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Mental Health during the COVID-19 Pandemic Focus on child mental health and individuals with developmental disabilities

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Presentation to National Disability Forum April 15, 2021

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Outline of Today's Presentation

- Child Mental Health
- Individuals with Developmental Disabilities
- ▶ Trajectories of Mental Distress in US Adults (if time, or for your own reference)

COVID-19 Pandemic

- Mental health effects of other disasters, major stressors have been well established
- Ongoing outbreaks, no 'single' event
- Repeated stressors, intersectionality
- Global scope
- Isolation, caregiving challenges, inadequate support services, etc.
- Uncertainty

Child Mental Health

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Caveats and Research Challenges

- Schools are main setting for research on children & adolescents
- Most COVID-19 research has occurred online; this is hard in pediatric population
- Limited data available on children and adolescents

Framework

- Pandemic is period of cumulative risk (multiple stressors)
 - Aggregation of risk factors during pandemic may be acute or unfold over time
- Mental health effects may not manifest immediately (i.e., sleeper effects)

Sensitizing effects

- Pre-existing vulnerabilities (e.g., anxiety disorder)
- Pandemic related stress as index event, sensitizing children who previously explored little adversity
- Mechanistic effects of pandemic on child/youth mental health (i.e., how parental job loss impacts child)
- Resilience processes and resources that restore equilibrium, offset challenges, foster adaptation to difficult conditions

Wade, M., Prime, H., & Browne, D. T. (2020). Why we need longitudinal mental health research with children and youth during (and after) the COVID-19 pandemic. *Psychiatry research*, 290, 113143.

Risk Factors and Subgroups

Risk factors

- Disease containment measures
- Increased screen time
- Parental stress
- Economic hardship
- Racism and discrimination
- Prior health concerns

Etc.

Subgroups

- Younger children
 - e.g., Tempers, sleep disruption, regressive behaviors
- Older children/teenagers
 - Frustration, anxiety, disconnected, bored
- Children with special needs
- Children with pre-existing mental illness
- Children in quarantine

School Functions and Implications during Pandemic

- Provides safe, structured learning environment
- Engagement with specialized educators, services, individual education plan
- Behavioral supports, services, providers.
- School nurse, counselor, etc.
- School lunches & other nutrition programs

- Increase in & under recognition of child abuse, neglect
- Decreased access to specialized services, resources
- Decreased access to health care, recognition of health concerns, both mental/emotional & physical
- Food insecurity

Individuals with Developmental Disabilities

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Impact of pandemic on people with intellectual and developmental disabilities

Letters to the Editor

The Impact of COVID-19 on Individuals With Intellectual and Developmental Disabilities: Clinical and Scientific Priorities

TO THE EDITOR: The goal of this communication is to provide clinicians and behavioral scientists with a scoping perspective on the diverse array of effects of the COVID-19 pandemic on individuals with intellectual and developmental disabilities in the United States. It is our hope that this will stimulate subsequent scientific and advocacy efforts to ameliorate the disproportionate burden of the pandemic on people with intellectual and developmental disabilities. We begin with the assertion that among noninfected persons in the United States, few are more adversely affected by COVID-19 than individuals with intellectual and developmental disabilities given that a an impossibility for many with intellectual and developmental disabilities, for whom virtual interaction—even if accessible is an inadequate substitute. Recovery efforts should be substantially guided by recognition of which individuals with intellectual and developmental disabilities can and cannot benefit from electronic substitutions for therapy, education, and social interaction. For those who can, attending to the "digital divide" (i.e., frank disparities in access to the technology necessary for virtual connectivity), as well as ensuring that Wi-Fi and usable devices are made available, is a pressing urgency; those who cannot benefit should be prioritized for the in-person services that they need.

A third and related domain is inequity in education across the lifespan. As summer school and summer camp programs were suspended, and as classrooms are being converted to

Figure shows snapshot of paper by Constantino et al 2020 on impact of COVID-19 on individuals with intellectual and developmental disabilities

Constantino, J. N., Sahin, M., Piven, J., Rodgers, R., & Tschida, J. (2020). The impact of COVID-19 on individuals with intellectual and developmental disabilities: Clinical and scientific priorities. *American Journal of Psychiatry*, *177*(11), 1091-1093.

Impact of pandemic on people with intellectual and developmental disabilities

- Most require in-person care/critical therapeutic support in living environment; little backup for extended service disruptions
- Disproportionate impact of mitigation efforts and social distancing
- Special education often requires nuanced physical contact and redirection, etc. Challenge with online schooling
- Exclusive reliance on telehealth can leave gaps in critical aspects of the delivery of appropriate health care

- Issues with access to testing and medical care for individuals infected with virus.
- Increased risk of infection with and complicated outcomes from SARS-CoV-2 (see Makary 2020 white paper)
- Ensure public decision making, relief funds mobilization are equitably responsive to needs and interests of people with IDDs

Constantino, J. N., Sahin, M., Piven, J., Rodgers, R., & Tschida, J. (2020). The impact of COVID-19 on individuals with intellectual and developmental disabilities: Clinical and scientific priorities. *American Journal of Psychiatry*, *177*(11), 1091-1093. / Risk Factors for COVID-19 Mortality among Privately Insured Patients: A Claims Data Analysis. A FAIR Health White Paper in Collaboration with the West Health Institute and Marty Makary, MD, MPH, from Johns Hopkins University, Nov 11, 2020.

Psychiatric & behavioral problems during COVID-19 Pandemic, among children with autism spectrum disorder (ASD)

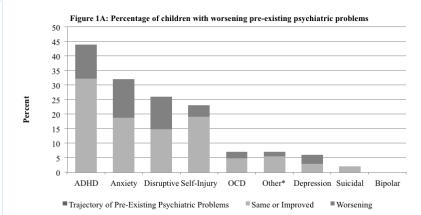
- Participants: parents of children with ASD diagnosis enrolled in clinic research registry at Kennedy Krieger Institute Center for Autism and Related Disorders
- Online survey
- Child age: 2-16.9 years
- ▶ N=257

Goal was to identify frequency of new and worsening symptoms and identify risk factors for child's worsening mental/behavioral health

Vasa, R., Singh, V., Holingue, C., Kalb, L., Jang, Y., Keefer, A. Psychiatric Problems During the COVID-19 Pandemic in Children with Autism Spectrum Disorder. Under Review.

Exacerbation of pre-existing conditions in children with ASD

- Top pre-existing psychiatric/behavioral problems that worsened
 - Anxiety (42%)
 - Disruptive Behavior (44%)
 - Depression (53%)



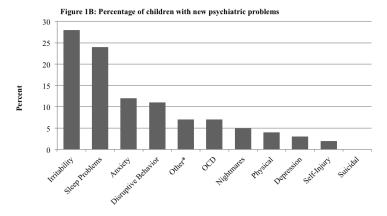
*Other included predominantly a broad range of developmental diagnoses not reported here (e.g., sensory processing disorder, apraxia)

Figure shows percent of children with a pre-existing psychiatric/behavioral health problem that experienced a worsening in their condition during the COVID-19 pandemic.

Vasa, R., Singh, V., Holingue, C., Kalb, L., Jang, Y., Keefer, A. Psychiatric Problems During the COVID-19 Pandemic in Children with Autism Spectrum Disorder. Under Review.

New psychiatric/behavioral symptoms in children with ASD

- Most common new symptoms
 - Irritability (28%)
 - Sleep problems (24%)
 - Anxiety (12%)
 - Disruptive behavior (11%).
 - Numbers similar among children without psychiatric psychiatric/behavioral conditions (except ASD)



*Other included predominantly a broad range of symptoms not reported here (e.g., tics, inattention, social withdrawal)

Figure shows percent of children with ASD with new psychiatric problems during COVID-19 pandemic.

Vasa, R., Singh, V., Holingue, C., Kalb, L., Jang, Y., Keefer, A. Psychiatric Problems During the COVID-19 Pandemic in Children with Autism Spectrum Disorder. Under Review.

Risk Factors

- We found that 59% of children in our clinical sample are experiencing increased psychiatric problems.
- Risk factors for increased psychiatric/behavioral problems were:
 - COVID-19 diagnosis in the family
 - Child's understanding of COVID-19 pandemic
 - Further research needed; see Asbury et al., 2020 JADD
 - Higher parental psychopathology (anxiety, depression, loneliness, hopelessness, hyperarousal)
 - Low income
 - Adjusted for parent and child sociodemographic factors

Vasa, R., Singh, V., Holingue, C., Kalb, L., Jang, Y., Keefer, A. Psychiatric Problems During the COVID-19 Pandemic in Children with Autism Spectrum Disorder. Under Review / Asbury, K., Fox, L., Deniz, E., Code, A., & Toseeb, U. (2020). How is COVID-19 affecting the mental health of children with special educational needs and disabilities and their families?. *Journal of Autism and Developmental Disorders*, 1-9.



Journal of Autism and Developmental Disorders https://doi.org/10.1007/s10803-020-04816-6

BRIEF REPORT



Brief Report: Impact of COVID-19 on Individuals with ASD and Their Caregivers: A Perspective from the SPARK Cohort

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Abstract

The impact of the 2019 coronavirus pandemic (COVID-19) in the United States is unprecedented, with unknown implications for the autism community. We surveyed 3502 parents/caregivers of individuals with an autism spectrum disorder (ASD) enrolled in Simons Powering Autism Research for Knowledge (SPARK) and found that most individuals with ASD experienced significant, ongoing disruptions to therapies. While some services were adapted to telehealth format, most participants were not receiving such services at follow-up, and those who were reported minimal benefit. Children under age five had the most severely disrupted services and lowest reported benefit of telehealth adaptation. Caregivers also reported worsening ASD symptoms and moderate family distress. Strategies to support the ASD community should be immediately developed and implemented.

Keywords Autism spectrum disorder \cdot COVID-19 \cdot Services \cdot Telehealth \cdot Stress

Image of published paper by White et al 2021 from the Journal of autism and developmental disorders, on impact of COVID-19 on people with & their caregivers Surveyed parents/caregivers of individuals with ASD enrolled in the Simons Powering Autism Research for Knowledge (SPARK)

▶ N=3,502

- "Most individuals with ASD experienced significant, ongoing disruptions to therapies", especially children <5 years
- Worsening ASD symptoms, moderate family distress

White, L. C., Law, J. K., Daniels, A. M., Toroney, J., Vernoia, B., Xiao, S., ... & Chung, W. K. (2021). Brief report: impact of COVID-19 on individuals with ASD and their caregivers: a perspective from the SPARK cohort. *Journal of autism and developmental disorders*, 1-8.

Key Conclusions & Implications

- COVID-19 crisis is serious, unique
- Though many (most?) individuals will not face long-term mental and behavioral challenges as a result of the pandemic, some will
- Need for longitudinal data, consideration of developmental lens
- Dynamic, interacting, multi-level factors, ecological system
- Much research has focused on adults, but desperately need data on special population (e.g., children, individuals with disabilities, etc.)

Thank you!

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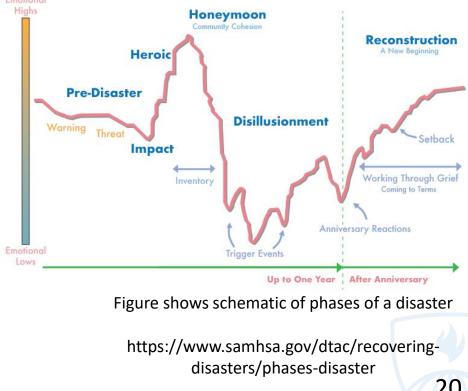
Trajectories of Mental Distress in US Adults

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Trajectories of Mental Distress

- Levels of mental distress tend to fluctuate during and after a public health crisis
- Trajectories are likely to differ based on sociodemographic characteristics
 - Structural/societal forces make some groups more vulnerable to the negative consequences of a pandemic



COVID-19 Pandemic

- Ongoing outbreaks, no 'single' event
- Repeated stressors, intersectionality
- Global scope
- Isolation, caregiving challenges, inadequate support services, etc.
- Uncertainty

- Objective: To examine trajectories of mental distress between March 10 and August 4, 2020
 - Overall and among sociodemographic subgroups defined by sex, age, race/ethnicity, census region, household structure, and federal poverty line

Understanding America Survey

- Probability-based, nationally-representative Internet-panel of adults (18 years and older)
 - Potential participants without prior internet access are provided with tablets and broadband internet connections
- Addresses used to sample participants come from the US Postal Service Delivery Sequence
- Has been active since 2013

- UAS administers surveys to respondents at 14-day intervals
 - About 400-500 respondents per day
- Currently there are >24 waves of data available, since March 10, 2020
 - Additional data collection is underway
 - Longitudinal data are released online within 48 hours of the end of a wave (!!)
- Data can be linked to prior survey waves collected before the pandemic
- Data are publicly available
- Additional details can be found here: <u>https://UASdata.usc.edu</u>

Trajectories of Mental Distress

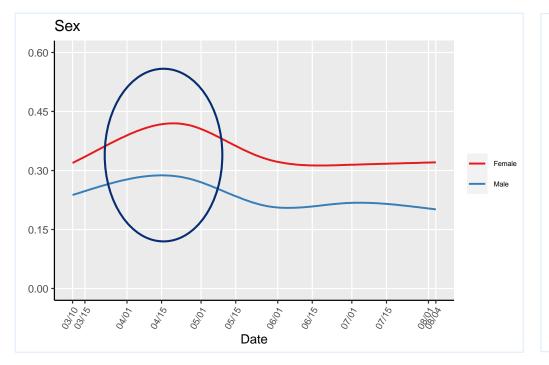
Trajectory of Mental Distress Among US Adults 0.60 0.45 OR = 1.84 (1.65-2.07) OR = 0.83 (0.70-1.00) 0.30 OR = 1.92 (1.62-2.28) OR = 0.82 (0.69 - 0.96)0.15 0.00 0310 0315 05/75 06/75 07/15 04/07 05/07 06/07 0707 Date

- Figure on the left shows trajectory of mental distress among US adults from March 10, 2020 to August 4, 2020
- Shows increasing levels of distress from March 10 though mid-April, with a gradual return to pre-pandemic levels

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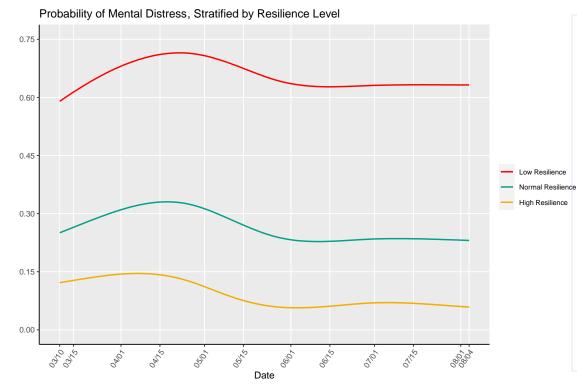
Riehm KE, Holingue C, Smail EJ, et al. Trajectories of Mental Distress Among U.S. Adults During the COVID-19 Pandemic. Annals of Behavioral Medicine. 2021

Trajectories of Mental Distress



- Figure on the left shows trajectory of mental distress among US adults from March 10, 2020 to August 4, 2020, separately for men and women
- Shows increasing levels of distress from March 10 though mid-April, with a gradual return to prepandemic levels, in both groups
- However, adult women experienced sharper increase in distress symptoms, as well as higher levels both before and during the COVD-19 pandemic
- Otherwise, trajectories over time were broadly similar between sociodemographic subgroups

What about resilience?



- We examined trajectories of mental distress over course of the COVID-19 pandemic.
- Figure to the left shows that adults with low and normal resilience experienced increases in mental distress.
- Men, older adults, and Black adults were more likely to report high resilience.
- Adults living below the poverty line were less likely to report high resilience.

Riehm, K. E., Brenneke, S. G., Adams, L. B., Gilan, D., Lieb, K., Kunzler, A. M., ... & Thrul, J. (2020). Association between psychological resilience and changes in mental distress during the COVID-19 pandemic. *Journal of Affective Disorders*.

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Image of Kira Riehm

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 - National Science Foundation (2028683)
 - Capital Group COVID-19 Response Fund Grant
 - JHSPH Mental Health & COIVD-19 homepage

https://www.jhsph.edu/departments/mentalhealth/mental-health-and-covid-19/

Thank you!

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