

Antidepressant Discontinuation During Pregnancy: Changes in Patient Prenatal Wellbeing and Healthcare Utilization

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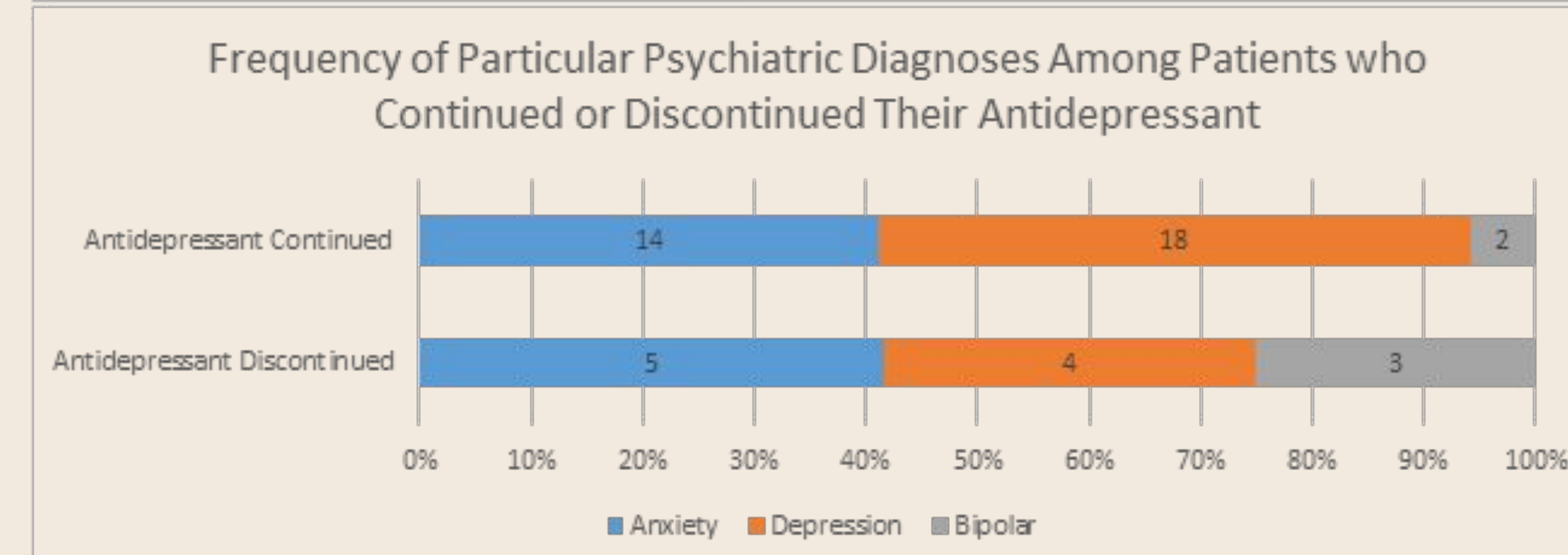
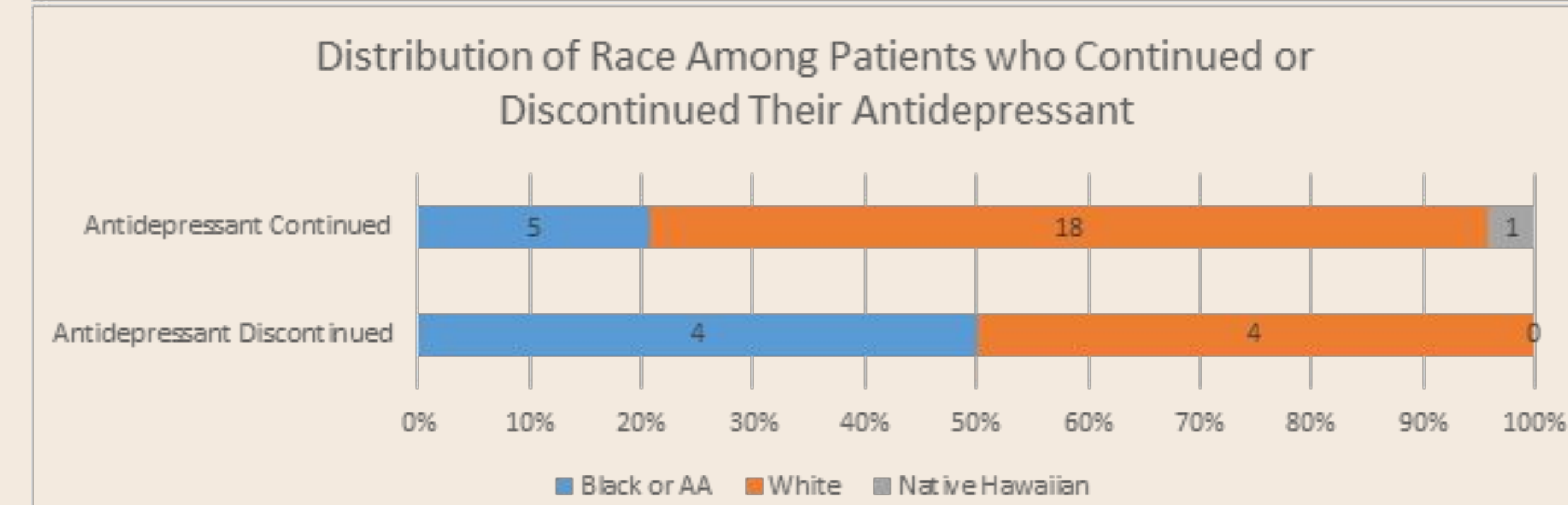
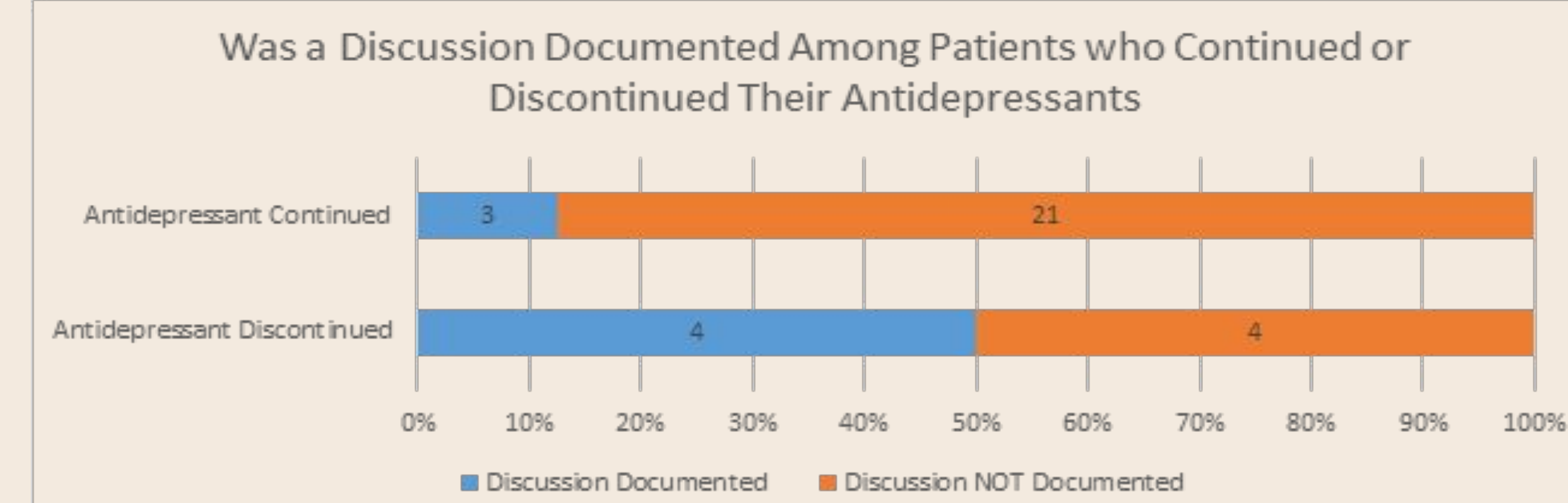
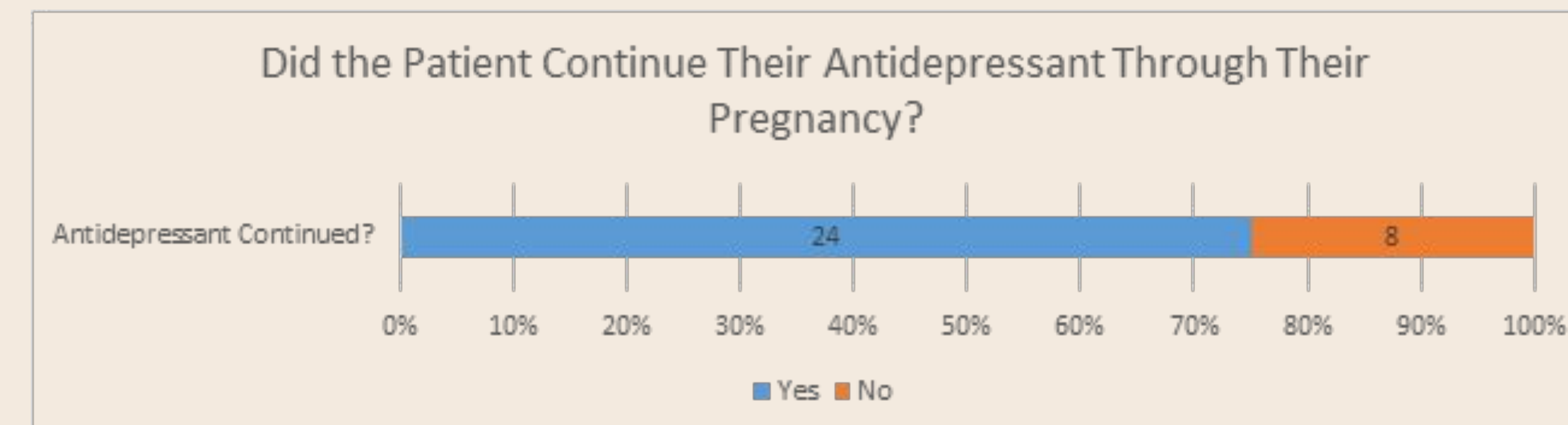
Background

- Depression and anxiety affect about 20% of women during their life, with pregnancy and postpartum being periods of increased vulnerability¹.
- 6.8% of pregnant women used antidepressants during the first trimester, with this percentage rising each year².
- Prenatal depression is the strongest risk factor for postnatal depression, and prenatal depression can lead to adverse maternal and fetal outcomes³.
- Given the potential of risks to their developing fetus, many women contemplate stopping their antidepressant when planning for pregnancy or discovering they are pregnant⁴.
- Per a 2005 study, despite being provided with reassuring evidence information by their physicians, 15% of patients using antidepressants opted to stop their medication. In contrast, merely 4% of those using gastric drugs and 1% of those using antibiotics opted to stop their medication⁴.

Study Design

- **Retrospective chart review**
 - University Hospitals TriNetX provided list of MRNs
- **Inclusion:** 1) Ages 18-50, 2) Assigned female sex at birth, 3) History of at least 1 pregnancy, carried to term, from 2015 to present, 4) History of taking antidepressants for at least 2 months before conception date of the pregnancy.
- **Exclusion:** 1) Patients who discontinued an antidepressant during pregnancy but also restarted during the prenatal period, 2) Current pregnancy, 4) Male sex or age <18 or >50
- **Hypothesis I:** Pts who discontinue antidepressants after 1st prenatal visit experience poorer prenatal wellbeing
 - Greater % missed appointments, greater # of visits to the ED, greater % patients with unhealthy (too low or high) weight change between first and last visits, greater average change in PHQ or GAD scores from first to last visit, greater average EPDS score, greater % reporting suicidal ideation during pregnancy, greater % reporting substance use during pregnancy
- **Hypothesis II:** Among patients who discontinued vs. continued their antidepressants, there are significant differences in ethnicity, and psychiatric diagnosis and severity
- **Other aims:** Study qualitative data, looking for details in the narrative, such as pt reasoning or physician communication

Results



"She was informed of her risks: 1) anxiety during pregnancy, and 2) history of anxiety, as well as her first pregnancy and was recommended to continue treatment as prescribed. Discussed r/b/a of exposure to Citalopram in pregnancy including but not limited to Neonatal Adaptation Syndrome and Persistent Pulmonary HTN, as well as infant exposure during lactation. Discussed plan to manage risks, including schedule for follow up visits, referral for therapy (...). Her questions were answered, she verbalized understanding and agreed to the treatment plan."

"Re-enforced importance of mother's mental health during pregnancy, correlating with healthy pregnancy and importance of maintaining adherence with prenatal care discussed. Caution abrupt discontinuation d/t risk for symptom exacerbation."

Preliminary Data:

- 1) **25% discontinued their antidepressants**
- 2) **Shared decision-making discussions documented more frequently among patients that discontinued medication.**
 - Only 12.5% patients who continued their medication had a documented discussion
- 3) **Majority of the sample who continued their antidepressant were white.**
- 4) The frequency of anxiety was similar among both groups, but there seemed to be **more patients with depression among the group that continued their medication**
- 5) **82% of white patients continued, 56% of black or AA patients continued**

Quotes from Documented Discussions:

"I did discuss that, generally, the risks of medication exposure is far outweighed by the risk of poorly treated mood disorders. Will plan to consult psychiatry for recommendations."

"... weighting benefit vs risk; goal being effective symptom managed at lowest dose"

Discussion

- **Major scarcity of documented discussions** between patients and physicians
 - Critical gap in the comprehensive understanding of the patient's mental health journey during pregnancy
 - Does OB/GYN believe this is within the scope of psychiatry?
 - Disconnect between specialties: How can we improve communication in maternal mental health care?
- **Limitations:**
 - Difficult to determine patient adherence to antidepressants
 - Data within the EHR is incomplete
 - Difficulty finding prenatal visit, delivery, or psychiatry notes, medication lists, etc.
 - University Hospitals recently switched their EHR platform
 - Patients may also get care from other institutions
 - Findings may not be generalizable to general populations
 - Sample: 69% White, 28% Black or AA, 3% Native Hawaiian
 - This study solely assessed the most recent pregnancy.
 - As a result, sample median ages are higher than median pregnancy ages of the general population
- **Future Directions:**
 - Increase sample size, study new variables (GAD, PHQ, etc.)
 - Quantitative analysis of commonalities in charted discussions

Acknowledgements

First, I would like to thank Erika Kelley, PhD for her valuable guidance and help throughout this project. I would also like to thank Julia Knopes, PhD and Marsha Michie, PhD from the CWRU Department of Bioethics, for their invaluable insight on bioethical frameworks essential to this retrospective chart review. Finally, I would like to thank OPPA and its Foundation for the opportunity to present my preliminary findings.

References

1. Rich-Edwards JW, Kleinman K, Abrams A, Harlow BL, McLaughlin TJ, Joffe H, Gillman MW. Sociodemographic predictors of antenatal and postpartum depressive symptoms among women in a medical group practice. *J Epidemiol Community Health.* 2006 Mar;60(3):221-7.
2. Huybrechts KF, Palmsten K, Avorn J, Cohen LS, Holmes LB, Franklin JM, Mogun H, Levin R, Kowal M, Setoguchi S, Hernández-Díaz S. Antidepressant use in pregnancy and the risk of cardiac defects. *N Engl J Med.* 2014 Jun 19;370(25):2397-407. doi: 10.1056/NEJMoa1312828.
3. Reefhuis J, Devine O, Friedman JM, et al. National Birth Defects Prevention Study. Specific SSRIs and birth defects: Bayesian analysis to interpret new data in the context of previous reports. *BMJ.* 2015; 351: h3190, doi: 10.1136/bmj.h3190
4. Bonari, L., Koren, G., Einarson, T. R., Jasper, J. D., Taddio, A., & Einarson, A. (2005). Use of antidepressants by pregnant women: Evaluation of perception of risk, efficacy of evidence based counseling and determinants of decision making. *Archives of Women's Mental Health,* 8(4), 214-220.