Case Report

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Fear is the Path to the Dark Side: Unsafe Delivery, One of the Consequences of Fear of the SARS-CoV-2 Pandemic, A Case Report

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Abstract

Indirect effects of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic are difficult to calculate. Fear of intrahospital infection has led to a decrease in the use of emergency services and the performance of elective procedures. Several low- and middle-income countries have seen the number of institutional deliveries reduced, even in the absence of a follow-up program for home births. We present the case of a patient with adequate prenatal care and an institutional delivery plan who, due to the SARS-CoV-2 pandemic, chose to have a home delivery with unsafe conditions. The lack of supervision by health personnel and the absence of an immediate consultation plan facilitated the presentation of postpartum hemorrhage and poor neonatal results. Little attention has been paid during the pandemic to pregnant women who decide to have their birth at home. A broad discussion is necessary in this regard, to regain the confidence of the population and strengthen institutional births, or to strengthen midwife-assisted home births programs. Patients' fear to acquiring SARS-CoV-2 infection inside hospitals is a factor that must be taken into account in prenatal care programs.

Keywords: SARS-CoV-2; Case report; Delivery; Safety

Introduction

Ensuring medical support during childbirth and timely access to hospital facilities has been one of the goals of obstetricians in the last century. However, some countries recommend home delivery in low-risk populations, accompanying them with trained personnel and planning a timely referral to hospital facilities if necessary,[1,2] whereas others do not consider this idea in their public health policy.[3]

During the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic, obstetric services around the world have seen a decline in occupancy, similar to the decline in emergency services and elective procedures.[4,5] There is growing concern about increased preventable morbidity and mortality associated with late consultations related to patients' fear of hospital admission or with the need to reduce the number of hospitalized patients.[4,6] We report the case of a patient with adequate prenatal control and institutional delivery plan who, due to the SARS-CoV-2 pandemic, chose an unsafe home delivery. Patient has given her consent to publish the clinical information in the journal.

Case presentation

We describe a primigravid with no relevant medical history, private medical insurance, and unremarkable prenatal control who was scheduled for in-hospital delivery. She did well during her pregnancy. However, on March 25 (at 32 weeks gestational age), a nationwide "stay-at-home" mandatory preventive isolation was established in Colombia. As concern increased about SARS-CoV-2 infection inside the hospital where her delivery was planned, the patient decided on home delivery.

At 38 weeks of gestation, the patient spontaneously started labor and was attended at home by nonmedical staff without any formal protocol for supervising labor at home and without established criteria or protocols for timely referral to an obstetric unit, if required. Twenty-six hours after the beginning of labor, a cyanotic male was delivered with poor respiratory effort, and the mother developed severe postpartum hemorrhage after the delivery of the placenta.

No medication was available at home, and no adequate resuscitation of the newborn was performed. The newborn and mother were taken in their particular vehicle to the tertiary obstetric care unit where labor care was previously

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scheduled. The newborn was bradycardic and had poor respiratory effort, which required advanced resuscitation maneuvers, including a protocol of therapeutic hypothermia due to hypoxic-ischemic encephalopathy. In the next 24 hours of hypothermia, the newborn presented with multiple seizure episodes and remained hospitalized after 14 days.

The mother was admitted without active vaginal bleeding yet was pale and tachycardic and had an Hb of 70 g/L. Therefore, the institutional protocol for the management of postpartum hemorrhage was activated. She received one unit of red blood cells and managed uterine hypotonia with oxytocin, methylergonovine, and tranexamic acid. She was stabilized and discharged 4 days later.

Discussion

We present a case of a patient who developed a preventable poor obstetric outcome at delivery. The maternofetal outcome is of greater concern because the mother did not have risk factors for a high-risk pregnancy or unfavorable neonatal outcomes. These catastrophic events would likely have been preventable if the patient had received basic medical assistance in an appropriate health care facility. The latter situation could be attributed to the fear of consulting to a hospital due to the possibility of getting infected with SARS-CoV-2, leading the patient prefer a home birth without the appropriate conditions.

Most public health advice during the SARS-CoV-2 pandemic has focused on social distancing and personal protective measures (masks and handwashing) for health workers and the general population when close contact is necessary. Stay-at-home orders have led to a lower frequency of medical consultations, and to date, a number of authors have shown a lower inflow of patients to hospitals for common pathologies such as coronary events or strokes.[4,7] Our obstetrics tertiary care unit was not exempt from this observation.

Although scientific societies in some countries have issued official communications establishing guidelines for home birth during the SARS-CoV-2 pandemic,[1] in Colombia, there are no established care routes for home labor monitoring. In contrast, it is postulated that all births should take place in hospitals[3] to respond to the changes in health care associated with the pandemic, health services should include programs that ensure access to sexual and reproductive health services while instilling sufficient confidence in the population to seek out these services in a timely manner before complications related to a late consultation occur.[8]

In the case presented, the patient chose home delivery, searching for options outside her health insurance, and without informing her gynecologist, she completely disengaged from the formal routes of care in the Colombian health system. She decided to venture into delivery without medical supervision and suffered from an inappropriate response to an unforeseen emergency, which had serious consequences for her and her newborn.

It is possible that the health of the mother and the newborn would have been very different if they had received basic care during labor and in a hospital. This patient had her prenatal check-ups in her city and had all the resources to make a timely consultation. The only factor that made her opt for home delivery was the fear of SARS-CoV-2 infection inside the hospital. Although home birth is a valid option in countries where it is regulated, fear of SARS-CoV-2 infection among pregnant women can lead to risky behaviors without adequate support from the health system.

Thus far, the estimates of the negative effects of the SARS-CoV-2 pandemic on maternal health and child mortality are concerning.[9] However, these estimates have been based on the decrease in coverage and the increase in health costs for the care of patients affected by SARS-CoV-2. Our case highlights the need to include an additional variable when estimating the side effects of the pandemic: the fear of consulting among patients with adequate health coverage. Although difficult to prove, some authors suggest that patients are more likely to die at home before seeking help for pathologies such as strokes or myocardial infarction.[4]

Maternal health indicators in Colombia have seen a worrying setback in 2020, with a maternal mortality ratio increase to levels similar to those observed in 2012.[10] This is directly related to the pandemic effects on the health system (coverage, early access, prevention programs, etc.) and to the impact of SARS-CoV-2 on pregnant women. Until April 2021, 8327 cases of pregnant women infection were registered in Colombia (among 2,518,715 total cases in the country for April 11), with 70 deaths.[11] Although there are multiple strategies reported to maintain the quality of obstetric care during the pandemic, most of them focus on prenatal care.[12,13] With regard to delivery care, few publications recommend strengthening midwife-assisted home births, all in countries with robust health systems.[14,15] The Colombian health system, as in many other low- and middle-income countries, continues to recommend hospital care for all deliveries, probably due to the impossibility of providing support and surveillance for home births.[16,17]

In view of the fact that many countries are in or have experienced the third "peak" of the pandemic (and new peaks of contagion are predicted), vaccination against SARS-CoV-2 is progressing slowly and there are doubts about the effectiveness of the vaccines available against some strains of SARS-CoV-2; it is important that the different scientific societies discuss in detail the support that will be provided to women who choose to have their birth at home and to those who prefer to attend the hospital.[18]

The "new normal" should arrive as soon as possible, and the required transformation of the health system must ensure that high standards of quality are maintained.[19] The challenge is even greater when considering the economic difficulties that the health system will face.[9] Among the possible strategies to fight the consequences of patients' fear of SARS-CoV-2 infection, we postulate clear SARS-CoV-2 education during prenatal check-ups, telemedicine with initiatives specifically developed for obstetric care, new formats for prenatal care, public health messages promoting immediate consultation in the presence of alarm signs and the availability of safe care routes for patients without SARS-CoV-2, thus minimizing the risk of infection within hospital facilities.

In conclusion, the fear of acquiring SARS-CoV-2 infection inside hospitals is a factor that must be taken into account in prenatal care programs.

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Conflicts of Interest

None.

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