Apr 4th, 9:40 AM - 9:55 AM

Behavioral Correlates for Quitting Opioids among Opioid-Dependent Pregnant and Non-Pregnant Women of Childbearing Age in Rural Appalachia

Sindura Kompella  
*East Tennessee State University*

Sylvester Olubolu Orimaye  
*East Tennessee State University*

Nigel Dsouza  
*East Tennessee State University*

Karl Goodkin  
*East Tennessee State University*

Steven Kendell  
*East Tennessee State University*

See next page for additional authors

Follow this and additional works at: [https://dc.etsu.edu/asrf](https://dc.etsu.edu/asrf)

Part of the [Behavior and Behavior Mechanisms Commons](https://dc.etsu.edu)
Behavioral Correlates for Quitting Opioids among Opioid-Dependent Pregnant and Non-Pregnant Women of Childbearing Age in Rural Appalachia

Appalachian Forum

April 4, 2018
Outline

- Background
- NAS Incidence rates
- Our Study
  - Methods
  - Results
  - Discussion
- Future implications
Neonatal Abstinence Syndrome

- United States is the largest consumer of prescription opiates in the world.
- Tennessee has the highest incidence of NAS cases.
- Maternal Use of opiates during pregnancy results in NAS, babies can have a variety of symptoms which are life threatening.
- Opiates cross the placental barrier during pregnancy and drug dependence develops in babies before birth.
- Heroin, Codeine, Methadone,oxycontin (painkillers, prescribed medications for addictive behavior or abused due to illicit drug use).
Neonatal Abstinence Syndrome

- High-pitched crying
- Seizures
- Temperature Instability
- Tremors
- Sleep problems
- Sneeze
- Feeding Difficulties

Symptoms taken from the CDC
Medication-assisted treatment for opiate use.

- 52.5% of children diagnosed with NAS in Tennessee have had exposure to one prescription drug.
- 27.2% were exposed to a combination of prescribed medications and illicit substances.
In this study: We examined the behavioral correlates that determine the wish to quit opioids or not to quit opioids among opioid-dependent pregnant and non-pregnant women in rural Appalachia.
All were receiving physician-managed Medication Assisted Treatment (MAT) therapy for the treatment of severe opioid use disorder, or are currently being prescribed an opioid medication.

Methods

• 10 females of childbearing age were recruited to join in the study from the rural Appalachia region (pregnant and non-pregnant).

• Variables used:
  - Age
  - Hamilton Depression Rating Scale (HAM-D)
  - Visual Analogue Scale – Pain (VAS-P)
  - Modified Opiate Craving Scale (MOCS)
  - Visual Analog Commitment to Quit Opiates
  - McGill Pain Index (MPI)
The HAM-D, MOCS, MPI, and SOCRATES scores were log-transformed to approximate a normal distribution to ensure equal distribution between each of the variables.

- Descriptive statistics and the Spearman’s rank correlation (with a 95% Confidence Interval) were conducted to examine significant behavioral correlates for quitting opioids.

- Drug prescriptions
- Tobacco and alcohol use, illicit substance use
- Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES)
- Adverse Childhood Experience (ACE) questionnaire
Results

- Women with higher HAM-D and MOCS scores are not likely to express willingness to quit opioids. There is a statistically significant strong positive correlation of 0.679.
- Women with high depression and pain scores are not likely to quit opioids.
- Women who recognize the need to quit opioids or are “taking steps” to quit are more likely to quit opioids.
Depression bears a complex relationship to opiate dependence and may represent an independent disorder or may be engendered by psychosocial stress or toxic and withdrawal effects of drugs.

Discussion

- Opioid abuse and depression correlation is bi-directional. One can be a risk factor for another and vice versa.
- Addiction can lead to the feelings of hopelessness, despair and guilt often associated with depression
- 48% of people dependent on the drug will also experience depression.

Future Implications

- Use larger sample size
- Explore correlation of Depression, Pain scores and Opiate abuse in different regions of US.
- Consider Non-opioid medications
Thank you

Questions?