, disaster type, disaster location, outcomes and risk factors observed, overall severity and impairment



60,000 Disaster Victims Speak: Part I. An Empirical Review of the Empirical Literature, 1981–2001

FRAN H. NORRIS, MATTHEW J. FRIEDMAN, PATRICIA J. WATSON, CHRISTOPHER M. BYRNE, EOLIA DIAZ, AND KRZYSZTOF KANIASTY

Results for 160 samples of disaster victims were coded as to sample type, disaster type, disaster location, outcomes and risk factors observed, and overall severity of impairment. In order of frequency, outcomes included specific psychological problems, nonspecific distress, health problems, chronic problems in living, resource loss, and problems specific to youth. Regression analyses showed that samples were more likely to be impaired if they were composed of youth rather than adults, were from developing rather than developed countries, or experienced mass violence (e.g., terrorism, shooting sprees) rather than natural or technological disasters. Most samples of rescue and recovery workers showed remarkable resilience. Within adult samples, more severe exposure, female gender, middle age, ethnic minority status, secondary stressors, prior psychiatric problems, and weak or deteriorating psychosocial resources most consistently increased the likelihood of adverse outcomes. Among youth, family factors were primary. Implications of the research for clinical practice and community intervention are discussed in a companion article (Norris, Friedman, and Watson, this volume).

On average, a disaster occurs somewhere in the world each day. It may be a flood, hurricane, or earthquake, a nuclear, industrial, or transportation accident, a shooting spree, or peacetime terrorist attack. What these various events share in common is their potential to affect many persons simultaneously and to engender an array of stressors, including threat to one's own life and physical integrity, exposure to the dead and dying, bereavement,

profound loss, social and community disruption, and ongoing hardship. As a result of both the high prevalence and high stressfulness of disasters, the question of whether they impact mental health has been of interest for decades, and a substantial literature has developed that identifies and explains these effects.

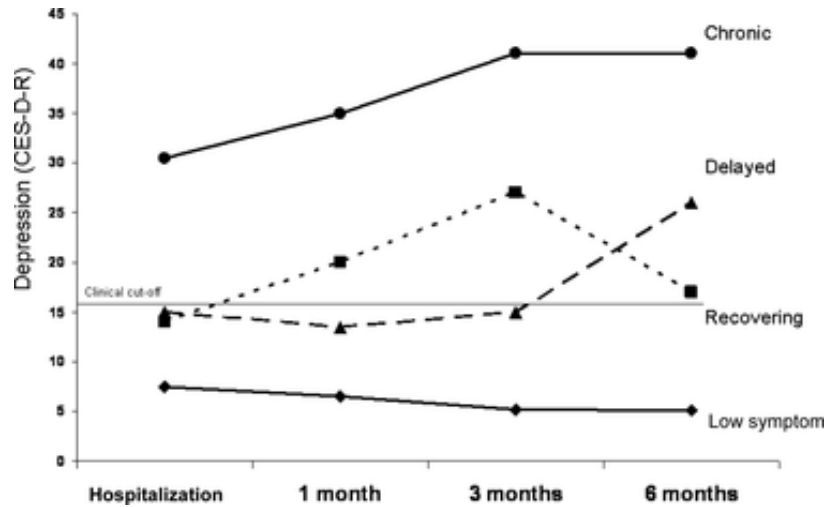
Although there are exceptions (e.g., Briere and Elliott 2000), most disaster studies examine the effects of a particular event that

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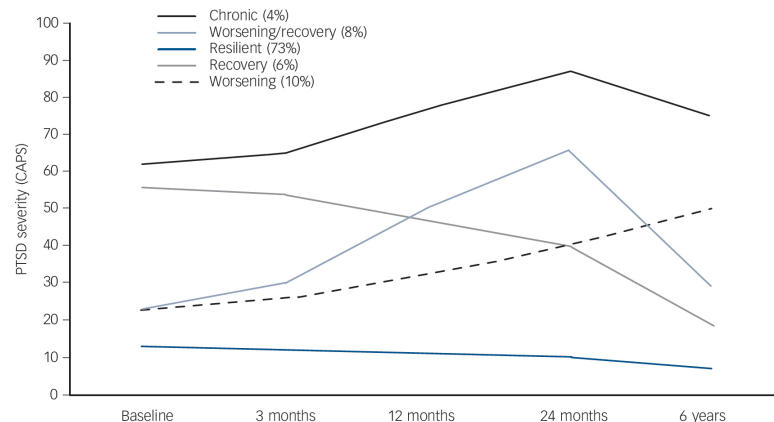
This work was funded by an interagency collaborative agreement between the Center for Mental Health Services and the Department of Veterans Affairs National Center for Posttraumatic Stress Disorder. Preparation of this manuscript was also supported by Grant No. KO2 MH63909 to Fran H. Norris.

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Trajectory of Symptoms Following Trauma



Adapted from T.A. deRoos-Cassini, 2010



Adapted from R.A. Bryant, 2015

General symptom improvement over time

- Pattern regardless of symptom/diagnosis
- Pattern consistent with acute and chronic exposure
- Across trauma studies, most are resilient or recover
- Consistent pattern over vastly different timelines

Risks for Poor Outcomes

- Most exposed to trauma initially experience symptoms and for most, symptoms improve with time
- Significant minority of people exposed to trauma may have long-term or chronic experiences with mental illness
 - Higher risk
 - Few social supports
 - History of trauma or mental illness
 - Were exposed directly to death or injuries
 - Had severe acute reactions to disaster
 - Experiencing ongoing stressors—including occupational and financial strain
 - There is no single variable that determines individual outcomes

Promote Recovery

- Meeting immediate needs helps long term impacts
 - Practical assistance—shelter, food, safety, economic stability
- Practice healthy coping strategies
 - Note accomplishments, set reasonable expectations, exercise, maintain schedule, eat well, get rest, talk with support network
 - Avoid substance abuse
- Treat new or worsening illness
 - Evidence based screening, assessment, treatment, and care coordination is expensive but cost effective ultimately

Mental Health Disparities Following Disasters

- Disparities in treatment following trauma exist by income level at both the country (Koenen, 2017) and neighborhood level (Ahern 2006)
- Social inequality and health disparities both predict and exacerbate vulnerability in marginalized populations
- Increasing access to effective treatment remains critical for reducing the burden of illness

DISCUSSION PAPER

Addressing Social Determinants of Health and Health Disparities

A Vital Direction for Health and Health Care

Nancy E. Adler, University of California, San Francisco; David M. Cutler, Harvard University; Jonathan E. Fielding, University of California, Los Angeles; Sandro Galea, Boston University; M. Maria Glymour, University of California, San Francisco; Howard K. Koh, Harvard University; David Satcher, Morehouse School of Medicine

September 19, 2016

About the Vital Directions for Health and Health Care Series



This publication is part of the National Academy of Medicine's **Vital Directions for Health and Health Care Initiative**, which called on more than 150 leading researchers, scientists, and policy makers from across the United States to assess and provide expert guidance on 19 priority issues for U.S. health policy. The views presented in this publication and others in the series are those of the authors and do not represent formal consensus positions of the NAM, the National Academies of Sciences, Engineering, and Medicine, or the authors' organizations. Learn more: nam.edu/VitalDirections.

Introduction

Despite the powerful effects of social and behavioral factors on health, development, and longevity, US health policy has largely ignored them. The United States spends far more money per capita on medical services than do other nations, while spending less on social services (Bradley et al., 2011). Residents of nations that have higher ratios of spending on social services to spending on health care services have better health and live longer (Bradley and Taylor, 2013; NCR and IOM, 2013a). The relative underinvestment in social services helps to explain why US health indicators lag behind those of many countries (Woolf and Aron, 2013). The best available evidence suggests that a health policy framework addressing social and behavioral determinants of health would achieve better

population health, less inequality, and lower costs than our current policies.

Overview

For over a century, each generation of Americans has lived longer than did their parents because of advances in health care and biotechnology (Nabel and Braunwald, 2012) and progress in public health and health behaviors (Laing and Katz, 2012; Tarone and McLaughlin, 2012). However, although the US population gained 1–2 years of life expectancy in each decade from 1950 to 2010, life expectancy has since then increased by only 0.1 year (Arias, 2015; Murphy et al., 2015), and some researchers predict that it will decrease for the next generation because of the obesity epidemic (Olshansky et al., 2005). Mortality in middle-

Perspectives | Expert Voices in Health & Health Care

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RADx-Underserved Populations (RADx-UP)

Overarching Goals

- Enhance COVID-19 testing among **underserved and vulnerable populations** across the US.
- Develop/create a **consortium of community-engaged research projects** designed to rapidly implement testing interventions.
- **Strengthen the available data** on disparities in infection rates, disease progression and outcomes, and **identify strategies to reduce these disparities** in COVID-19 diagnostics.

September – November

2020

Phase I: \$300M



*Build
infrastructure*



*Rapidly
implement
testing, other
capabilities*

2021

Phase II: \$200M



*Integrate
new
advances*



*Expand
studies/
populations*

Some RadX-UP supplement awards

Center for American Indian and Rural Health Equity (Montana State University, Bozeman, 3P20GM104417)

- This study will use pragmatic randomized testing to evaluate home based testing through comparing community health workers with mail in at-home testing and their related feasibilities.

Building Resilience and Vital Equity (BRAVE) - Increasing COVID-19 Testing in American Indians (North Carolina Central University, 3R01MD012767)

- This study will evaluate the impact of work to increase testing uptake for American Indians in North Carolina.

Protecting Native Families from COVID-19: RADx Initiative (Johns Hopkins University, 3U19MH113136)

- This study will address high rates of morbidity and mortality due to COVID19 among American Indian and Navajo Nation communities in the US. The goal of this study is to increase and speed up the testing among those with symptoms and improve adherence to recommended strategies.

Collaborative Hubs to Reduce the Burden of
Suicide among American Indian and Alaska
Native Youth



Some RadX supplement awards

RADx-UP NARCH Supplement: A Cherokee Nation Community-Driven Program for Testing and Contact Tracing (Cherokee PROTECT) (Cherokee Nation, 3S06GM127983)

- This study will enhance understanding of COVID-19 within the significantly and disproportionately impacted residents of Cherokee Nation. The researchers will perform rapid point-of-care testing, antibody testing, and contact tracing, and will develop educational materials for the community. Rapid data analysis will be used to nimbly move testing sites to areas of need.

Community Organizations for Natives: COVID-19 Epidemiology, Research, Testing, and Services (CONCERTS) (Washington State University, P3U54MD011240)

- This study focuses on satellite centers that partner with six geographically contiguous Urban Indian Health Programs across the United States to launch studies under Community Organizations for Natives: COVID-19 Epidemiology, Research, Testing, and Services (CONCERTS). The overarching goal is to remove barriers and increase SARS-CoV-2 testing among urban American Indian/Alaska Native populations by offering an array of testing options that cover a wide geographical area.

Advancing Palliative Care in Northern Plains American Indians (Massachusetts General Hospital, 3R01CA240080)

- This research will perform a phased study of three Lakota tribes in South Dakota to address attitudes and access to testing.

COVID-19 Research Support Example: NIH-Wide SBE Workgroup

OVER 60 WG MEMBERS



- Social, Behavioral, and Economic Impacts of COVID-19 initiative engaged NIH members with representation from 21 ICOs



FUNDED 52 SUPPLEMENTS

- 28 Longitudinal Studies
- 15 Digital Health Studies
- 9 Community Health Studies

DIVERSE POPULATION



- Many health disparity populations (e.g., racial and ethnic minorities, less privileged SES, rural residents)
- Vulnerable populations included community older adults, frontline workers, children

IMPACTFUL RESEARCH

Research focus areas included but not limited to:

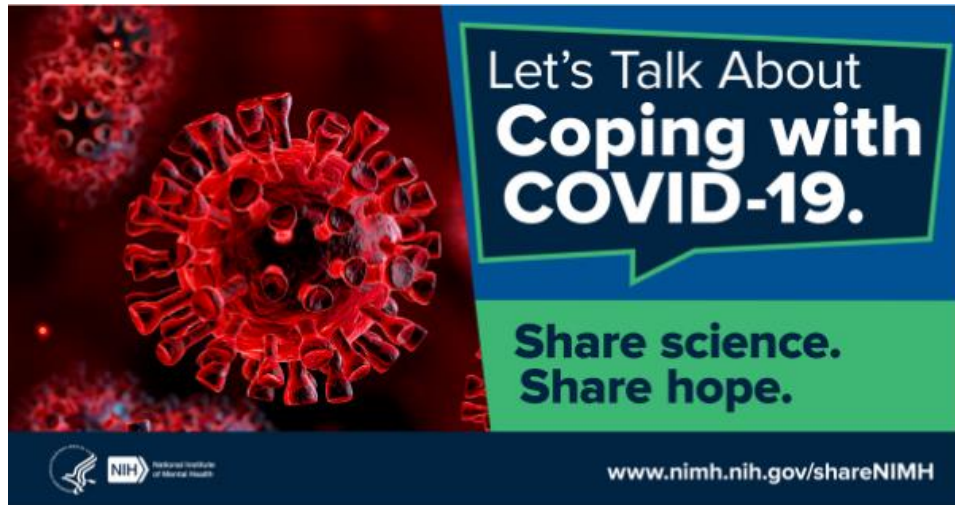
- Alcohol, substance abuse, mental health outcomes
- Public health mitigation impact and adherence
- Chronic health conditions



Relevant Commentaries

- Gordon & Borja (2020) The COVID-19 Pandemic: Setting the Mental Health Research Agenda, *Biological Psychiatry*.
[https://www.biologicalpsychiatryjournal.com/article/S0006-3223\(20\)31616-4/pdf](https://www.biologicalpsychiatryjournal.com/article/S0006-3223(20)31616-4/pdf)
- Riley, Borja, Webb Hooper, Lei, et al (2020) National Institutes of Health social and behavioral research in response to the SARS-CoV2 Pandemic, *Translational Behavioral Medicine* <https://academic.oup.com/tbm/advance-article/doi/10.1093/tbm/ibaa075/5876656?guestAccessKey=146fbb29-20b3-4e35-b06f-b83267c1dd67>
- Hooper, Nápoles, & Pérez-Stable (2020) COVID-19 and Racial/Ethnic Disparities, *JAMA*. <https://jamanetwork.com/journals/jama/article-abstract/2766098>

NIMH Response to COVID-19



Why Testing is the Key to Getting Back to Normal



<https://www.nimh.gov/covid19>

Thank you!

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NIMH Vision and Mission

VISION



NIMH envisions a world in which mental illnesses are prevented and cured.

MISSION



To transform the understanding and treatment of mental illnesses through basic and clinical research, paving the way for prevention, recovery, and cure.

NIH-Wide COVID-19 Social, Behavioral, and Economic (SBE) Impacts of COVID-19 in Health Disparity and Vulnerable Populations

Purpose

The COVID-19 pandemic and its associated mitigation efforts have had profound effects and will disproportionately affect racial/ethnic minorities, less privileged SES, and other vulnerable populations who already experience health disparities.

- The purpose of this initiative is to **assess the social, behavioral, and economic health impacts of COVID-19 and its mitigation**, particularly in health disparity and vulnerable populations, and to evaluate interventions to ameliorate these impacts
- This initiative aims to understand the costs and benefits of the strategies to mitigate transmission, particularly in health disparity and vulnerable populations, to **improve our response to the current pandemic** and **prepare more effectively for future infectious disease epidemics**

Priorities

This initiative proposes a comprehensive approach to understanding and insulating against these impacts in 5 broad areas:

- The **effects of various mitigation strategies** on reducing transmission and the **role of adherence** to these strategies
- The **social and economic impacts** of various mitigation efforts
- The **downstream effects** of these impacts on mental health, suicide, substance abuse, and other disorders
- The effects of the pandemic and its mitigation on **health care access** and on **health outcomes**
- The effects of **interventions**, including telehealth and digital health interventions, in reducing these impacts

Some SBE awards

Examining the Role of Sleep Disturbances in Contributing to Health Risk Behaviors and Cardiometabolic Outcomes in Urban Native American Youth (Rand Corporation, R01 MD012190-04S1)

- Using two waves of data (baseline and during the coronavirus pandemic), we will examine changes in individual (e.g., technology use), family (e.g., conflict and cohesion), community (e.g., sense of community), and cultural (e.g., engagement in cultural activities) risk and protective factors, and changes in sleep, risk-taking and mental health (depression, anxiety, and post-traumatic stress disorder, PTSD).

Chukka Auchaffi Natana: The Weaving Healthy Families Program to Promote Wellness and Resilience and Prevent Alcohol and Other Drug Abuse and Violence (Tulane University of Louisiana, R01 AA028201-01S1)

- Our central hypothesis is that the sustainable and community-based Weaving Healthy Families program will reduce and postpone alcohol and other drug use, decrease and prevent violence in families, and promote resilience and wellness (including mental health) among NA adults and youth.

Transdisciplinary Research, Equity and Engagement Center for Advancing Behavioral Health (Columbia University, 3U54MD004811)

- We target improvement of behavioral health disparities for socioeconomically disadvantaged and underserved rural populations with a southwest regional focus on American Indian/Alaska Natives and Latinos in New Mexico. Our goal is to highlight the social determinants of behavioral health, including Adverse Childhood Experiences, historical trauma, and intersectional effects of poverty and discrimination to improve conditions and outcomes related to youth suicide, alcohol and drug misuse, depression, and access to behavioral health services.