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#### **Opioid Usage in Pregnant Women**

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# **OPIOID USAGE IN PREGNANT WOMEN**

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# Introduction

Women have a heightened sense of health during pregnancy, especially first pregnancies. They often pay closer attention to taking medications (both over the counter and prescribed). Some discontinue smoking and choose healthier diet choices. The question or hypothesis of this research is to examine if this heightened sense of health during pregnancy has any effect on the choice to use recreational drugs during pregnancy.

### Methods

We did a retrospective study involving the review of 475 prenatal patient charts from Rowan Medicine Ob/Gyn from 2018-2020. During the initial prenatal visit, most patients take an initial urine drug screen to assess pregnancy risk. This study included any patient who had a positive initial urine drug screening test. Of patients who had a positive initial drug screen, we noted gestational age at the time of the initial positive drug screen and the drug used. We then compared to the urine drug screen at the time of delivery. Interventions to help patients discontinue drug use were also looked at for example counseling, medications, etc. As some drugs are more highly addictive, we noted which drugs each patient were found to be positive on the drug screen. Mode of delivery (vaginal or cesarean section) was also noted. Dr. Xinhua Chen is a statistician who helped me with analyzing the data. She used the SAS system to put together the data that is shown in the results below.

# Results

#### Summary of data at this stage:

Table 1. Subjects included in this summary (n (%))

UDS at initial visit	Positive, 27 (100)	
UDS at delivery	Negative, 22 (81.48)	Posit

### Table 2. Description of patient's characteristics comparing UDS status at delivery

Variable/characteristic	All patient (n=27)	UDS negative at delivery (n=22)	UDS positive at delivery (n=5)
Gestational age at UDS screen (week)	13.89±7.39	14.27±1.60	12.20±3.35
Gestational age at delivery (week)	37.11±3.21	37.73±0.63	34.40±1.34*
Mode of delivery			
Vaginal	16 (59.3)	14 (63.6)	2 (40)
C-section	11 (40.7)	8 (36.4)	3 (60)
Drug used			
Cannabinoid	21 (77.78)	16 (72.7)	5(100)
others	6 (22.22)	6 (27.3)	0

Data are mean±SD or n (%).

\* P<0.05 vs. UDS negative at delivery.

tive, 5 (18.52)	ive,	5	(18.52)
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### Discussion

Women's health is critical for the health of both mother and her baby which drives patients to make better, healthier lifestyle choices. Since substance abuse can have harmful effects on fetal development, women will often be motivated to stop use of these substances during pregnancy. The tangible outcome or product of this research project is to help women's health and wellness of the newborns as well as themselves. Women who were positive for the drug usage at the initial screening, most of them were negative at the time of delivery which supports this hypothesis. All the patients who were negative at time of delivery had received some form of counseling to assist in stopping their drug usage. Therefore, it can be concluded that talking to patients can enhance the sense of care in women during pregnancy which made them stop the drug at least until the delivery.

## Acknowledgements

I would like to thank the IRB for approving my research project for the summer of 2021. I also want to acknowledge Dr. Xinhua Chen who helped analyze the data. And, of course, Dr. Karen Krieg, my mentor who helped me put all of this together. Lastly, I would like to thank the CREATE program for selecting me and giving me this opportunity to further my curiosity about scientific research.