NOAP Conference 2021

- COVID Pandemic Effects, Trauma, and Adaptations to Substance Use Disorder Monitoring by Professional Health Programs in Response to COVID 19
- Polles, Bundy, Jacobs, and Merlo, "Adaptations to substance use disorder monitoring by physician health programs in response to COVID-19." *J Sub Abuse Treatment* 125 (2021)

Disclosures and Objectives

I have no conflicts of interest.

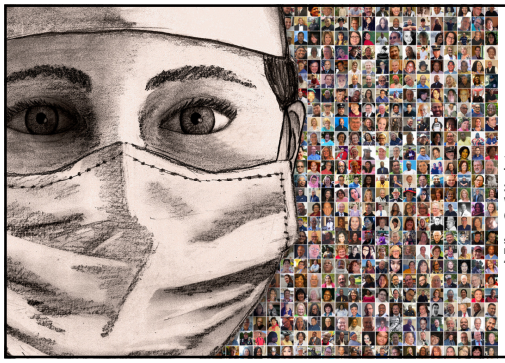
Participants will be able to describe why recommendations for evaluation, treatment, and monitoring of healthcare workers are more stringent than in the general population.

Participants will be able to describe 3 ways in which monitoring has evolved during the COVID-19 pandemic.

Participants will be able to discuss how traumatic events including acute and chronic aspects of COVID-19 affect healthcare workers.

Talking about addiction, suicide, burnout, can be triggering. This is more likely when you are still experiencing the traumatic events.

- KEEP OURSELVES AND EACH OTHER SAFE
- SHARE THINGS, TALK, AND BE ALL IN VERBALLY INCLUDING ASKING QUESTIONS



12 Months of Trauma: More Than 3,600 US Health Workers Died in Covid's First Year

Spencer, Jewett, Kaiser Health News
4/8/21

Definition of Trauma

The diagnostic manual used by mental health providers (DSM-5) defines trauma (Criterion A) as an event that involves actual or threatened death or serious injury or sexual violation in which the individual:

- directly experiences the event
- witnesses the event in person
- learns that the event occurred to a close friend or relative
- experiences first-hand repeated or extreme exposure to aversive details of the traumatic event (exposure through e-media, TV, movies, pictures counts if it is work related)

DSM-IV requirement that "The person's response to the event must involve intense fear, helplessness or horror" was eliminated in DSM-5.

The Single-item PTSD Screener (SIPS) is a single item asking respondents to indicate to what degree they were recently bothered by a past traumatic experience.

Gore KL, Engel CC, Freed MC, Liu X, Armstrong DW 3rd. Test of a single-item posttraumatic stress disorder screener in a military primary care setting. Gen Hosp Psychiatry. 2008;30(5):391–7.

- Were you recently bothered by a past experience that caused you to believe you would be injured (infected) or killed (die)?
- Response options : *not bothered at all, bothered a little,* or *bothered a lot*.

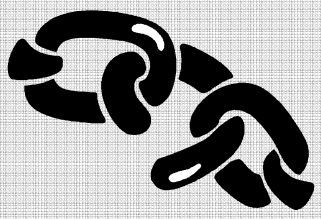
Debate regarding A1 criterion of PTSD

- DSM-5 became more stringent re: A1
- ICD-11 will leave it (A1) out as a key criterion
- An open random population study of 832 people looking over 30 years, PTSD scores were higher after adverse life events than after traumatic (A1) events Mol, Arntz, et al, "Symptoms of post-traumatic stress disorder after non-traumatic events: evidence from an open population study." Br J Psych,2005.
- A clinical sample of 1433 participants showed that in men, PTSD symptoms were more severe after non-A1 "most bothersome" life events; in women the symptom severity was equally severe symptoms after traumatic vs stressful life events Van den Berg, Tollenaar, et al, "A new perspective on PTSD symptoms after traumatic vs stressful life events and the role of gender." Eu J Psychotraumautol, 2017.

Trauma

- May include events that are not beyond the scope of normal human experience, as long as the event has had a trauma-like impact on the person.
- DSM-5 moved it from an Anxiety Disorder to Trauma- and Stress-or-Related Disorders.
- **What makes an event traumatic:**
  - **The severity of the event**
  - **The proximity of the experience**
  - **The personal impact of the event**
  - **The after-event impact**

Types of PTS/PTSD



Simple PTS/D

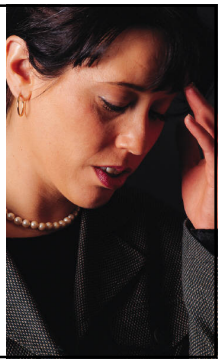
- The response to one or more traumatic events that are NOT linked in any way (e.g., one rape, one car accident, one sudden loss).

Complex PTS/D

- The response to a combination of traumatic events that ARE linked to each other in some way or occur repeatedly over time. Prolonged, repeated experiences of trauma with little or no chance of escape (or termination).

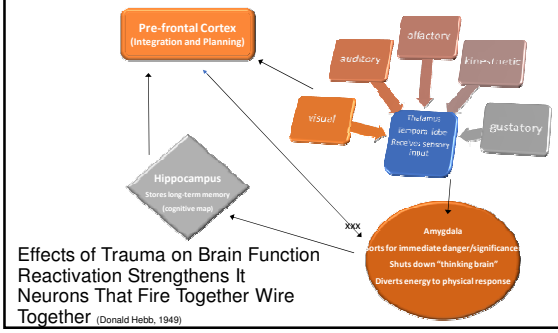
In Summary:

- Trauma is an experience that overwhelms our capacity to have a sense of control over ourselves and our immediate environment, to maintain connection with others and to make meaning of our experience.

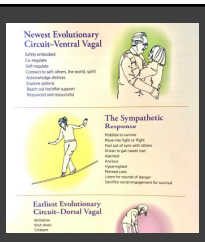


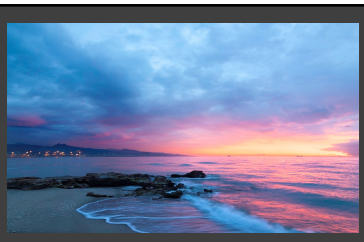
How does the past become the present?

- Threat + Sensorimotor Experience (Traumatic Cues) + Level of Arousal is imprinted in procedural memory and leads to fear conditioning
- There is a walling off of this memory ("dissociative capsule") that is brought into the present by external representative cues or internal cues



Effects of Trauma on Brain Function
Reactivation Strengthens It
Neurons That Fire Together Wire Together (Donald Hebb, 1949)





Can it really be ending?

- Porges' polyvagal theory posits that trauma haunt's the body with physiologic responses mediated through the unmyelinated vagus nerve, in addition to the memories

The Washington Post

Breaking News

News Alert — April 19, 5:35 p.m. EDT

More coronavirus cases are being reported worldwide than ever before. A key factor in the rise: the ferocity of India's second wave.

The coronavirus pandemic has left more than 3 million dead around the world. Cases are rising rapidly. In India, this surge is not a wave but a vertical spike, with entire families infected and hospitals overwhelmed. The country accounts for about 1 in 3 of all new cases around the globe.

What happens when strong emotionally valenced memories do not integrate/process adaptively?

Thoughts that perpetuate the arousal increase

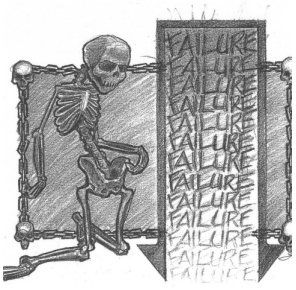
Negative thoughts regarding responsibility/safety/control such as

- I'm incompetent. I'm a failure. I have to be perfect. I should have known better and therefore I am stupid/inadequate.
- I cannot trust anyone. I'm in danger. I'm not safe. It's not ok or safe to feel or show my emotions.
- I'm not in control. I can't trust my judgment. I'm powerless. I can't handle it.

Thoughts that reduce arousal decrease, such as

- I'm okay/fine as I am.
- I did the best I could.
- The world is usually safe.
- I can handle it.
- I can ask for help.

Self-portrait



Healthcare Professionals and PTSD

- Most studies pre-COVID were with non-physician providers (EMTs), first responders.
- Many of those dealing with physicians/nurses were post disaster.
- Much that has been written on "stress and burnout" that does not specifically look at PTSD spectrum disorders may have included it without naming it.

Traumatized by practice

PTSD is underrecognized but may be more prevalent in physicians than the general U.S. population

- https://www.physicianleaders.org/news/traumatized-by-practice-ptsd-in-physicians
- Lazarus, April 30, 2020

Some are more prone

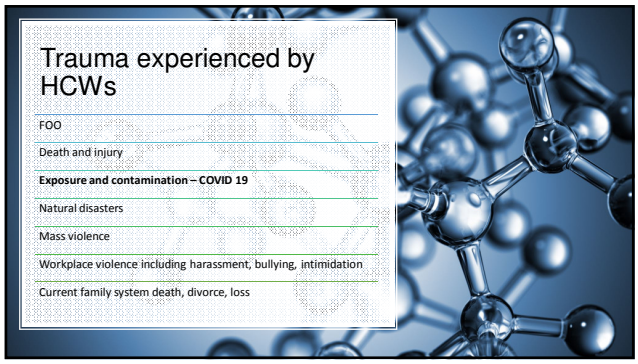
- Emergency physicians
- Those in under served and remote areas
- Medical residents
- Those involved in malpractice litigation
- Those "second victims" who are indirectly exposed to trauma, unanticipated adverse patient events or medical errors where the physician feels personally responsible for the outcomes and that they have failed

Physicians cite work stress rather than traumatic exposures (non-A1)

- https://www.aamc.org/news-insights/when-physicians-are-traumatized
- Paturel, August 13, 2019

Nearly 80% of doctors have experienced a distressing patient event in the previous year (pre-COVID)

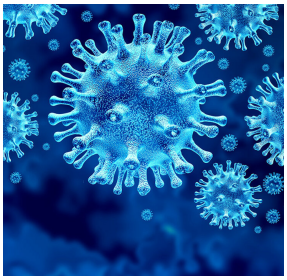
Trauma experienced by HCWs



- FOO
- Death and injury
- **Exposure and contamination – COVID 19**
- Natural disasters
- Mass violence
- Workplace violence including harassment, bullying, intimidation
- Current family system death, divorce, loss

COVID-19

- A review of 7 studies of HC workers assessing traumatic stress response, acute stress symptoms, or vicarious traumatization showed 7.4-35% prevalence of trauma-related stress
- Sources of distress
  - Spread of the virus
  - Their own health
  - Health of loved ones
  - Changes in the work environment
    - Rapid influx of critical patients, decision making burden, high daily case fatality rates, constant change in medical management with burden of needing to keep current
  - Moral injury (actions or inability to implement actions that violate one's ethical and moral codes)



Benfante, Di Tella, et al, "Traumatic Stress in Healthcare Workers During COVID-19 Pandemic: A Review of the Immediate Impact." Frontiers in Psychol, Oct. 2020;
Camassi, Foghi, et al, "PTSD symptoms in healthcare workers facing the three coronavirus outbreaks: What can we expect after the COVID-19 pandemic." Psychiatry Res. Oct, 2020.

What do affected HCWs do?

- Drugs/Alcohol
- Overwork
- Overeat
- Gamble/game
- Retire/Leave
- Other "numbing" behaviors such as compulsive problematic sexual behaviors, TV/Netflix binges, compulsive shopping/spending
- Acute and chronic traumatic events may lead to boundary crossings and even boundary violations

Regarding addiction and trauma (Fisher, 2007)

In the context of trauma, addiction arises as a **survival strategy:**

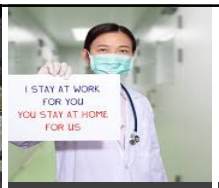
To self-soothe and self-regulate by numbing hyper-arousal symptoms: intolerable affects, reactivity, impulsivity, obsessive thinking

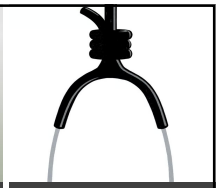
By energizing hypo-arousal symptoms of depression, emptiness, numbness, deadening

To wall off intrusive memories and facilitate dissociation

To combat helplessness by increasing hypervigilence and feelings of power and control

To function or to feel safer in the world





Consequences of untreated distress

Burnout and depression often go hand in hand and burnout is highly associated with SUDs
There is a highly statistically significant association between burnout and suicidal ideation
Burnout associated with diminished patient care including medical errors and reduced patient satisfaction
HCWs with burnout more likely to leave medicine
Burnt out professionals make poor role models for trainees
Associated with greater implicit and explicit bias towards people of color. As level of severity of burnout increased, so did bias in residents. (Dyrbye et al. JAMA Netw Open 2019;2(7):e197457.)

Professional Health Programs

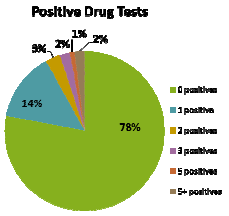
- FL PRN enrolled its first participants in 1981
- FL IPN enrolled its first participants in 1983
- Most PHPs have oversight by DOHs/Licensing Boards, a Board of Directors, and/or other external review processes
- Outcome studies of physicians in PHPs
  - 77% sustained abstinence over 5 years (Gallegos et al, *MD Med J*, 1992)
  - 91% "good outcome" over 6 years; 65% completed contract and 26% relapsed but eventually completed (Ganley et al, *J Addict Dis*, 2005)
  - UK study showed 21 years of follow-up with mean sustained abstinence of 17.6 years (Lloyd, *Alcohol Alcohol*, 2002)
  - 75% with no relapse (Domino, et al, *JAMA*, 2005)
  - 78% in 16 PHPs over 5-7 y were continuously abstinent, 90% were practicing (McLellan, et al, *BMJ*, 2008)

PHPs Have Dual Missions

- Protecting the public
- Supporting practitioners in safety sensitive positions to achieve mental health and wellness, which protects the public
- The typical process once referred:
  - Intake process with the PHP
  - Comprehensive assessment with experts specializing in the field
  - Intensive treatment (if treatment is indicated) with experts specializing in treating HCPs
  - Monitoring for typically 5 years with SUDs issues; 2 + for some MHC

PHP SUD Long-Term Results

- Over the course of 5 years:
  - 78% of all physicians had zero positive drug tests
  - 14% had only 1 positive test
  - 3% had 2 positives tests
  - 5% had 3 or more positives
- Outcomes as excellent for physicians with opioid use disorders as for those with alcohol use disorder



DuPont, McLellan, et al. Setting the standard for recovery: Physicians' Health Programs. *J Subst Abuse Treat*. 2009 Mar;36(2):159-71.
Merlo, Campbell, et al. Outcomes for physicians with opioid dependence treated without agonist pharmacotherapy in physician health programs. *J Subst Abuse Treat*. 2016 May;64:47-54.

Mental Health outcomes with PHP monitoring

- 10 years of data from the Mass. Medical Society's PHP
- N = 58
- Outcomes:
  - 74% completed successfully, defined as full compliance with therapy, medications when indicated, no unprofessional workplace behaviors
  - 7 % relapsed/symptomatic
  - 14 % did not complete for other reasons
- Average length of monitoring minimum of 2 years

- Knight, Sanchez, et al. Outcomes of a monitoring program for physicians with mental and behavioral health problems. *J Psych Practice*. Jan 2007, Vol.13, No. 1; 25-32.

The Challenge with COVID in Maintaining the Effectiveness of the PHP Model

- How to support HCWs under conditions of extreme emotional stress, personal and professional loss, and physical exhaustion
- Prevention of rekindling their SUD and MH issues
- How to operate in the environment of a rapidly transmitted virus and its several variants while sustaining the health of the workforce

Basic Requirements

- Reevaluation of prior assumptions about evaluations, treatment, and monitoring program components
- Balancing exposure to infection vs being able to advocate for the HCW's ability to practice safely
  - Intake: Shifted to videoconference or phone based sessions
  - Evaluations: Options for telehealth to avoid travel and adhere to social distancing
  - Treatment programs: Isolation/quarantine new patients; Daily symptoms screening; COVID testing when it became available; Visitors limited to none; No commuter status or passes; Virtual group therapy and support groups; Mask mandates; Telehealth for some IOP and PHP situations

Other balancing acts – ongoing monitoring

- Providing information on national and local resources
- Increased PHP staff contacts
- Continued worksite monitor reports
- Virtual facilitated monitoring groups
- Virtual meetings (support groups, therapy)
- Toxicology testing
  - Urine testing by appointment at sites not doing COVID testing
  - At-home testing (salivary and breath testing with phone video COC)
  - Lab testing with longer windows of detection (hair/nails, blood)
  - Expanded window for providing specimens when selected from 6-10 hours to up to 48 hours for random schedule (maintain same day for cause issues)

Case Examples

- A physician who tested positive for alcohol metabolites who had compulsive behaviors related to acute COVID stress
- A physician whose previously undetected work-related PTSD manifested during the pandemic
- Dr. A produced positive toxicology testing for alcohol biomarkers in urine and blood. He admitted to drinking and said that the pandemic was a factor due to isolation in living alone, in person support meetings being cancelled, and not being able to express his feelings, which was part of his upbringing.

Please remember your colleagues and reach out If you are suffering, reach out

- **NYC Emergency Room Doctor Dies by Suicide After Treating COVID-19 Patients**
- The 49-year-old doctor, Lorna Breen, had previously contracted the coronavirus while treating patients, but recovered and recently had gone back to work before being sent home once again, according to her father

Drinking more alcohol during COVID pandemic

- Collective uncertainty, and grief and stress over the loss of a sense of safety and security have contributed
- Unemployment and financial loss, frontline work, working from home, childcare and schooling, death/hospitalization of a loved one, loss of emotional/social supports, limitations in treatment options
- Among gen. population consumption increased 14% overall, with a 41% increase in heavy drinking days for women in 2020 compared with their 2019 baseline. (Heavy drinking for women 4+ drinks/day; 8+/week) (5/15 for men)
- Alcohol is available, is marketed as a way to relieve stress, Zoom gatherings and home delivery were normalized

- Pollard, Tucker, Green. "Changes in adult alcohol use and consequences during the COVID-19 pandemic in the US." *JAMA Network Open*. 2020;3(9):e2022942.

71% of young nurses felt overwhelmed over the past year (Jan 19/2020 – Feb 16/2021)

- American Nurses Foundation surveyed 22,316 nurses
- 81% <35 yo felt exhausted
- 65% unable to relax
- Of those who plan to leave work negatively affecting their health and well being was cited as the main cause in 47% and insufficient staffing was cited 45% of the time

- From Becker's Hospital Review Newsletter
- www.beckershospitalreview.com/nursing/

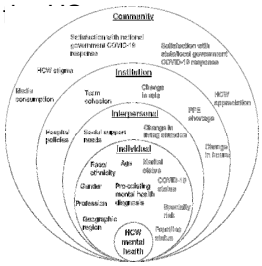
Assessing sxs and functional impairment (non-MH) in 2149 HCWs 8 months after mild acute COVID-19 in Sweden

- Overall, 80% of hospitalized pts. have persistent sxs several months after infection
- This study looked at HCWs with mild sxs
- 393 were seropositive; had at least 2 of 23 predefined physical sxs for >2 mos; were scored for functional disability by the Sheehan Scale
- 26% of the seropositive prts. (v. 9% sero-) had 1 mod. to severe sxs for > 2 mos., most commonly anosmia, fatigue, ageusia, and dyspnea
- 15% (v3%) had the mod. to severe sxs for 8+ mos.
- 8% (v4%) said the sxs moderately to markedly disrupted their work life as well as social and home life disruptions

Havervall, Rosell, Phillipson, et al. Research Letter JAMA, Pub. Online April 7, 2021. ppE1-E3

Socio-ecological model for MH outcomes in HCW during COVID-19 in

- 1,092 participants; ave. age 40
- 52% frontline; 72% women
- X-sectional in May 2020
- Maj Dep 13.9%
- GAD 15.6%
- PTSD 22.8%*
- AUD 42.8%



Light grey: no sig. asso; Dark grey: sig. asso. w/ at least 1 in unadj; Black: sig. asso. in adj. and unadj. models
Hennein, Mew, Low, Yale University School of Medicine, PLOS ONE, Feb 5, 2021

*The number of Veterans with PTSD varies by service era: **Operations Iraqi Freedom (OIF) and Enduring Freedom (OEF):** About 11-20 out of every 100 Veterans (or between 11-20%) who served in OIF or OEF have PTSD in a given year. US Dept. Veterans Affairs' Natl. Ctr. for PTSD

Allow reflection on who you are and how you want to live

WHO ARE YOU?

Assess your ability to access gratitude from others and towards yourself and your career

- Close your eyes and think of the face of one person whose life you had a direct part in saving. Let their image and the feelings you are experiencing grow and intensify. Now bring in their family, their friends, other people whose life they have or may touch. Think of that and allow yourself to experience it.
- Note things such as whether this was difficult or easy, comfortable or uncomfortable. Just be curious about the experience and your response to it.

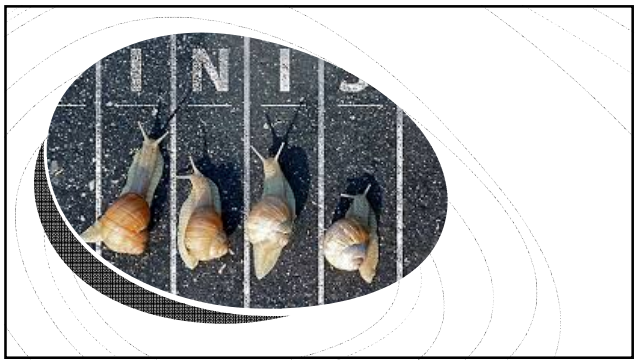
"I love my ergonomic office chair. It reclines, has heated vibrating massage, and provides electro-shock therapy at the end of a stressful day!"

Take a break for breath "Breathing in……" Thich Nhat Hanh

Mayo Clinic OR-Stretch Between Surgery, with and without breaking scrub

https://youtu.be/bLAeVbBjZV0

- Participants overwhelmingly reported the impact over 35 surgical days using the shorter version in which scrub is not broken and a slightly longer version between cases
- Better physical performance
- Better mental focus
- Reduced pain and discomfort
- Less fatigue



Evidence Supported Treatments that can result in post traumatic growth

- Narration (oral, written, past tense, imaginal)
- Cognitive Therapy, Cognitive Processing Therapy (**CPT**)
- Exposure Therapy
- Stress Inoculation Training (**SIT**)
- Psychoeducation
- Eye Movement Desensitization and Reprocessing
- DBT Strategies
- Mindfulness Based Strategies
- Complementary and Integrative Modalities (Yoga, Meditation, Acupuncture)
- Pharmacotherapy: Alpha 2 ligands, SSRIs, SNRIs. Avoid zolpidem for sleep. Prazosin may be helpful for nightmares/sleep.

Working in communities and institutions

- Reducing HCW stigma
- Improving team cohesion
- Impacting hospital policies
- Addressing and supporting social issues and needs