

SRI Abstract #1 of 2

Title: Giving a Vulnerable Population a Voice: A Characterization of a Modern Antepartum Inpatient Unit

Keywords: Antepartum hospitalization, nonresponders

Tables/Figures: Table 1, Figure 1: DBnrr_indication, Figure 2: DBnrr_outcome

Introduction: The characteristics of the modern antepartum population are under researched. Existing data indicate they are more likely to be young, black, and without private insurance¹, but the modern population has not been studied. Our prior study evaluated the antepartum population via a longitudinal, survey-based cohort study, with 55.1% response rate. However, data suggests nonresponders, similar to antepartum population, are more likely to be racial/ethnic minorities, women, and younger individuals². We propose evaluating this nonresponding subset of the antepartum population to fully characterize the modern antepartum population and its relationship to the general obstetric population.

Methods: A prior survey-based, longitudinal cohort study evaluated the antepartum inpatient experience by fielding a survey to patients admitted for at least 96 hours to the antepartum service of a large university hospital between 2011 and 2019. Participants were queried regarding their demographics, pregnancy outcomes, provider interactions, perceived needs, resource use, and satisfaction with their stay. Survey response was 55.1%. A chart review was then conducted on survey non-responders to obtain demographic, pregnancy, and neonatal outcome information. Descriptive statistics and ANOVA were used as appropriate to characterize underlying differences between the survey responder and nonresponder groups, and the antepartum and general obstetric population groups (with deliveries between 2011 and 2020).

Results: Between the years 2011 and 2020 there were 68,010 deliveries. Of these, 504 (0.74%) were born to antepartum patients (defined as an admission to the antepartum service for greater than 96 hours). The antepartum group delivered earlier (excluding stillbirths, 269 days of gestation vs 272, $P < 0.01$), was younger (29.5 vs 30.5, $P < 0.01$), and had more prior deliveries ($P < 0.01$) than the general obstetric population. Notably, the distribution of patient race between the antepartum group and the general group is similar ($P = 0.18$). The stillbirth rate is also similar between the antepartum group and the general group ($P = 0.95$). Within the antepartum group, survey responders ($N = 297$, 58.9%) and nonresponders ($N = 207$, 41.1%) were similar in terms of maternal age ($P = 0.82$), race ($P = 0.17$), gestational age ($P = 0.88$), length of stay ($P = 0.14$), parity ($P = 0.06$), and fetal number ($P = 0.19$). The responders are more likely to be married ($P < 0.01$). Regarding reason for admission, responders are more likely to be admitted for maternal comorbidity or hypertension while nonresponders are more likely to be admitted for preterm labor or non-reassuring fetal heart tones ($P < 0.01$). Regarding pregnancy outcomes, responders are more likely to have a baby in the NICU or born preterm not needing NICU care while nonresponders are more likely to have a neonatal demise ($P < 0.01$).

Conclusion: Antepartum patients are more likely to be multiparous and younger. The subset of antepartum nonresponders are more likely to be single, experience a neonatal demise, deliver preterm, and have a baby that requires NICU care. Programs seeking to optimize the antepartum experience should attempt to elucidate and then target the specific needs of the antepartum population as a whole.

Prelim References:

1. Bacak SJ, Callaghan WM, Dietz PM, Crouse C. Pregnancy-associated hospitalizations in the United States, 1999-2000. *Am J Obstet Gynecol* 2005;192(2):592-7.
2. Schneider KL, Clark MA, Rakowski W, et al Evaluating the impact of non-response bias in the Behavioral Risk Factor Surveillance System (BRFSS) *J Epidemiol Community Health* 2012;66:290-295.