Collision of Public Health Crises Substance Use Disorders Research and COVID-19 Adapting Designs, Interventions, Data Collection

Edward V. Nunes, MD

Columbia University Irving Medical Center/

New York State Psychiatric Institute

Center for Healing of Opioid and other Substance Use Disorders (CHOSEN)









March 2020

- Virus spreading rapidly in Europe (Italy), reaching U.S.
- Mode of transmission?
 - Surface? Droplet? Airborne?
- Should "non-essential" research be halted?
- How to keep research participants safe?
- How to keep patients safe?

COVID-19 and Research Participants

- Social-physical distancing
 - Interviews, clinical research visits
 - Neuropsych testing
 - Procedures, e.g. blood draws, MRI
- Risks of travel to research visits
- COVID-19 as risk of research participation
- Essential vs non-essential personnel





Adaptations to Research Methods

- Remote or virtual procedures
 - Remote consent with e-signature
 - Remote assessment via "Zoom" or web-based data collection
 - Remote neuropsychological testing
 - Remote behavioral intervention, via "Zoom" or digital interventions
 - Delivery of medications to participants' homes
 - Home delivery/pickup of sample collection materials and biological samples

Adaptations to Research Methods

- In person procedures
 - Reduced participant, patient "traffic"—25%, 50%
 - Reduced staff on site
 - Volunteers, students, research assistants
 - Staff not directly needed for on-site procedures
 - How to conduct long procedures safely, e.g. MRI
 - Cleaning surfaces
 - Ventilation
 - Distancing participants from staff
 - PPE

Adaptations to Research: Outcomes and Lessons Learned

- Speed of initiation and conduct of clinical trials for COVID-19 medications and vaccines (*Tuttle, Nat Rev Nephrol 2020*)
 - Expedited protocol preparation, review, approval
 - Accelerated contracting/budgeting
 - "First participant enrolled <1 week from protocol receipt"
 - "A study for every patient"
- Adaptations for COVID-19 related trials (remote consent, remote monitoring, telehealth, remote delivery of meds, etc) well accepted by research staff (Gerber et al., J Natl Compr Canc Netw 2020)

COVID-19 Impact on HEAL and Substance Use Disorder Research

- Dozens of commentaries, anecdotal reports
 - Limited hard data on impact on research
- Research slowed at least temporarily
 - Recruitment more difficult
 - Impact on engagement and retention?
- Can the COVID-19 research adaptations be harnessed across the board for HEAL and other research?
 - More flexible, nimble, speedy research process

COVID-19 Related Adaptations to SUD Clinical Practice

- March 2020: DEA, SAMHSA, State agencies swiftly relaxed rules governing treatment for substance use disorders
 - Telehealth facilitation; initiation of buprenorphine by telehealth without an in-person visit; expanded methadone take-homes for stable patients
 - Potential to make medication treatments more convenient, attractive
- Anecdotally these changes have been well-accepted by patients and providers
 - Survey of 227 administrators or clinicians at outpatient treatment or harm reduction programs in NY State found the majority supported continuing these practice adaptations (Mandavia et al., submitted)

Outcomes of Practice Adaptations

- Clinical research underway, examples:
 - CTN-0102: Rural Expansion of Medication Treatment for OUD
 - Telemedicine vs usual in-person care for buprenorphine treatment of opioid use disorder
 - CTN-0100: Retention, Duration, Discontinuation
 - Commercially available smartphone-based apps, reSET, ACHESS (ACCESS), for behavioral treatment of OUD along with buprenorphine or XR-naltrexone
 - Healing Communities Study
 - Comprehensive community-level intervention to reduce opioid overdose deaths and opioid morbidity: OEND, MOUD, safe prescribing
 - CTN-0112 (OPTIMMAL)
 - Chart review on outcomes of methadone maintenance before vs after COVID-related liberalization of methadone takehomes, testing, counseling

COVID-19 and Substance Use Disorders Disruption and Opportunities

- Innovative adaptations to research methods
 - Remote procedures
 - Make research participation more attractive, convenient?
 - How does this work? Lack the human touch of in-person attention?
- Example of swift conduct of COVID-19 clinical trials
- More flexible rules governing treatment, medications for opioid use disorder, telemedicine, technology-based treatments
 - Potential to make treatment more convenient, more attractive
 - Need evidence on effectiveness