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## Impact of the COVID-19 pandemic on induced abortions in France in 2020

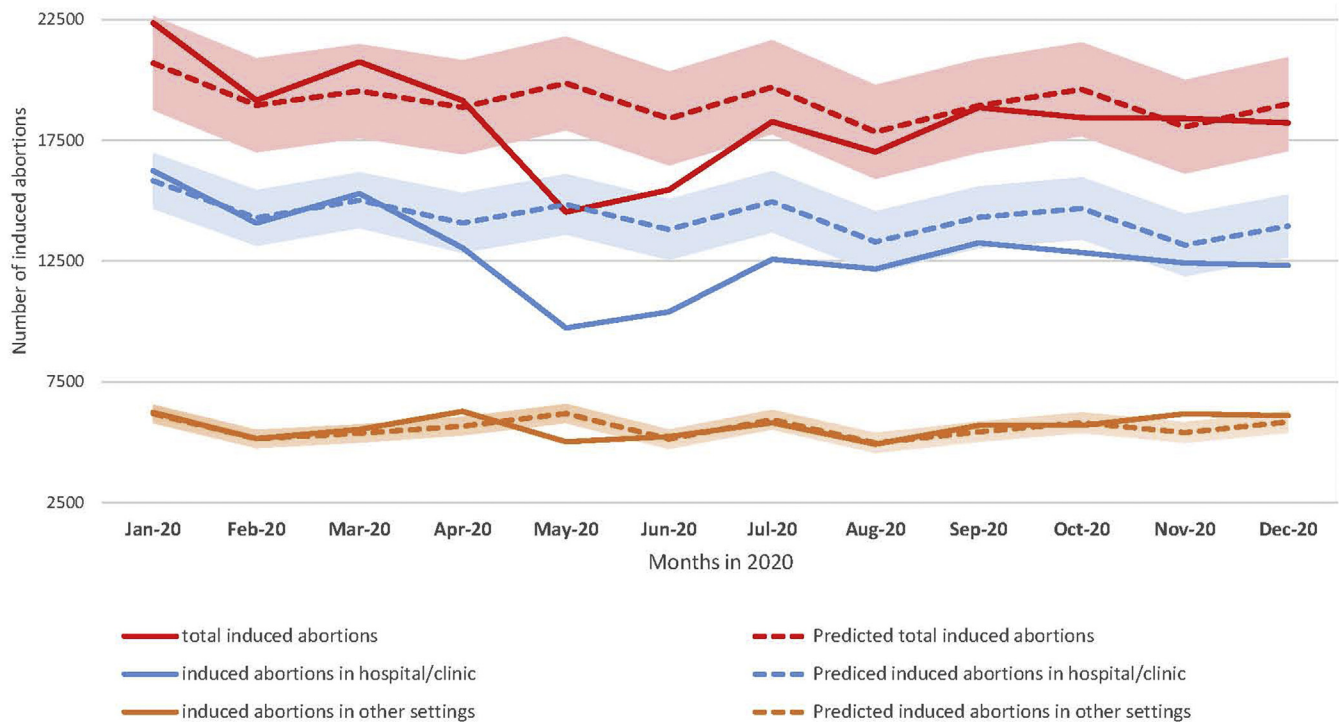


**OBJECTIVE:** A major concern during the COVID-19 lockdowns was reduced access to time-sensitive reproductive healthcare, in particular, healthcare related to abortions.<sup>1</sup> France's first lockdown from March 17 to May 10, 2020, consisted of strict stay-at-home orders that dramatically limited population movement.<sup>2</sup> Medical care was exempted from these restrictions, but pandemic-related health service reorganization and fears of infection created potential obstacles to abortion services. In France, abortions are permitted without restriction until 14 weeks of gestation (until 7 weeks' gestation in an ambulatory setting). After 14 weeks of gestation, only abortions for severe anomalies or maternal health risks can be performed after authorization by a medical committee. To maintain access to abortion services, the government modified management of medical abortions by extending the gestational limit to 9 weeks in an ambulatory setting, authorizing telemedicine visits, and allowing direct pickup from pharmacies of call-in orders for mifepristone and misoprostol.<sup>3,4</sup> This study aimed to

investigate changes in the use of abortion services during and after this first very restrictive COVID-19 lockdown in France.

**STUDY DESIGN:** We used data on the number of monthly abortions from 2016 to 2020 in France (N=1,104,408). Data on all procedural and medical abortions in hospitals and clinics are recorded in hospital discharge data, whereas medical abortions prescribed in doctors' or midwives' offices can be obtained from insurance claims data. We modeled the time series from 2016 to February 2020 to forecast the expected monthly values with their confidence intervals for March 2020 onward using an autoregressive integrated moving average model. Potential increases in delayed care were assessed by the percentage of abortions within 2 weeks of the legal limit. Live birth conceptions were estimated from birth registration data by subtracting 9 months from the date of birth, and monthly conceptions in 2020 were compared with those in 2018 and 2019.

**FIGURE**  
Number of monthly abortions by setting in 2020



Number of monthly abortions by setting in 2020 and its comparison with the predicted values from the ARIMA model. The full ARIMA model from 2016 to 2020 is provided in the [Supplemental Figure](#).

ARIMA, autoregressive integrated moving average.

Vilain. Impact of the COVID-19 pandemic on induced abortions in France in 2020. *Am J Obstet Gynecol* 2022.

**RESULTS:** In 2020, the number of monthly abortions deviated from the predicted data in May and June, but the first 2 months of the lockdown in March and April were in line with expectations (Figure; full time series results in Supplemental Figure). Decreases in the number of abortions occurred in hospitals and clinics. The proportion of abortions at 13 to 14 weeks were similar in 2020 (2.3%) and 2019 (2.7%). In 2020, the estimated number of conceptions ending in a live birth was 123,271 in January and February, 112,335 in March and April, 113,521 in May and June, and 379,006 from July to December or  $-3.5\%$ ,  $-10.3\%$ ,  $-3.3\%$ , and  $+1.4\%$  respectively, of the conceptions that occurred during the same periods in 2019 and  $-5.1\%$ ,  $-11.1\%$ ,  $-1.2\%$ , and  $-1.5\%$  of those in 2018.

**CONCLUSION:** We observed a reduction in the abortions during France's strict COVID-19 lockdown, but the delayed time pattern, the stability of late abortions, and concurrent changes in live birth conceptions suggest that it was caused principally by declines in conceptions. This reduction occurred primarily among induced abortions in hospitals and clinics, and the number of these abortions continued to be lower than expected throughout 2020. However, the total number of abortions was in line with the expectations

from July through December 2020 despite the second pandemic wave in September and October and a less restrictive lockdown in November.

National- and state-level approaches to abortion care have been heterogeneous during the pandemic.<sup>3–5</sup> There are some reports of restricted access to services,<sup>5,6</sup> but data are scarce. Our nationwide study contributes important evidence that broadening the window for medical abortions and permitting telemedicine visits preserved access in France. Our results also highlight the need to account for pandemic-related changes in conceptions when evaluating abortion policies. ■

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## Uterine rupture in subsequent pregnancies following in utero spina bifida closure without stapled hysterotomy



**OBJECTIVE:** This multicenter study describes the pregnancy outcomes in subsequent pregnancies following a pregnancy in which in utero open spina bifida closure without a stapled hysterotomy was performed.

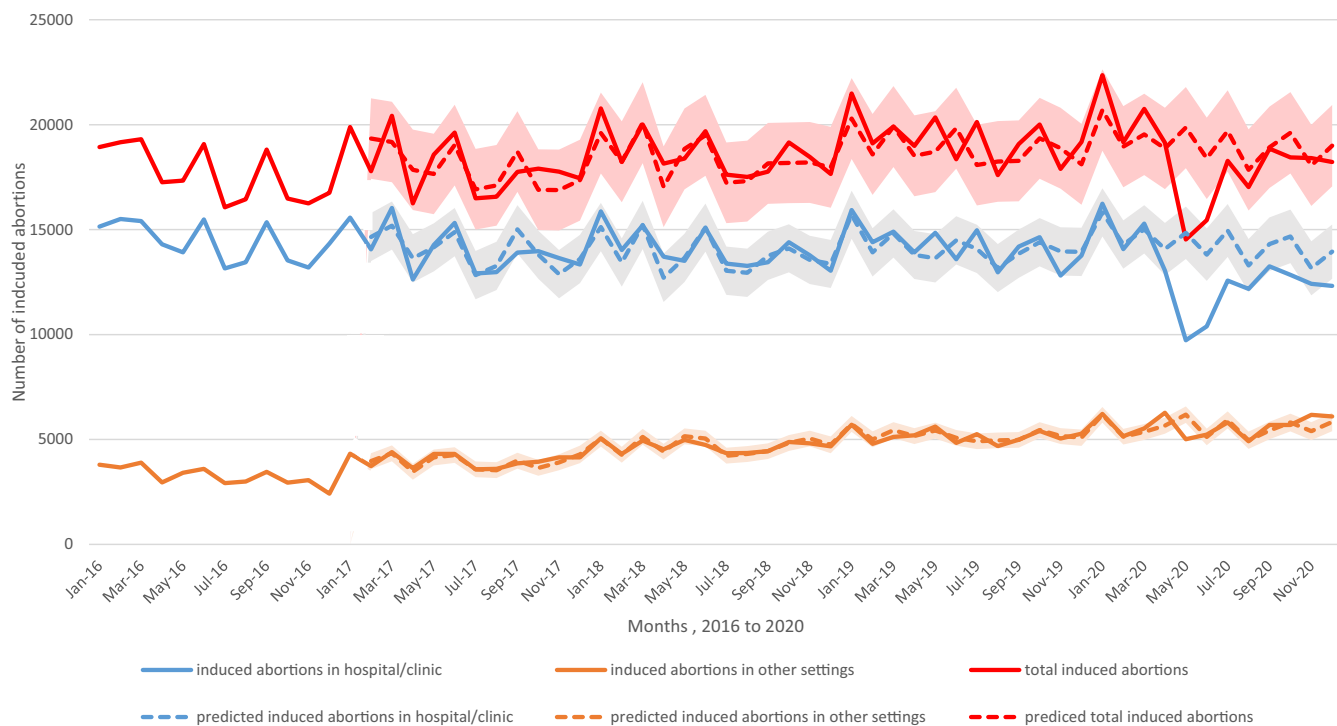
**STUDY DESIGN:** All patients who underwent in utero open spina bifida closure at 5 referral centers in Latin America from 2005 to 2020 were included. During surgery, the initial hysterotomy was performed in the uterine fundus at least 3 to 5 cm away from the placental edge, which was identified using ultrasonography. The incision was made using a surgical scalpel or with electrocautery and it was extended to a length of 4 to 7 cm using a scalpel, electrocautery, or a bipolar clamping device. The chorioamniotic membranes were then sutured to the myometrium using running or interrupted synthetic absorbable 2-0 polyglactin or 2-0 polydioxanone sutures.

The hysterotomy was closed in 2 or 3 layers with running 2-0, 0, and/or 1 polyglactin or polydioxanone sutures. The medical records were reviewed. This study was approved by the Baylor College of Medicine Institutional Review Board (approval number H-38479).

**RESULTS:** A total of 222 consecutive patients underwent in utero, open, spina bifida closure without stapled hysterotomy, with 7.2% (n=16) of them being lost to follow-up. Of the remaining 206 patients, 24.8% (n=51) had subsequent pregnancies, 16.5% (n=34) had subsequent deliveries via repeat cesarean delivery (Table), and there are 3 ongoing pregnancies. Subsequent pregnancies were complicated by abortions (n=12), ectopic pregnancies (n=2), postpartum hemorrhage requiring blood transfusions (n=2), and placental abruption (n=1). One pregnancy was complicated by prelabor uterine rupture, which required a hysterectomy

## SUPPLEMENTAL FIGURE

## Number of monthly abortions by setting from 2016 to 2020



Number of monthly abortions by setting from 2016 to 2020 and a comparison with the predicted values obtained from the autoregressive integrated moving average model. Note that the first 12 months are used to model the time series.

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