

Screening For Substance Use Disorder (SUD) In Pregnancy

Elizabeth Crow, MD
Alexandra Hartley, DO
Cresta Jones, MD
University of Minnesota
Departments of OB/GYN and Psychiatry

ATM

Determine if appropriate universal screening for SUD in pregnancy is occurring within the University of Minnesota Department of OB/GYN.

INTRODUCTION

In February of 2014, the United States Preventive Services Task Force recommended universal screening for substance use disorders (SUD) in pregnancy,¹ with ACOG supporting universal screening since 2011.² Rates of SUD in pregnancy are often underestimated because of underreporting. Despite this, rates continue to rise. For instance, in 2009 0.56% pregnant women who delivered in US carried a diagnosis of opioid use disorder (OUD), a five fold increase from 2000^{3,4}. Alcohol use during the last month of pregnancy was reported at 10%, despite decades of public health warnings on risks of fetal alcohol spectrum disorder (FASD) with any alcohol exposure in pregnancy. Not only is SUD a health concern to a pregnant woman, fetal effects of SUD can increase care costs and have permanent effects. FASD, low birth weight, preterm delivery, vertical transmission of viral illnesses including HIV and HCV, and fetal demise, all increase in the context of maternal SUD.^{3,4} If SUD is detected and the patient continues to engage in care, various treatments are effective in reducing drug use in the short term, which can have long term effects on patient outcomes.^{5,6,7} The University of Minnesota Department of OB/GYN wanted to assess their SUD screening rate and screening tool in pregnancy to address the USPSTF recommendation.

METHODS

1. IRB exemption was obtained.
2. Delivery data for UMP OB/GYN providers in 2016 procured and 75 mother and infant charts reviewed for SUD screening tool type and baseline screening rate during the new OB visit and admission history and physical.
3. Risk indicators were identified for patient fully screened versus patients who were not screened or partially screened for SUD. These rates were compared to look for obstacles to screening.
4. 4P's Plus (an evidence based SUD screen in pregnancy⁸) was piloted during new OB visits to see if it was a feasible and acceptable screen for UMP OB Department.

RESOURCES

Fairview Social Work Maternal Child Health Team at (612-899-5258). Monday-Friday 8:00 am-5:00 pm.
Project Child (Hennepin Co): For women who are using drugs or alcohol before their 34th week of pregnancy. Services include chemical health assessments and treatment services, as well as education, support, one-to-one counseling, referrals for help in the community, assistance with basic needs and parenting education. 612-879-3609.
Mothers First (Ramsey Co): Mothers First provides families with prenatal, nursing, chemical health and case management services. 651-266-7820.
St. Joe's Inpatient SUD Program: 24 hour assessment/referral line 651-232-3222
SAMHSA's Treatment Locator: <https://findtreatment.samhsa.gov/> or 1-800-662-HELP (4357)

RESULTS

1. UMP OB Department currently uses the traditional social history as their SUD screen in pregnancy. This is not a validated tool for pregnancy.
2. 61/75 charts had complete SUD screens (SHx) for both NOB and H&P. Baseline SUD screening rate: 81.3%
3. Charts were divided into those with full SUD screens vs those with no or partial screens. The following antepartum risk factors were assessed per patient and if present given a value of "1":
 - Mental Illness Diagnosis
 - Medical Problems
 - Obstetrical Problems
 - Fetal Problems
 - Poor Prenatal Care (e.g., < 4 visits or initiating care > 16 weeks)
 - Psychosocial concerns (e.g., transfer OB, IPV, etc)
 - SUD history
 - Interpreter

Of the 61 patients who had complete SUD screens, the average number of risk factors was 1.97. The most common risk factor was obstetrical problem.

Of the 14 patients who did not have complete SUD screens, the average number of risk factors was 4.43. The most common risk factor was SUD history.

4. New OB pilot (n=21) of validated SUD in pregnancy screen (4P's Plus):
 - 100% felt the same or easy to do with usual history
 - 100% felt sensitive and specific
 - 90% felt neutral or better screen than current SUD screen
 - 14% felt 4P's was awkward or difficult to time when implementing.

REFERENCES

1. USPSTF (accessed 3/26/19) Internet Citation: Final Recommendation Statement: Drug Use, Illicit: Screening. U.S. Preventive Services Task Force. February 2014. <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/drug-use-illicit-screening>
2. ACOG Committee Opinion Number 472: Substance Abuse Reporting and pregnancy: The Role of the Obstetrician-Gynecologist. Obstet Gynecol. 2011;117(473):200-201.
3. Bahkireva LN, Shrestha S, Garrison L, Leeman L, Rayburn WF, Stephen JM. Prevalence of alcohol use in pregnant women with substance use disorder. Drug and Alcohol Dependence. 2018;187:305-310.
4. Johnson A, Jones C. Opioid Use Disorders and Pregnancy. Obstet Gynecol Clin N Am. 2018;45:201-216.
5. Substance Abuse and Mental Health Services Administration. Clinical Guidance for Treating Pregnancy and Parenting Women With Opioid Use Disorder. HHS Publication No. (SMA) 18-5054. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2018.
6. Edwards A, et. al. Protective Effects of Pregnancy on Risk of Alcohol Use Disorder. Am J Psychiatry. 2019;176:138-145.
7. Stone R. Pregnant women and substance use: fear, stigma and barriers to care. Health and Justice 2015;3(2):1-15.
8. Chasnoff I, Wells A, McGourty R, et. al. Validation of the 4P's Plus screen for substance use in pregnancy validation of the 4P's Plus. J Perinatol. 2007 Dec;27(12):744-8. Epub 2007 Sep 6.

DISCUSSION

This project highlights the importance of universal SUD screening in pregnancy, and the difficulty in obtaining it when SUD is present. This may reflect a need for increased resources during a visit with a pregnant patient with SUD, and also may reflect a reluctance to screen by providers due to Minnesota's mandatory reporting law, which can be an obstacle to provider/patient rapport. Missing SUD screening is a reflection of the possible resource intensive visits required for patients with SUD. Women with SUD in pregnancy often have difficulty with accessing care, IPV, mental illness, medical and obstetrical co-morbidities. To better serve these patients, an antepartum social work consult would be beneficial when a patient has 2 or more risk factors and/or an SUD screen cannot be obtained by the obstetrical provider. Secondly, the Midwives within the UMP group piloted a validated SUD screen for pregnancy and found it to be easy to use and equal to or better than the social history, their current SUD screen.

Treatment of SUD in pregnancy is a priority, as the effects are harmful to both mother and baby. Additionally, pregnancy is a time when women will access healthcare, even when they haven't in the past. Pregnant women are more likely to make positive behavioral changes, like smoking and alcohol cessation.^{2,4} Pregnant women with SUD, who obtain prenatal care, have better outcomes than those that don't. Unfortunately, there are many barriers to pregnant women with SUD obtaining care.^{5,6} A universal screening tool for SUD in pregnancy is easy to implement and will improve care. Looking at patient risk factors like SUD history, more than two issues on the problem list, or difficulty obtaining a patient's complete social history, might alert the OB provider to get an antepartum social work consult to assess the patient's need for additional resources.

FUTURE CONSIDERATIONS

1. Consider AP SW consults with 2 or more issues on problem list and/or inability to complete SUD history during new OB visit
2. Possible 4P's Plus integration into Epic by Fairview
3. Develop resource list or smartphrase for SUD in pregnancy