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Marijuana Use Among Pregnant Women in Buprenorphine Treatment for Opioid Dependence

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2a: Closer to Home

- * New program, “Closer to Home,” will allow pregnant women in buprenorphine treatment for opioid dependence to get treatment closer to home and deliver at Copley Hospital instead of being required to go to Burlington
- * Requires local physicians to prescribe buprenorphine to pregnant women
- * In creating the program, prescribing physicians have to decide policies around non-opioid substance use

2b: Closer to Home

- * Currently, with non-pregnant patients, the prescribing physicians in the practice differ with regard to policies toward marijuana use
- * 50-85% of people dependent on opioids use marijuana
- * In a previous study, 94% of marijuana users in treatment for opioids continued to use marijuana during treatment
- * The creation of an evidence-based policy for marijuana use during buprenorphine treatment, especially during pregnancy, would be beneficial

3a: Public Health Cost

- * In the US in 2009, treatment of neonates exposed to opioids cost \$70-112 million.
- * Opioid dependence during pregnancy is associated with intrauterine growth restriction, intrauterine fetal demise and stillbirth, preterm labor, placental abruption and postpartum hemorrhage.
- * Buprenorphine treatment in pregnancy increased prenatal care, reduces criminal activity, decreases neonatal morbidity and mortality, and increases likelihood that mothers will maintain custody of their children after delivery
- * As highlighted in the popular press lately, Vermont is very much a part of the opioid dependence epidemic

3b: Public Health Cost

- * Buprenorphine treatment, in comparison to methadone treatment, results in less severe neonatal abstinence syndrome and a shorter hospital stay, making the provision of buprenorphine to pregnant women who are opioid dependent an important public health matter.

4a: Community Perspective: Closer to Home team

- * Based on discussions with providers, support staff, and attendance at an OB-Peds meeting focused on the implementation of this new program
- * Opinions on marijuana use differed among members of the Closer to Home team, including buprenorphine prescribing physicians and nurses with specialized training:
 - * “Marijuana is illegal and I don’t see how ignoring a patient obtaining drugs illegally is consistent with supporting recovery”
 - * Others felt that allowing marijuana use fit within their model for prescribing buprenorphine – they frequently described their role as “harm reduction”

4b: Community Perspective: Substance Abuse Treatment Experts

- * Experts at the Substance Abuse Treatment Center at the University of Vermont shared their practice of encouraging abstinence from all illegal substances, and providing abstinence support if marijuana is identified as an issue for an individual, but not penalizing for marijuana use
- * They shared that the scientific literature has not found that marijuana use during medication assisted treatment for opioid dependence is associated with treatment outcome

5: Intervention and Methodology

- * The intervention is providing the developing “Closer to Home” program with education about marijuana use in opioid dependent pregnant women in order to make policies on this issue.
- * The Closer to Home Treatment Coordinator and one of the prescribing physicians in the program were provided with a literature review, a bibliography on relevant sources, and copies of eight scientific papers on the topic. They plan on further distributing these materials.
- * The evidence is in two forms
 - * Scientific literature review looking at:
 - * marijuana use and treatment outcomes in medication assisted opioid treatment (buprenorphine and methadone)
 - * Maternal and fetal effects of marijuana use in pregnancy
 - * Expert opinions and standard of care at other established substance abuse treatment programs for pregnant women

6a: Results of Literature Review

Marijuana Use During Opioid Replacement Therapy:

- * In a study of cannabis use among opioid-dependent youth in buprenorphine treatment found neither past marijuana use or use during treatment was associated with level of opioid use
- * A study done at UVM found that 66% of patients in a buprenorphine treatment program used marijuana and 94% of those continued to use marijuana during treatment despite encouragement to abstain. There was no relationship between marijuana use and treatment outcome

Fetal effects:

- * inconclusive evidence and insufficient research
- * Little evidence of intrauterine growth restriction, prematurity or low birth weight
- * Some evidence of impaired neurodevelopmental outcomes in school-age children

6b: Standard of Care

- * The Chittenden Clinic, a buprenorphine and methadone treatment center, does not penalize for marijuana use during medication assisted treatment. They do for illicit opioid, cocaine, alcohol and benzodiazepine use because these drugs are associated with poor treatment outcomes in the scientific literature
- * The Comprehensive Obstetric and Gynecological Service (COGS) clinic at Fletcher Allen Health Care, that prescribes buprenorphine to pregnant women, does not consider marijuana use as treatment non-compliance
- * Overall, the program directors felt that the risks of withholding medication assisted opioid treatment to a pregnant woman far outweighed the risks of providing the treatment to a woman who uses marijuana. The risks sighted for continued illicit opioid use were overdose, death, and the negative fetal outcomes presented previously.
- * The above is based on discussions with *Name Withheld*, Ph.D., *Name Withheld*, Ph.D. (both in the Departments of Psychiatry and Psychology at the University of Vermont) and *Name Withheld*, MD (in the Department of Obstetrics, Gynecology and Reproductive Services at the University of Vermont)

7: Evaluation of effectiveness and limitations

- * The best way to evaluate the effectiveness of this project would be to resurvey the prescribers and others involved in the Closer to Home program on their policies toward marijuana use in their buprenorphine patients, especially pregnant patients.
- * Another possible outcome to evaluate would be if the program itself makes a standard policy, rather than allowing for personal preference
- * Limitations: A significant limitation of this study is that the dissemination of the literature review and standard of care findings will be determined by provider interest in reviewing the materials provided. It would have also been useful to have some baseline statistics on marijuana use in the specific treatment population

8: Recommendations for the future

- * A workshop or lecture for prescribers and other practitioners in the Closer to Home program based on the findings of this study could increase knowledge and potentially change practices
- * Additionally, discussions with patients around marijuana use and establishment of evidence based treatment for marijuana use could be a fruitful future project

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