



# CENTER ON ALCOHOLISM, SUBSTANCE ABUSE, AND ADDICTIONS (CASAA)

BARBARA S. MCCRADY, PH.D.

---

DISTINGUISHED PROFESSOR OF PSYCHOLOGY AND CASAA

CASAA DIRECTOR, 2007-2018

[BMCCRADY@UNM.EDU](mailto:BMCCRADY@UNM.EDU)

9-13-19

# Drugs, Alcohol, and New Mexico

---

- ❖ Opioid Epidemic
- ❖ Health of mothers and children
- ❖ DWI
- ❖ Effective treatments
- ❖ Helping unique populations
- ❖ Marijuana



# Overview of presentation

---

- ❑ What is CASAA?
- ❑ CASAA research and its relevance to New Mexico
- ❑ CASAA service
- ❑ CASAA and training



CENTER ON ALCOHOLISM,  
SUBSTANCE ABUSE,  
& ADDICTIONS

# What is CASAA?

---



# CASAA overview

---

- ❑ Research Intensive Center at UNM since 1989
- ❑ ~70 full- and part-time faculty, staff, and funded students
- ❑ Core activities:
  - Research
  - Student training
  - Community service



CENTER ON ALCOHOLISM,  
SUBSTANCE ABUSE,  
& ADDICTIONS

# CASAA's mission

---

*To conduct high quality scientific research to improve prevention and treatment and to reduce suffering related to alcohol and drug use and other addictive behaviors*



# CASAA Funding

FY18: External Grants: >\$4.9M

---

- ❑ National Institutes of Health: 21 primary grants to CASAA researchers
- ❑ National Institutes of Health: 10 subawards through other institutions to CASAA researchers
- ❑ Private foundations
- ❑ NM Department of Health and Human Services
- ❑ UNM Grand Challenge



# CASAA: More than 75 partners

---

- ❑ Collaborations across ten colleges and centers of the UNM main campus
- ❑ Collaborations across ten departments of UNMH
- ❑ More than 20 partners across New Mexico:
  - ❑ Criminal justice system
  - ❑ Other colleges and universities
  - ❑ Community service and treatment programs
  - ❑ Offices of NM State government
  - ❑ Indian Health Service
- ❑ More than 30 collaborators across the United States and Internationally



# The Opioid Epidemic

---

# Opioid use disorders

---

- ❑ Tim Condon: has been training judicial and court personnel about substance use disorders
- ❑ Randall Starling: is directing a UNM program to impact underage drinking and prescription opioid use and evaluate impact of the program.
  - *Did you know?* 11.9% of UNM students purchased, received, or took prescription opioids in the last year.
- ❑ Katie Witkiewitz and Kevin Vowles: developed and tested an integrated behavioral treatment for chronic pain patients who are misusing opioids

# Opioid use disorders -2

---

- ❑ Brady Horn assessed the Impact of Prescription Drug Monitoring Program laws on crime
  - *Did you know?* His research found that these laws reduce crime
- ❑ Kamilla Venner is leading a new study of culturally centered medication treatment for opioid use disorders among American Indian populations (one grant in 4 states; one grant in New Mexico)
- ❑ Matthew Pearson and Margo Hurlocker are conducting a pilot study through the UNM Grand Challenge examining the use of harm/risk reduction strategies among opioid users



# Opioid use and criminal justice populations

---

- ❑ Barbara McCrady evaluated the Methadone Maintenance Program at MDC
  - *Did you know?* Inmates in the program had fewer and shorter reincarcerations than other opioid dependent inmates
- ❑ Tim Condon and Barbara McCrady just completed a study of injectable naltrexone for inmates with opioid use disorder prior to release from incarceration.
- ❑ Tim Condon has just been funded to conduct Implementation Research (NIH HEAL:JCOIN Initiative) to improve pre-release and community re-entry strategies for CJ population with Opioid Use Disorder

# Health of Mothers and Children

---

# Fetal Alcohol Spectrum Disorders (FASD)

---

Philip A. May and Wendy Kalberg

- Fetal Alcohol Syndrome Epidemiology Research (FASER):
  - Epidemiology of FASD in New Mexico, Northern Plains Indians, South Africa, and the US
  - *Did you know?* The prevalence of FASD in the US communities ranges from 1 to 5 percent, or 1 in 20 students.

# Pregnant addicted women

---

- Pilar Sanjuan is conducting research on prenatal alcohol and drug use to understand:
  - The role of fetal attachment and PTSD symptoms on drug use during pregnancy
  - The role of maternal PTSD on birth outcomes
  - Brain development from the fetal stage to age 9 associated with prenatal substance exposure
  - How continuous labor support could be a helpful intervention for pregnant women in addiction treatment

DWI

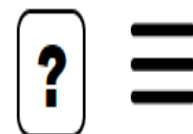
---



# DWI prevention

---

- ❑ Gill Woodall (retired) and Randall Starling have conducted research on responsible beverage service training
  - *Did you know?* On-line responsible beverage server training can almost double how often servers refuse to serve intoxicated patrons
  
- ❑ Barbara McCrady and Gill Woodall are developing a smartphone app (“B-SMART”) to help families of DWI offenders
  - ❑ *The goal?* To cut down on drinking and driving after offenders no long have an Ignition Interlock Device on their car



# Effective Treatments

---



CENTER ON ALCOHOLISM,  
SUBSTANCE ABUSE,  
& ADDICTIONS

---

*Almost all the evidence-based  
psychological treatments for  
alcohol/substance use disorders have  
been developed by CASAA researchers*



# Evidence-based treatments developed/studied by CASAA investigators

---

- ❑ Behavioral Couple Therapy (Barbara McCrady)
- ❑ Community Reinforcement Approach (Bob Meyers and Jane Ellen Smith)
- ❑ Cognitive Behavior Therapy (Bill Miller, Barbara McCrady)
- ❑ CRAFT (Community Reinforcement and Family Training) (Bob Meyers and Jane Ellen Smith)
- ❑ Mindfulness-Based Treatment (Katie Witkiewitz)
- ❑ Motivational Interviewing (William Miller, Theresa Moyers)
- ❑ Twelve-Step Facilitation Treatment (J. Scott Tonigan)



CENTER ON ALCOHOLISM,  
SUBSTANCE ABUSE,  
& ADDICTIONS

# New treatments under study

---

# Psychological interventions

---

- ❑ Brief family-involved treatment for alcohol/drug problems
- ❑ Culturally adapted family intervention for a Southwest tribe
- ❑ Motivational interviewing for socially anxious heavy drinking college students
- ❑ Prenatal Yoga as mindfulness and behavioral activation for pregnant addicted women

# Novel psychological interventions

---

- Some *very* experimental treatments:
  - Attentional bias modification (reduce the grip of alcohol stimuli on attention)
  - Working memory training (improve executive functioning)
  - Mindfulness-based interventions (improve non-judgmental present-moment awareness)
  - Transcranial Direct Current Stimulation (tDCS)
  - Cognitive retraining



# Economics of health and substance abuse treatment

---

- *Objective of economic analyses:* to determine how to get the greatest good with limited societal resources. Examples from Brady Horn:
  - Jail-based Methadone maintenance treatment
    - *Did you know?* It saves money
  - Emergency Department interventions for patients with substance use disorders
    - *Did you know?* They don't save money
  - Impact of substance abuse treatment programs on property values
    - *Did you know?* There's no negative impact



# Understanding *how* treatments work

---

- ❑ If we understand *how* treatments work, we can make them more efficient and effective
- ❑ *Do you know how AA works? (Scott Tonigan)*
  - Spirituality
  - Social support for abstinence
  - Self-efficacy
- ❑ *Do you know how Motivational Interviewing works? (William Miller, Theresa Moyers, Margo Hurlocker)*
  - Clients learn to talk more about changing their behavior and less about not changing
  - Therapists pay attention to client talk about positive change
- ❑ We also are studying how other treatments work:
  - Behavior couple therapy for alcohol problems (*Barbara McCrady*)
  - Mindfulness-based interventions for addiction (*Katie Witkiewitz*)



# The brain and treatment

---

- How does the brain respond during psychotherapy sessions?  
Do those responses predict substance use disorder outcomes?
  - *Did you know?* Jon Houck found that different parts of the brain respond when patients talk about changing than when they talk about not changing their drinking

# Neurocognitive processes of change

---

- ❑ A collaborative CASAA-MRN group (Eric Claus, Jon Houck, Barbara McCrady, Katie Witkiewitz) is studying mechanisms of change in the brain and behavior
  
- ❑ The goals of the research are to:
  - Understand how the brain changes/heals with changes in drinking
  - Understand what kinds of brain deficits respond to what kinds of treatment
  - Find markers that clinicians can use to tailor their treatment to their patients' brain strengths and weaknesses
  
- ❑ The research is being done with:
  - Heavy drinkers who are not seeking treatment
  - Heavy drinkers seeking treatment

# Helping Unique Populations

---



# American Indians/Alaska Natives

---

Kamilla Venner and Kait Hirchak are:

- ❑ Understanding success stories of AI/AN individuals in recovery
  - ❑ *Did you know?* American Indians past month rates of abstinence from alcohol (62.7%) higher than any racial group except Asians (65.5%)
- ❑ Conducting clinical trials of treatment-as-usual versus culturally adapted treatments with a Southwest Pueblo
- ❑ Studying contingency management for alcohol use disorder
- ❑ Studying substance use and treatment engagement among AI/AN youth in NM



# American Indians/Alaska Natives - 2

---

Scott Tonigan is:

- ❑ Conducting research to understand recovery and use of mutual help groups such as AA among urban Native Americans



# Adolescent research

---

- ❑ Health disparities in adolescent interventions (Jon Houck)
- ❑ Economic analyses of interventions to reduce risky sexual behavior among alcohol and drug using adolescents (Brady Horn)



# College students and young adults

---

- ❑ Behavioral strategies to help college students avoid or decrease drinking-related harm (Matthew Pearson)
- ❑ Text message reminders to support adolescents and young adults interested in changing their substance use (Frank Schwebel)
- ❑ Risk factors and consequences of co-occurring alcohol and mood/anxiety disorders among young adults (Margo Hurlocker)
- ❑ Interventions to help young adults with mood/anxiety symptoms to avoid or decrease drinking- and marijuana-related harm (Margo Hurlocker)





# College students and sexual violence

---

- Risk factors for college women's sexual victimization
- Models to understand and impact risky behaviors among college students (Elizabeth Yeater)



CENTER ON ALCOHOLISM,  
SUBSTANCE ABUSE,  
& ADDICTIONS

# Law Enforcement Officers

*\*\* Not about alcohol or drugs \*\**

---

- Strengthening health and resilience among the Law Enforcement Officers in the Albuquerque Police Department via stress management education and mindfulness-based resilience training (Katie Witkiewitz)

# Marijuana

---

# Fostering research on marijuana

---

- ❑ A CASAA researcher (Matthew Pearson) is the Founder/President of the Research Society on Marijuana
  - A multidisciplinary research organization
  - Annual scientific meeting
  - Open-access peer-reviewed journal (*Cannabis*)
  
- ❑ Dr. Pearson also is the coordinating PI of the Marijuana Outcomes Study Team
  - A multi-investigator team
  - Goal is to better understand the antecedents and consequences of cannabis use among college students

# Conducting research on marijuana

---

- ❑ Dr. Pearson is the Coordinating PI of the Protective Strategies Study Team
  - A multi-investigator team
  - Goal is to understand the use of protective behavioral strategies to minimize the harms of use of marijuana and other substances
  
- ❑ CASAA investigators have a Grand Challenge pilot study to study the use of cannabis-based products among medical cannabis users with an opioid use disorder (Matthew Pearson, Jon Houck, Kevin Montes)



CENTER ON ALCOHOLISM,  
SUBSTANCE ABUSE,  
& ADDICTIONS

# CASAA Service to New Mexico

---



# CASAA campus service programs

---

- ❑ Campus Office of Substance Abuse Prevention (COSAP) (Randall Starling) is charged with two broad objectives:
  - To ensure UNM's **compliance with federal regulations related to substance abuse**
  - To coordinate, enhance, and develop **substance abuse prevention programs**
  
- ❑ Grants and projects:
  - Program to impact underage drinking and prescription opioid use
  - Program to determine feasibility of creating and establishing a collegiate recovery community center (CRC) at UNM
  - Higher education consortium to impact alcohol and drug use on NM campuses (now completed)



# CASAA research service programs

---

## Roberta Chávez:

- Program Evaluation Services (PES):
  - Participant recruitment, conduct structured research interviews - intakes and follow-ups
  - Maintenance of participant records
  - Assures compliance with all IRB and Federal regulations
  - Follow-up rates in excess of 90% across more than 60 studies
  
- Research Data Services (RDS):
  - Computerized test administration
  - Custom, study-specific data entry systems and databases for research
  - Assures clean and accurate datasets





# CASAA community service programs

---

- Substance use disorder prevention and early intervention in adolescent populations (Tim Condon)
  - Integrated primary care and behavioral health for adolescents
  - Implemented SBIRT (Screening, Brief Intervention, and Referral to Treatment) in NM School-Based Health Centers
  - Developed adolescent peer-to-peer strategies for prevention and early intervention



# Community service

---

- Program/economic evaluations:
  - Metropolitan Detention Center Methadone Maintenance Program
  - Mandated treatment laws for DWI offenders
  - Care One, a UNMH intervention for high-cost, medically complex patients
  - Heading Home, an intervention for vulnerable homeless population
  - Santa Fe drug court, which incorporates medication-assisted treatment



# Community service -2

---

- Membership on standing committees of state and county government
- Community presentations on substance use
- Advisors to:
  - Department of Children Youth and Families
  - NM Behavioral Health Collaborative, Department of Health
  - Department of Health



CENTER ON ALCOHOLISM,  
SUBSTANCE ABUSE,  
& ADDICTIONS

# CASAA as a Training Institution

---



# Educational contributions

---

## □ Students

- NIAAA pre- and post-doctoral research training grant
- “@ UNM” – Alcohol Treatment Clinic (in Psychology)
- Basics in Addictions Counseling (in Psychology)
- Research opportunities for undergraduate students

## □ Service providers

- State contracts to train service providers
- Training DVDs



# Educational contributions - 2

---

## Research methods

- National trainings on therapy coding
- National trainings on clinical research methods
- Annual grant writing seminar for UNM investigators

## Professional conferences

- Mechanisms of Behavior Change
- International Conferences on the Treatment of Addictive Behaviors
- Collaborative Perspectives on Addiction



CENTER ON ALCOHOLISM,  
SUBSTANCE ABUSE,  
& ADDICTIONS

# Questions and discussion

---