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The coronavirus disease 2019 (COVID-19) pandemic has led to abrupt modifications in the management of antenatal visits, delivery, and postpartum period.<sup>2,3</sup> Telehealth services have been largely implemented to reduce in-person contacts, and in some cases, policies that prohibit the presence of a support person during labor and require temporary separation of mothers with SARS-CoV-2 infection from their newborns have been instituted. Altogether, these changes have taken their toll on women's mental health, with potential unforeseen consequences for them, their newborns, and their close family members.<sup>4</sup>

Both continuous companionship and application of mobility and upright positions during labor are usually recommended for all pregnant women to improve childbirth experience.<sup>5</sup> In addition, these interventions have been associated with improved outcomes for women in labor, including decreased risk of cesarean delivery.<sup>6</sup> This is particularly important in an already at-risk pregnant population such as those with suspected or confirmed COVID-19.<sup>7</sup>

Owing to the COVID-19 pandemic, some women are being deprived of their right to have a support person during labor and to experience mother-baby early bonding as part of measures implemented to prevent the transmission of the virus. Thus, favoring frequent position changes to enhance maternal comfort and promote optimal fetal positioning should be mandatory whenever possible. As obstetricians and midwives, our duty is to protect the expecting mothers and their neonates and to provide them the best care possible. Simple and cost-effective interventions proven to be beneficial to women in labor, such as mobility and alternative positions, should always be promoted and even more so in these difficult times. The delivery table shield proposed by Sahin and colleagues enforces a lithotomic position and creates an additional barrier to interaction between the woman and the physician or midwife during the delicate moments of pushing when physical and emotional support is needed the most. We believe the use of this shield should be discouraged unless adequate personal protective equipment for the assisting physicians or midwives is unavailable. ■

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#### REFERENCES

1. Sahin D, Erol SA, Tanacan A, Ozcan N, Keskin HL, Tekin OM. Protective equipment to use in the vaginal delivery of the pregnant women with suspected/diagnosed COVID-19: delivery table shield. *Am J Obstet Gynecol* 2020. [Epub ahead of print].
2. Arora KS, Mauch JT, Gibson KS. Labor and delivery visitor policies during the COVID-19 pandemic: balancing risks and benefits. *JAMA* 2020. [Epub ahead of print].
3. von Dadelszen P, Khalil A, Wolfe I, Kametas NA, O'Brien P, Magee LA. "Women and children last"-effects of the covid-19 pandemic on reproductive, perinatal, and pediatric health. *BMJ* 2020;369:m2287.
4. Berthelot N, Lemieux R, Garon-Bissonnette J, Drouin-Maziade C, Martel É, Maziade M. Uptrend in distress and psychiatric symptomatology in pregnant women during the coronavirus disease 2019 pandemic. *Acta Obstet Gynecol Scand* 2020;99:848–55.
5. World Health Organization. WHO recommendations: intrapartum care for a positive childbirth experience. Geneva, Switzerland: World Health Organization; 2018.
6. ACOG Committee Opinion No. 766: approaches to limit intervention during labor and birth. *Obstet Gynecol* 2019;133:e164–73.
7. Martínez-Perez O, Vouga M, Cruz Melguizo S, et al. Association between mode of delivery among pregnant women with COVID-19 and maternal and neonatal outcomes in Spain. *JAMA* 2020. [Epub ahead of print].

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## Response to concerns about the use of delivery table shield in the vaginal delivery of the pregnant women with suspected/diagnosed COVID-19



We would like to thank Ornaghi and colleagues for their interest in our article.<sup>1</sup> The authors expressed their concerns that the delivery table shield may have a negative

impact on the psychology, mobility, and breathing of pregnant women during delivery. However, as mentioned in our study, it was only used in the second stage of labor

wherein the mothers were pushing their babies. Because of its unique design, it allows the mothers to maintain eye contact with healthcare professionals. In addition, as shown in the figures of the article, the delivery table shield has an opening at the posterior, and it poses no barrier for respiration. Ankara City Hospital is a mother- and baby-friendly hospital that effectively supports comfort of pregnant women during labor and delivery. Various alternative management strategies such as water birth, implementation of different maternal pushing positions, continuous companionship of healthcare professionals, and use of pilates balls have been successfully performed for years at our institution. In addition, we strongly encourage skin-to-skin contact and breastfeeding.<sup>2</sup>

Healthcare workers around the world have been working under extremely tough conditions to fight against the coronavirus disease 2019 (COVID-19). Many of them contracted the disease, and some of them lost their lives during this period. Ankara City Hospital has also been working as an active pandemic center since the outbreak of COVID-19 in Turkey. We have managed more than 150 cases and performed more than 70 deliveries so far. Approximately one-third of these deliveries were performed vaginally. During this period, we realized the necessity for practical protective equipment that may be used during the second stage of labor to encourage vaginal delivery.<sup>3</sup> Moreover, patients felt great anxiety for the risk of transmitting the virus to their babies. Thus, we designed a delivery table shield. The delivery table shield was used after giving the patients comprehensive information. Informed consent was obtained from the patients, and the delivery table shield was only used with the patients' approval. Both mothers and healthcare staff were satisfied with the delivery table shield. Patients expressed that they felt their babies will be safer during delivery. We are now working on a questionnaire-based survey to assess the objective satisfaction of patients and healthcare professionals. The delivery table shield has been used in 10 different centers in our country with positive comments. In conclusion, the delivery

table shield may be safely used against all respiratory-borne infections including COVID-19. ■

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#### REFERENCES

1. Sahin D, Erol SA, Tanacan A, Ozcan N, Keskin HL, Tekin OM. Protective equipment to use in the vaginal delivery of the pregnant women with suspected/diagnosed COVID-19: delivery table shield. *Am J Obstet Gynecol* 2020. [Epub ahead of print].
2. Moraloglu O, Kansu-Celik H, Tasci Y, et al. The influence of different maternal pushing positions on birth outcomes at the second stage of labor in nulliparous women. *J Matern Fetal Neonatal Med* 2017;30:245–9.
3. Rasmussen SA, Smulian JC, Lednický JA, Wen TS, Jamieson DJ. Coronavirus disease 2019 (COVID-19) and pregnancy: what obstetricians need to know. *Am J Obstet Gynecol* 2020;222:415–26.

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## Intensive care unit admissions for pregnant and nonpregnant women with coronavirus disease 2019



**TO THE EDITORS:** We enjoyed reading the article by Blitz et al<sup>1</sup> entitled “Intensive care unit admissions of pregnant and nonpregnant women with coronavirus disease 2019,” recently published in the *American Journal of Obstetrics & Gynecology*. The researchers did not find an increased risk for intensive care unit (ICU) admission in hospitalized pregnant women diagnosed with coronavirus disease 2019 (COVID-19) compared with those who were not pregnant and concluded that the results were reassuring as they indicated that pregnant women infected with the severe acute respiratory

syndrome coronavirus 2 (SARS-CoV-2) may not experience more severe disease progression than nonpregnant women.

This is in variance with a recent report from the Public Health Agency of Sweden.<sup>2</sup> This report was based on a comprehensive analysis of all pregnant or postpartum women and nonpregnant women with laboratory-confirmed SARS-CoV-2 infection who had been treated in ICUs in Sweden between March 19, 2020 and April 20, 2020. Cases were identified in a special reporting module within the Swedish Intensive Care Registry (SIR). Overall, 53 women aged 20 to