LOS ANGELES COUNTY DEPARTMENT OF MENTAL HEALTH
QUALITY, OUTCOMES AND TRAINING DIVISION

Mental Health and Infectious Disease Outbreaks
Executive Summary
May 6, 2020

As the Coronavirus (COVID-19) pandemic spreads worldwide, it is causing a considerable degree of fear, worry, and concern and elevating levels of stress and anxiety. While public health measures such as social distancing, isolation, and quarantine are effective in slowing the spread of COVID-19, the disruption to people's daily activities, routines, and livelihoods is having a significant negative mental health impact.

In order to support and inform the Department's efforts to meet the mental health needs of Los Angeles County residents during and after the COVID-19 pandemic, we have summarized findings from research literature about the psychological impact of previous infectious disease epidemics. Included are those who are directly and indirectly affected by the disease as well as effective mental health interventions on the individual, community, and systems levels. To the extent possible, we included emerging research about COVID-19, most of which is still evolving as we progress through the current pandemic.

Below is a brief summary of the major findings in attached literature review:

PSYCHOLOGICAL IMPACT OF INFECTIOUS DISEASE OUTBREAKS

We examined the scientific literature related to infectious disease outbreaks including Ebola, H1/N1 (Swine Flu), Influenza (2002-2003), Middle Eastern Respiratory Syndrome (MERS), Severe Acute Respiratory Syndrome (SARS), and Zika, as well as current and developing research on Coronavirus/COVID-19. These studies reported on general psychological symptoms and behaviors, as well as emotional disturbance and distress. Nearly all of the studies reported higher-than-normal prevalence of depression, post-traumatic stress, and anxiety, and many reported increased irritability, anger, insomnia, and emotional exhaustion.

In addition to these typical mental health concerns, our review identified several secondary issues that were mentioned briefly in the literature:
- Health anxiety
- Social isolation
- Stigma and discrimination based on infection and associated cultural groups
- Domestic violence/child abuse

Several populations appeared to be at higher risk of mental health complications during an infectious disease outbreak:
- Individuals who test positive, including those who are or were infected with the disease and/or are quarantined or isolated with the disease, and the family members who care for them
- Older Adults
- Children/Youth
- First Responders and Healthcare workers
- Marginalized communities such as:
  - People with disabilities and chronic disease,
  - Those with pre-existing mental illness/trauma,

- o The Lesbian, Gay, Bisexual, Transgender, Queer, Questioning, Intersex, Asexual, Two-Spirit (LGBTQIA2-S) Community,
- o Racial and ethnic minorities,
- o Those with elevated Body Mass Indices

INTERVENTIONS TO ADDRESS THE PSYCHOLOGICAL IMPACT OF INFECTIOUS DISEASE OUTBREAKS

Individual Level Interventions

This section provides an overview of recommended strategies for supporting the mental health of various populations including the general public, as well as those struggling with pre-existing or emergent mental health issues. Specific interventions are listed below:
- Inform the general public of stress management techniques
- Integrate physical health and mental health screening and treatment
- Cross train medical staff in Psychological First Aid
- Conduct mental health screening in the hospital when a person is diagnosed
- Screen all isolated/quarantined individuals for mental health issues during and after isolation/quarantine
- Set up a telephone support line for those in isolation/quarantine, staffed by clinicians
- Implement support groups for those who are/were isolated/quarantined
- Mental health interventions should address uncertainty, enhance resilience and coping, and foster adaptive behavior in dealing with messaging and community mitigation strategies as well as the disease itself.
- Integrate traditional medicine and practices for stress management
- Screen family members and caregivers for mental health needs
- Use smart-phone based apps with youth for psychoeducation and treatment
- Clinicians should adapt how they interact and provide therapy to children and their caregivers when using telemental health
- Use online technologies and telephone "friendship" lines to provide social support networks for older adults
- Implement support groups and stress management services for Health Care Workers

Community Level Interventions

The community should be involved with making decisions about mental health interventions during and after an epidemic. Some strategies include the following:
- Collaborate with community leaders and faith-based leaders
- Deploy Community Health Workers (e.g. Promotores, etc.) to educate and engage community
- Establish virtual and in-person (if possible) self-help and supportive community groups
- Provide community mental health and resiliency trainings
- Use a community capacity building approach

RECOMMENDATIONS FOR DMH/MENTAL HEALTH SYSTEMS TO IMPLEMENT BEST PRACTICES

- Identify those at higher risk
  - o Use simple, ethnographically informed quantitative measures to assess mental health needs, especially for vulnerable populations - measures should cover (1) macro-level

factors (economic opportunities, social capital, and human rights violations), (2) mental health outcomes (symptoms and disability), and (3) available mental health resources.
- o Take advantage of technological platforms that can collect large amounts of data from individuals in a short amount of time. Several apps can collect data on users that can give insights into the experiences and emotional health of large groups of people.
- o Pay special attention to sub-groups at higher risk of developing psychological problems.

- Conduct local epidemiological research
  - o Have psychiatrists and public health specialists conduct local epidemiological research to describe mental health issues that arise concomitantly with any epidemic to provide the underlying basis for appropriate targeted intervention to be implemented.

- Telehealth/technology
  - o Use telehealth (through videoconference, e-mail, telephone, or smartphone apps) to help patients maintain psychological well-being. Telehealth can be used for treating a variety of disorders and may be as effective as in-person treatment as well as cost-saving.
  - o Plan for expanded crisis hotlines. Ensure that these hotlines are properly staffed and that there is adequate training, scripts, referral mechanisms, and equipment).
  - o Establish alternative means for people to "connect" outside of crisis situations, potentially hotlines, warmlines, and interactive Web sites.
  - o Make resource list and post to website as well as distribute to behavioral health professional associations and stakeholder groups across the country and to state public health authorities.

- Deploy appropriate staff and monitoring wellness
  - o Create alternative staffing plans—including redeploying staff from clinics, hospitals, and other agencies—to fill behind absent and incapacitated staff.
  - o Attend to the emotional well-being of health care workers, especially monitoring for fatigue and overwork. Focus on motivating, protecting, and promoting the workforce by acknowledging, validating, and responding to their psychological needs.

- Evaluation of interventions
  - o Administer outcome measures to assess the impact of mental health interventions. Use of technology can be a particularly helpful method to monitor these outcomes over time for a large group of individuals. Some applications may already monitor these kinds of outcomes or measures could be built into other technological systems.

- Consider the "what", "when", "who", and "how" of communication

- Prepare system for future epidemics
  - o Make plans for ongoing leadership in the event that current leaders are unable to work.
  - o Devote resources to preparedness efforts and mechanisms to more quickly reprogram or transfer needed funds.
  - o Create a mental health research base that includes data related to mental health needs and successful interventions during the crisis.