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The impact of the COVID-19 pandemic on postpartum contraception planning



OBJECTIVE: The COVID-19 pandemic necessitated rapid adjustment of obstetrical delivery models including fewer antenatal appointments and increased use of telehealth. We hypothesized that an increase in telemedicine and a decrease in antepartum visits owing to the COVID-19 pandemic led to a decreased proportion of people with a postpartum contraception plan at the time of the birth-hospitalization admission and a reduced uptake of top-tier forms of contraception at birth-hospitalization admission and discharge, and the routine postpartum visit, which has otherwise been increasing in recent years.^{1,2}

STUDY DESIGN: A retrospective cohort study comparing a randomly selected sample of people giving birth at a large, tertiary referral center during a regional “shelter in place” order, March 16, 2020, to July 31, 2020, with a previously abstracted random sample of people delivering between November 1, 2017, and April 30, 2018, was conducted. This study was reviewed and approved by the Stanford University Institutional Review Board before its initiation. The study was powered to detect a 10% difference in the proportion of those arriving at birth-hospitalization with a contraceptive plan (power 80%, alpha 0.05). The final sample size included 586 people (318 in the pre-COVID cohort and 268 in the COVID cohort). Multivariable modified Poisson regression model was used to estimate the relative risk of arriving at birth-hospitalization with a contraceptive plan in pre-COVID vs COVID cohorts, adjusting for age, parity, insurance status, and delivery mode. Secondary outcomes included tier of contraception plan at admission, discharge, and 6 weeks postpartum (classified by World Health Organization Tiered-Effectiveness³), attendance at postpartum visit, and whether the postpartum visit was conducted via telehealth. Tiered effectiveness was used for this study’s purposes because it was hypothesized that telehealth would mostly affect the provision of top-tier forms of contraception that require in-person initiation. Fisher exact test was used to compare the secondary outcomes.

RESULTS: For the 2 cohorts, the median age was 32 years (range, 17–48 years) and median parity was 1 (range, 0–6). The majority (78%) had private insurance and most commonly identified as non-Hispanic White (38%) and Asian (36%). Baseline demographics did not differ between the cohorts. At birth-hospitalization admission, a smaller proportion of people had a postpartum contraceptive plan in the COVID cohort

than in the pre-COVID cohort (73.9% vs 99.4%, adjusted risk ratio, 0.87; 95% confidence interval, 0.84–0.91, $P < .001$). A smaller proportion of people had a plan for top-tier contraception among the COVID cohort compared with the pre-COVID cohort at both admission and discharge (46.0% vs 71.0%, $P < .01$ and 31.0% vs 37.9%, $P = .05$) (Figure). More than 80% of the people attended a routine postpartum visit in both cohorts ($P = .30$) with 17.7% being telehealth visits in the COVID cohort compared with telehealth not being offered pre-COVID. Among those who attended their postpartum visit, the proportion discharged with a plan for interval top-tier contraception that was fulfilled was high in both groups (76.3% pre-COVID vs 71.2% post-COVID, $P = .56$).

CONCLUSION: The study found a significant decrease in people arriving at birth-hospitalization with a contraception plan in the months following a COVID-19 “shelter in place” order when compared with the pre-COVID cohort. It is suspected that changes in the obstetrical service models indirectly deprioritized the most effective forms of postpartum contraception because sterilization requires a signed consent before birth-hospitalization and postplacental intrauterine devices require consent before delivery.^{4,5} Current state legislation requiring in-person signature to consent for federally funded sterilization remains a barrier. We found that fewer individuals left with top-tier contraception than with plan on admission, especially within the COVID cohort. In addition to clinical contraindications that arise during labor, which preclude placement of an intrauterine device in the postpartum setting, many patients requested an expedited discharge during the peak of the COVID-19 pandemic. As the prenatal care model continues, this transition to adopt virtual visits, reduce visit schedules, and expedite postpartum discharge, actualizing patients’ contraceptive plans is increasingly more dependent on early inpatient provision. Maternity care providers should consider initiating postpartum contraception counseling and completing mandatory consents earlier in the antenatal period. This study is inherently limited by its retrospective nature of review and additional qualitative studies may better characterize this trend in contraceptive uptake. In the meantime, obstetrical care providers should carefully evaluate institutional barriers to postpartum contraception during this movement to telehealth.

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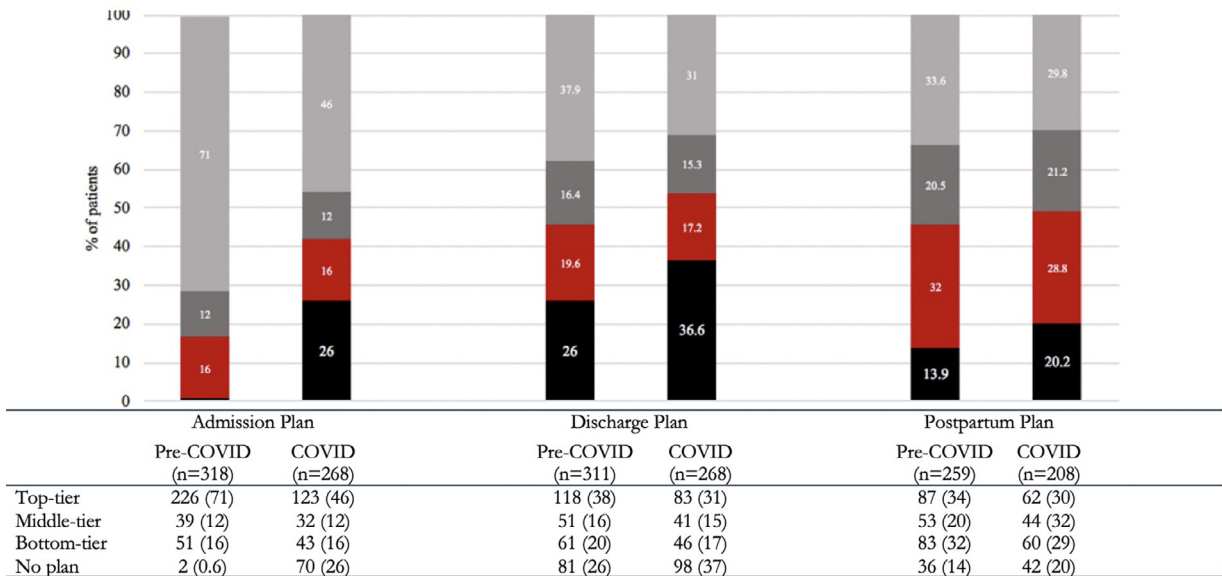
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FIGURE

Comparison of contraception plan among pre-COVID (n=318) and COVID (n=268) cohorts



Data are expressed as number (percentage). Fisher exact test was used to compare pre-COVID and COVID cohorts. *P* values were calculated as <.001 for plan at admission, .052 for plan at discharge, and .31 for plan at postpartum visit. WHO tiered-effectiveness³ chart was indicated as top-tier: female or male sterilization, implant, intrauterine device (light gray); mid-tier: pills, ring, patch, injection (dark gray); and low-tier: condoms (red), or undecided/declined (black). Excluded patients without a contraceptive plan documented or applicable at the time of admission for birth hospitalization.

WHO, World Health Organization.

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