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

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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
Sneezing
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.
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?