

New Challenges in Pain & Addiction Arising from the COVID-19 Pandemic

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Interdisciplinary Care for Patients with Pain & Addiction in the Virtual Age,
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Disclosure Information

New Challenges in Pain & Addiction Arising from the COVID-19 Pandemic

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☀ No Disclosures



Disclosure Information (Required)

- ☀ Presenter 1: Barbara St. Marie, PhD, AGPCNP, FAANP, FAAN
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Learning Objectives

Describe

Describe vulnerabilities to COVID-19 infection, chronic pain, and substance use disorder.

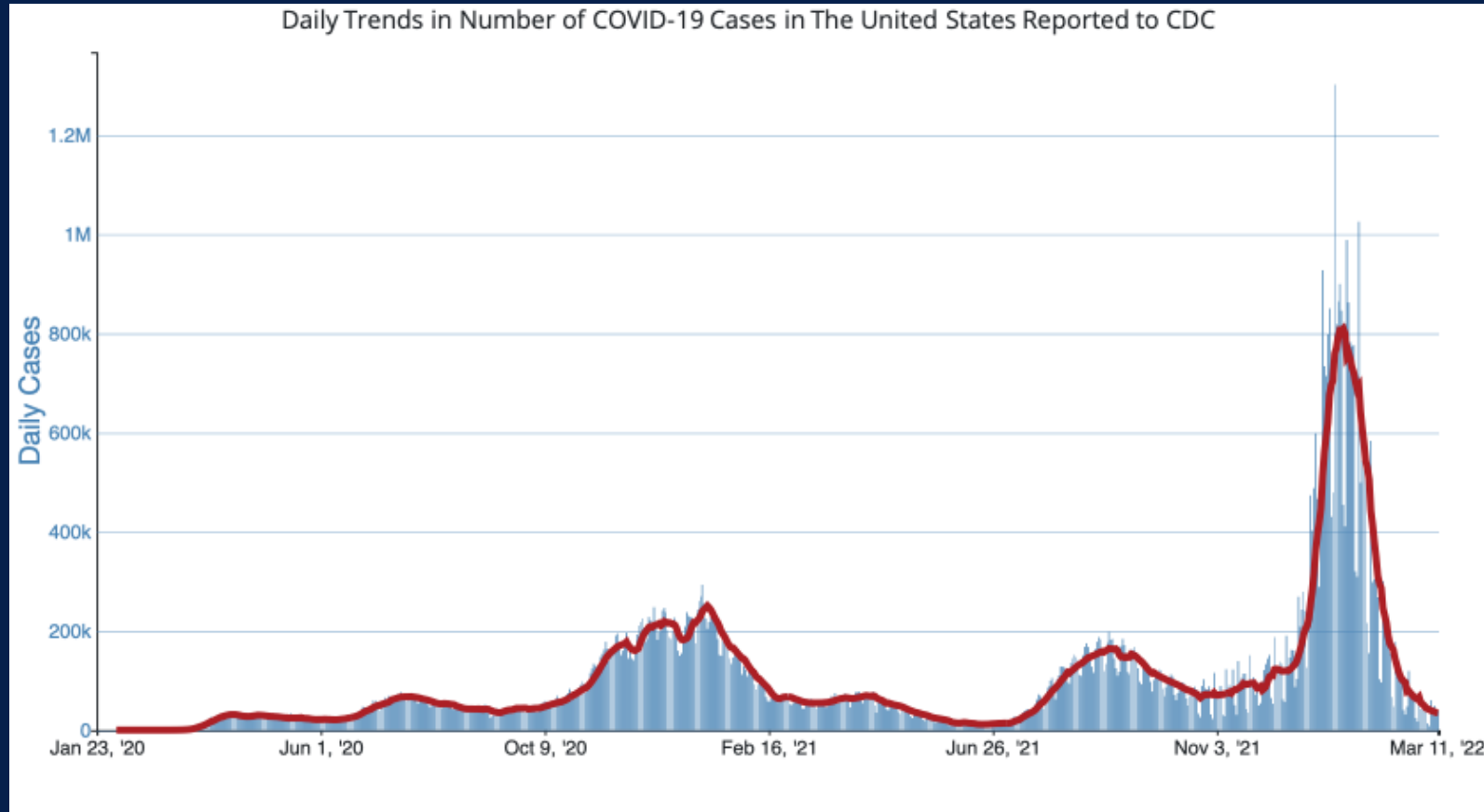
Identify

Identify provisions of care to mitigate risk of harm when individuals have COVID-19, chronic pain and substance use disorder.

Compare

Compare self-care strategies that can reduce stress, social isolation, and maintain health.

Daily Trends in COVID-19 Cases in the United States Reported to CDC 3/11/2022



Krispy Kreme are giving away a free face shield with every 12 doughnuts 👍



**One
Nurse's
Experience**

2020

New York City

Intensive Care

Role: Pain Management Nurse Practitioner

Pain Team then Hypoxic Team



(Sowicz, TJ et al., 2022)

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Intensive Care

☀ Surviving ICU

☀ Stress and feeling traumatized

☀ Sleep disturbances

☀ Severe anxiety

COVID-related Hospitalization

☀ Distress

- ☀ Less or no support and care of family

☀ Intermittent or continuous procedures

- ☀ Prone positioning
- ☀ Mechanical ventilation
- ☀ Placement of ECMO

Impact of COVID-19

☀ Physical symptoms

- ☀ Fatigue, body aches, headaches
- ☀ Loss of taste and smell
- ☀ Impact on respiratory, cardiovascular, hematologic systems

☀ Psychological symptoms

- ☀ Isolation, uncertainty, confronting own mortality
- ☀ Anxiety, anger, shame, embarrassment

COVID-19 and Substance Use Disorder

- ☀️ Vulnerability to severe COVID-19 infection
 - ☀️ Poor outcomes
 - ☀️ Increased risk of infection
- ☀️ Co-morbidities
- ☀️ Lifestyle

COVID-19 and Substance Use Disorder Treatment

☀ Social support

- ☀ Communication during online meetings
- ☀ Inconsistent guidelines, Interruptions to healthcare services

☀ Medications for opioid use disorder (MOUD)

- ☀ Changes in guidance: take-home doses
- ☀ Telemedicine approaches for initiation of buprenorphine therapy

Disruption of Healthcare Resources

- ☀ Services to already marginalized populations less priority

- ☀ Access

 - ☀ Rural communities

 - ☀ Ethnic and racial minority populations

- ☀ Substance Use Disorder related stigma

- ☀ Resources available

Due to my
isolation, I finished
3 books yesterday,
and believe me,
that's a lot of
colouring.

Covid-19 and SUD Outcomes

- ☀ Increase in overdoses

- ☀ 75,673 drug overdose deaths in 12 months ending April 2021

- ☀ Drug supply chain

- ☀ Emergency care or urgent care

- ☀ Reversal agent



(Murphy et al., 2021; Spagnolo et al., 2020; Wakeman et al., 2020) #ASAMAnnual2022

Risk to Substance Use and Relapse



Social isolation



Uncertainty about future



Grief from illness or death of loved ones



Boredom

Overlap of Risks for COVID-19 and Chronic Pain

- ☀ Vulnerability to severe COVID-19 infection
 - ☀ Lower socioeconomic status
 - ☀ Co-occurring chronic disease
 - ☀ Older age
 - ☀ Residence in nursing facilities
 - ☀ Limited access to care

Pain as a COVID-19 Complication

- ☀ Exacerbation of pain and interference

- ☀ Social lockdown

- ☀ COVID-19 illness and Hospitalization

- ☀ Psychological health

- ☀ Fatigue

- ☀ Sleep

COVID-19 and Chronic Pain

- ☀ Patients with chronic pain and rheumatic pain
 - ☀ Poor sleep, sedentary lifestyle, psychological concerns
 - ☀ Coping with pain medication and little activity
- ☀ Online survey data (N=1,453 adults with chronic pain)
 - ☀ Increase pain severity and interference (25-30%) during pandemic
 - ☀ Black and non-Hispanic

COVID-related Pain and Chronic Pain

☀ Symptoms of Pain

- ☀ Myalgias (36%)

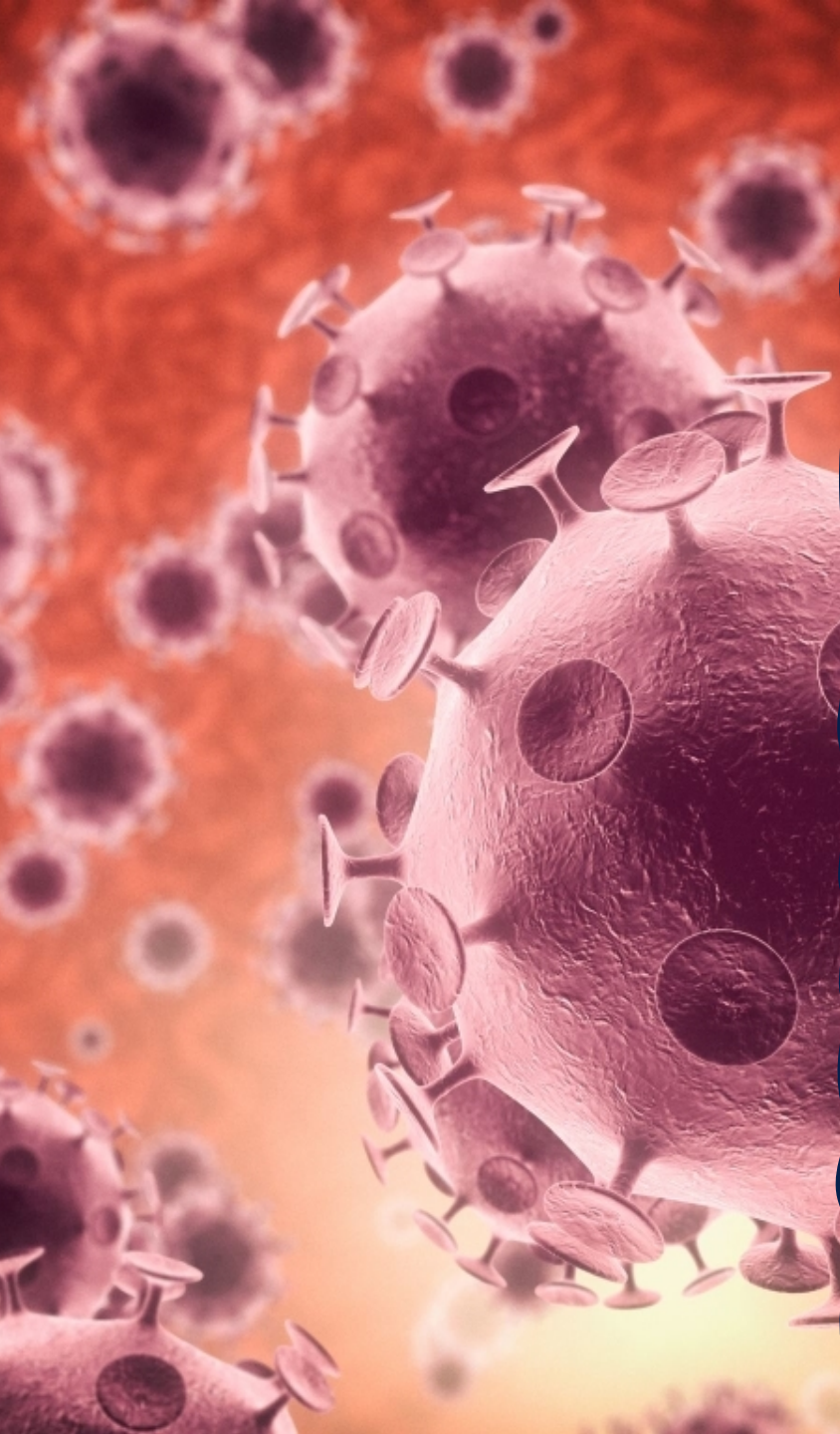
- ☀ Headache (90.5%)

☀ Inflammatory mechanisms or immune-mediated processes

- ☀ CNS and PNS

COVID-19 and Headache

- ★ Viral infection on Pulmonary Tissue
- ★ Immune cell and pro-inflammatory response
- ★ Central cytokine overexpression
- ★ Increase CSF cytokine (IL-6)
- ★ Central sensitization
 - ★ Stimulation of trigeminal ganglion
 - ★ Over production of CGRP (e.g. migraine)



COVID-19 and Myalgias

- ✦ Viral infection
 - ✦ Binds to Angiotensin II receptor
 - ✦ Transmission of pain signals (e.g. neuropathic pain)
 - ✦ Proinflammatory cytokines
 - ✦ Damage to pulmonary tissue
 - ✦ Immune cell activation & cytokine overexpression
 - ✦ Muscle protein breakdown
 - ✦ Increased nociceptive signaling

Acute Transverse Myelitis (ATM)

- ☀️ Acute or post COVID-19 illness

- ☀️ Rapid onset

- ☀️ Global weakness

- ☀️ High level of debilitation

Viral Infections and Chronic Pain

- ☀️ Chronic pain: SARS and Epstein-Barr viruses

- ☀️ “Long Haulers” (N=100)

 - ☀️ 68% reported persistent headache

 - ☀️ 55% persistent myalgias

- ☀️ **Pain is a complication of COVID-19**

Restricted Access to Chronic Pain Services

- ☀ Acute Pain personnel – diverted to ICU

- ☀ Limited resources

 - ☀ “Stay away”

- ☀ Patients receiving prescription opioids

- ☀ Nonpharmacologic restrictions

Limited Access to Healthcare

- ☀ Pain interference, Function
- ☀ Depression (50%), suicidal thinking (34.6%)
- ☀ Self-medicating
- ☀ Increased severity and complexity of patient care**

**All this COVID-19 talk is
depressing, so here's some better
lab results..**



Caring for Patients COVID-19, SUD, Pain

- ☀️ Care unique to a pandemic
- ☀️ Safety
- ☀️ Directed assessment
- ☀️ Risk Mitigation
- ☀️ Individualized self-care options

Safe from Exposure

- ☀ Minimizing exposure to virus

- ☀ Virtual technologies

- ☀ Electronic Health Record

Telemedicine Solutions

- ☀️ Health Care Consumer Response to COVID-19 survey (N=1,510 patients 18 yo+)
- ☀️ 2019- early 2020 virtual visits rose from 15% to 19%
- ☀️ April 2020 increased to 28%
- ☀️ Apps (2018-2020): 42% reported steady use

Directed Nursing and Medical Assessment

- ☀️ Special assessment components needed
- ☀️ Disruption of activity and sleep routines
- ☀️ Stress and social support
- ☀️ Guidance to appropriate interventions

Directed Nursing and Medical Assessment

- ☀ Worsening of symptoms

- ☀ Assessment Tools

 - ☀ Pain intensity, enjoyment of life, interference with general activity (PEG)

 - ☀ Drug Abuse Screening test (DAST)

 - ☀ Alcohol Use Disorder Identification Test (AUDIT)

Directed Nursing and Medical Assessment

- ☀ Risk mitigation
 - ☀ Depression, Anxiety
 - ☀ Risk for suicide, opioid overdose
- ☀ Depression and anxiety
- ☀ Pandemic – general population

Risk for Suicide

- ☀ Independent predictors of suicide risk: Persistent pain and SUD
- ☀ Emerging data world-wide (2020-2021)
 - ☀ Canada: 2,114 excess suicides
 - ☀ Austria: tripled rates of suicide-related admissions (2019-2020)
- ☀ Opioid overdoses –suicide attempt or accidental

Recommendations

- ☀ MOUD or opioid therapy for chronic pain
- ☀ Naloxone – without a prescription at major pharmacy chains
- ☀ Insurance companies, Medicaid and Medicare
- ☀ Delivery to the homes

Recommendations

☀ Self-care during pandemic

- ☀ Exercise, Mindfulness
- ☀ Outdoor socialization
- ☀ Video chats

☀ Over-the-counter analgesics

- ☀ Topical: anesthetics, salicylates, counterirritants, capsaicin
- ☀ TENS

Recommendations

☀ TENS

☀ \$30 OTC

☀ Reduces pain by activating descending inhibitory

☀ Releases serotonin, endogenous opioids, and GABA

☀ Feasible and effective intervention for fibromyalgia pain

Recommendations

- ☀ Online and virtual pain and SUD interventions

- ☀ Self-efficacy

- ☀ Sustainability at follow up

- ☀ Successful outcomes

- ☀ Temporomandibular disorder, low back pain

- ☀ Veteran population

- ☀ Adolescents online relapse prevention

Role of Health Disparities

- ☀ Infection and mortality rates

- ☀ higher in lower income communities, racial and ethnic minorities

- ☀ Chronic pain and chronic stress

- ☀ Research needed:

- ☀ Does stigma and discrimination increase vulnerabilities to infection and more severe illness from COVID-19?

Final Takeaways

- ✱ Unique risk for COVID-19 and more severe disease
- ✱ Stress and social isolation can worsen pain and increase substance use behaviors
- ✱ Disruptions of provisions of care
- ✱ Patient-centered approach
- ✱ Safety from viral exposure

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