Number of children worldwide impacted

More than 2.2 billion children in the world
- Approximately 28% of world population
- 16% of population are ages 10-19

Nationwide closures of schools and colleges have negatively impacted over 91% of the world's student population.

Unicef 2019; statistics 2021
Impact on youth mental health
PTSD in children alters brain development. Alterations in fronto-limbic circuits - contribute to increased threat reactivity and weaker emotion regulation - neuroanatomical/neurofunctional consequences of PTSD include declining hippocampal volumes, increasing amygdala, reactivity and declining amygdala prefrontal coupling with age.

Lockdown/quarantine: data suggest disruptions in brain development caused by social isolation. There are reciprocal relationships between social interactions and brain development. Disruptions caused by social isolation potentially influences the onset of psychiatric disorders.

Herringa, 2017. Trauma, PTSD and the developing brain. Current Psychiatry Reports
The Pandemic and Youth Mental Health

- Parents and youths agree that COVID-19 and related public health measures have made their mental health worse or much worse.
- Those with pre-existing mental health conditions fare worse - a majority report disruptions to access for mental health services as a major contributor to poor mental health.
- Different effects of the pandemic appear to contribute to specific mental health challenges.
- Specific populations appear to be impacted more than others with minoritized youth.
Effects of Lockdown for Adolescents

- Chronic and acute stress
- Worries about family health, unexpected bereavement
- Developmental Disruptions
- School disruption
- Sudden separation from friends
- Increased internet and social media use
- Economic worries for family and country
- Lockdown may result in breaks in care of shifts in care for those with preexisting psychiatric disorders

Effects of Lockdown for Adolescents

- School closures associated with:
  - Decreased physical activity
  - Increased screen time
  - Irregular sleep patterns
  - Peer difficulties and isolation
  - Increased onset of psychiatric disorders

Guessoum SB et al 2020; Adolescent psychiatric disorder during COVID19 pandemic and lockdown. Psych res 291
Quarantine/Lockdown Effects on Youth

Grief
- Sudden deaths of family members may be first experience of death
- Risk for traumatic grief increased by prevention of visits, rituals, good by
- Traumatic events are associated with longer grief for adolescents

Increased family violence and Abuse and neglect has been reported

Girls have experienced increased gender based and sexual violence

School closures prevent other adults, like school personal, from noting abuse and providing help for victims

Quarantine/Lockdown Effects and Disparities in Care

Minoritized youth are overrepresented among lower income families. Structural racism, poverty, and barriers to care have disproportionally affected this population.

Economically disadvantaged children face nutritional deprivation and overall lack of protection with increased risk for exploitation, especially among female children.

Economically disadvantaged children are at risk for greater violence, increasing risk for depression, anxiety and suicidality. This is worsened by school closures.

Lack of Digital Platforms among economically disadvantaged youth contribute to educational disparities.

Govt helpline receives 92,000 calls on abuse and violence; Solantaus et al 2020. Childrens mental health during economic recession: the family economic stress model in Finland.
COVID 19: Emerging Data on Mental Health

Among children and adolescents across studies
• 22.6%-43% reported depression
• 18.9%-37% reported anxiety
• 31% reported anxiety and depression
• >50% reported moderate to severe impact on mental health

Save The Children conducted a survey of 1500 households
• 67% of parents reported being worried about their child’s emotional wellbeing
• Half of children reported feeling bored (52%) or worried (49%)
• 52% of children worried that they are not learning enough academically
• 74% of children report concerns about missing out on social activities

College student studies during COVID-19 found persistent negative effects on students behavioral and emotional functioning despite wellness focused strategies

Neurodevelopmental Disabilities

• Approximately 1 in 6 children ages 2-8 years have some form of neurodevelopmental, behavioral or emotional difficulty including ADHD, Autism, learning disabilities, cerebral palsy and others and face challenges.

• Adolescents with ADHD may have difficulty adjusting to lockdown with increased behavioral problems. Current recommendations are that parent focused ADHD interventions to support mental well being should be implemented.

• Youth with Autism Spectrum Disorders are at risk due to school disruptions, Disruptions of routines, habits and rituals with escalated risks for acting out behaviors.

## Predictors of Childhood Resilience

<table>
<thead>
<tr>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children's intelligence and cognitive ability</td>
</tr>
<tr>
<td>Positive parenting and caregiving</td>
</tr>
<tr>
<td>Self-efficacy and positive self-perceptions</td>
</tr>
<tr>
<td>Hope, faith, and religious affiliations</td>
</tr>
<tr>
<td>Close relationships with other competent and prosocial</td>
</tr>
<tr>
<td>people</td>
</tr>
<tr>
<td>Self-regulation skills</td>
</tr>
<tr>
<td>Effective schools</td>
</tr>
</tbody>
</table>
Early Covid-19 data for mental health impact for youth

• Adolescents with pre-existing psychiatric disorders are at greater risk for poor outcomes due to disruptions of care, Covid related anxiety, and confinement

• Covid related sudden deaths, grief, trauma are more likely to cause depression and other psychiatric disorders

• Increased risk for acute traumatic stress, post-traumatic stress disorder, depression and anxiety with lockdown and Covid related worries, stress factors and intrafamilial violence

• Emerging data suggests that impact of COVID related disruptions will continue to negatively impact student behavioral and emotional functioning

• Vulnerable youth deprived of school and external support, minoritized youth, girls and children living in poverty are at greater risk for poor mental health

• Excessive internet and social media use increase risk for poor mental health

• Supporting resilient families and children, and building upon strengths for struggling families will support recovery, but we should expect to see impacts on mental health for some time post pandemic