

Improving Utilization of Aspirin for Prevention of Preeclampsia in a High Risk Urban Cohort

Rupsa C. Boelig MD, Mariam Wanees BA, Vincenzo Berghella MD, Amanda Roman MD

Sidney Kimmel Medical College at Thomas Jefferson University, Philadelphia, PA

Background

- In 2016 ACOG recommended use of daily aspirin to prevent preeclampsia in selected high risk pregnancies
- There has been limited study on the implementation of this recommendation
- **OBJECTIVE:** To evaluate the utilization of aspirin for preeclampsia prevention before and after implementation of a screening tool at 11-13 week ultrasound

Materials and Methods

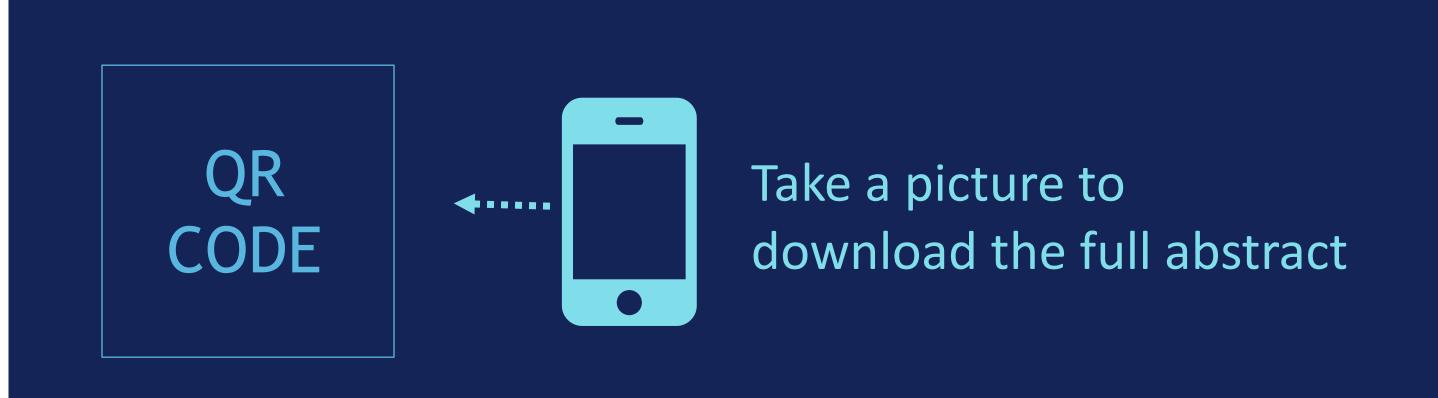
- One year prospective cohort study (2018) of patients at high risk for preeclampsia after the implementation of a screening tool (post-screen) administered to all patients at check in for an 11-13 week ultrasound.
- Screening tool completed by patient at check in, surveyed presence of high risk factors for preeclampsia. Patients also surveyed for adherence through pregnancy
- Prospective cohort compared to a retrospective cohort (2017)
- Obstetric history, antenatal complications, and aspirin recommendation determined by chart review in both cohorts
- Primary outcome: provider recommendation for aspirin therapy

Results

- Pre-screen (N=156) and post-screen (N=136) cohorts similar except for race and multifetal gestation
- Overall, recommendation for aspirin therapy improved post-screen vs pre-screen (95% vs 74%, p<0.001)
- High risk women without prior preeclampsia were less likely to be prescribed aspirin pre vs post-screen (64% vs 95%, p<0.001)
- Adjusting for baseline differences, post-screen was associated with an increased odds of high risk women receiving aspirin (OR 10.0 (3.7-26.8), p<.001)
- 109 women completed initial survey, 88% initiated aspirin by 20 weeks'. The most common reason for not was that patient "forgot but planned to" (31%) or "did not think it would help" (31%)
- 104 women completed third trimester survey, 91% reported still taking aspirin, and 75% reported rarely or never missing a dose

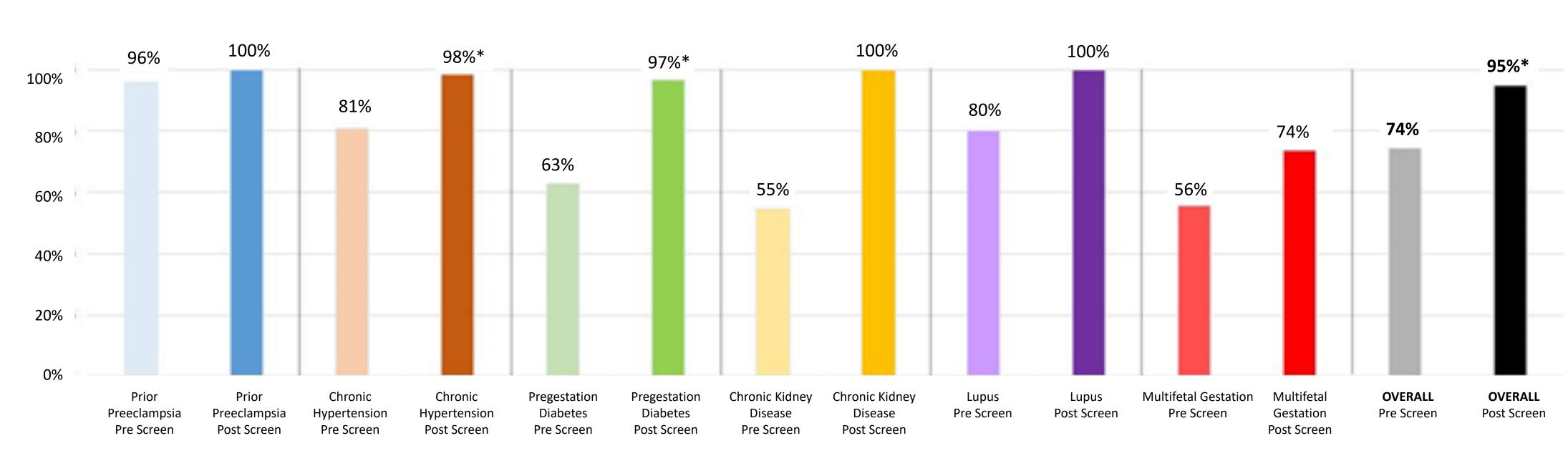
High risk women without a history of preeclampsia were less likely to be recommended aspirin for preeclampsia prevention.

A simple screening tool at 1st trimester ultrasound can significantly improve aspirin utilization for preeclampsia prevention



Contact: Rupsa.Boelig@jefferson.edu

Figure 1: Provider Recommendation for Aspirin by Risk Factor Pre- and Post- Screening Tool



*p<0.05 for pre vs post

Figure 2: Aspirin Adherence in High Risk Pregnant Women

