



## Commentary

# Reproductive Health and Coronavirus Disease 2019–Induced Economic Contraction: Lessons From the Great Recession

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### ABSTRACT

The coronavirus disease 2019 (COVID-19) pandemic has magnified disparities in care, including within reproductive health. There has been limited research on the implications of the financial calamity COVID-19 has precipitated on reproductive health, including restricted access to contraception and prenatal care, as well as adverse perinatal outcomes resulting from economic contraction. We therefore examined the Great Recession (the period of economic downturn from 2007–2009 also referred to as the 2008 recession) to discuss how the current financial difficulties may influence reproductive health now and in the years to come. The existing literature examining the impacts of economic downturn on reproductive health provides a resounding body of evidence supporting the need for state and federal investment in comprehensive reproductive health care. Policies directed at expanding access to programs such as Special Supplemental Nutrition Program for Women, Infants, and Children and Medicaid (WIC), extending Medicaid coverage to 12 months' postpartum, continuing coverage for telehealth services, and lowering barriers to access through mobile care units would help mitigate anticipated effects of a recession on reproductive health. (*Clin Ther.* 2022;44:914–922.) © 2022 Elsevier Inc.

**Key words:** COVID-19, reproductive health, US economy, women's health.

### INTRODUCTION

The coronavirus disease 2019 (COVID-19) pandemic has magnified disparities in care, including within

reproductive health. Beyond concerns regarding health outcomes and systemic inequities among people of color and those of lower socioeconomic status, uncertainty remains surrounding indirect outcomes secondary to the economic impacts of the pandemic. Although many studies have examined the effects of the virus itself on reproductive health outcomes, there has been limited discussion on the ways in which the financial calamity of COVID-19 has affected reproductive health outcomes, including restricted access to contraception and prenatal care, as well as adverse perinatal outcomes.

The pandemic has resulted in profound economic impacts, the effects of which are still seen more than a year after the initial cases were reported in the United States. In April 2020, the U.S. Bureau of Labor Statistics reported that the unemployment rate hit a record high of 14.7%, a figure that dwarfs the unemployment rates at the height of the 2008 Great Recession (the period of economic downturn from 2007–2009 also referred to as the 2008 recession) and approaches rates seen during the Dust Bowl period of the Great Depression.<sup>1,2</sup> Women have experienced the majority of jobs lost, despite making up almost 80% of the health care workforce.<sup>1</sup> The U.S. Bureau of Labor Statistics reported that in April 2020 alone, women accounted for 55% of the 20.5 million jobs lost in the United States and that job loss was more prevalent and

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occurred at a more rapid rate for women than for men.<sup>1</sup> A study by Adams-Prassl et al<sup>3</sup> found that in the United States, women faced a higher likelihood than men of losing their jobs or reporting lower earnings during the pandemic in comparable jobs, even when controlling for characteristics such as college degree.

In June 2020, the National Bureau of Economic Research declared that the COVID-19–related economic contracture officially constituted a recession, beginning February 2020.<sup>4</sup> More than a year after the initial spike in unemployment, the economic effects of the pandemic are still palpable. As of March 2021, the economy is showing signs of recovery; however, only 57.8% of the 22 million people who lost jobs in March and April 2020 have regained employment.<sup>1</sup>

Due to persistently elevated unemployment rates, millions of Americans are losing their employer-sponsored insurance and becoming eligible for public coverage through Medicaid. However, there are few data on how this increase in Medicaid eligibility affected existing Medicaid providers. The Kaiser Family Foundation estimates 79% of individuals who lose their employer-sponsored insurance are eligible for a public option, with the majority qualifying for Medicaid.<sup>5</sup> Medicaid has long prioritized coverage for pregnant women, and it funded nearly one half of births in the United States in 2018.<sup>6</sup> At the same time, states across the country reported budget deficits in the hundreds of millions, which may lead to cuts in Medicaid spending.<sup>7</sup> California, for example, announced in May 2020 that health care spending would be cut as part of their efforts to address their projected \$53.4 billion deficit.<sup>8</sup>

In light of the economic instability observed within the past year, compounded by future COVID-19 impacts, it is important to evaluate how contraceptive access and perinatal and birth outcomes may be affected long term. As we consider the implications of this economic recession, we seek to examine the past to inform our future; that is, looking back to the Great Recession to anticipate how the current recession may influence reproductive health in the years to come and how policy can have a lasting impact during and after the COVID-19 pandemic.

## MATERNAL HEALTH AND PRENATAL CARE

Early and regular prenatal care has been shown to be an essential component for improving health outcomes for

birthing people and infants alike, with early initiation of prenatal care resulting in decreased risk of preterm delivery as well as improved birth weight.<sup>9</sup> However, several studies have shown that in times of economic recession, pregnant people are more likely to delay prenatal care or receive no prenatal care altogether.<sup>10–13</sup> Blakeney et al<sup>14</sup> specifically analyzed the differing rates of prenatal care utilization before, during, and after the 2008 recession among women of varying racial and socioeconomic backgrounds, and they found that, as was the case for prior recessions, women who entered prenatal care late or not at all were more likely to be young and less likely to have received higher education. Enrollment in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) has been shown to be effective at reducing late or no prenatal care utilization even in times of economic downturn.

WIC is a federal grant program that provides states with funding for supplemental food and nutrition education for low-income birthing persons and breastfeeding and non-breastfeeding postpartum people, as well as children up to the age of 5 years. As of 2018, WIC served almost one half of infants born in the United States.<sup>15</sup> WIC enrollment reached an all-time high in 2009 during the Great Recession, with enrollment declining steadily since. Despite the fact that the rising unemployment rate during the pandemic increased the number of people eligible for WIC benefits, there was no corresponding increase in participation. Commonly described barriers to WIC enrollment include misperceptions of eligibility, lack of access to transportation to reach WIC clinics, and negative clinic experiences, including long wait times.<sup>16</sup> In September 2020, the United States Department of Agriculture announced extension of flexibilities for WIC recipients, including remote issuance of benefits to all participants, flexibility of food package requirements, and approval for enrollment without being physically present in a local office.<sup>17</sup> These waivers, although an important first step to decreasing barriers to WIC participation, expired by December 31, 2021 or 90 days after the end of the nationally declared public health emergency.<sup>18</sup> Extending eligibility waivers indefinitely could represent an important policy tool to increase WIC enrollment during the economic recovery. Furthermore, effective outreach is essential to correct misconceptions about eligibility. These findings suggest that WIC, although vastly

underutilized in its current iteration, may represent a valuable programmatic vehicle to broaden prenatal care usage, especially during economic downturn.

An examination of maternal outcomes for Medicaid enrollees in North Carolina during the Great Recession (April–June 2009 vs April–June 2010) found that the number of obstetric visits decreased significantly after state budget cuts, likely due to longer wait times and decreased availability of appointments.<sup>19</sup> There is currently little evidence as to how the COVID-19 pandemic and accompanying economic recession affected prenatal care usage in the United States; however, a 2021 survey of health care providers in the United Kingdom found that 70% of units experienced a reduction in antenatal appointments.<sup>20</sup> To limit exposure to the virus while allowing continued prenatal care, the Centers for Medicare & Medicaid Services expanded coverage of telemedicine services. Telehealth services had previously been restricted to Medicare-insured patients living in rural areas, but despite its limited availability, evidence has proven telehealth to be a safe alternative to in-person visits. A systematic review from February 2020 found that telehealth interventions improved obstetric outcomes related to smoking cessation and breastfeeding, in addition to decreasing the need for high-risk obstetric monitoring office visits, while maintaining maternal and fetal outcomes.<sup>21</sup>

Telemedicine was rapidly implemented during the COVID-19 pandemic, and many providers reported improved attendance at prenatal care visits due to elimination of barriers to visits, including lack of transportation and child care.<sup>22</sup> However, despite its utility, telehealth has the potential to exacerbate disparities among patients who may not have access to the necessary resources for adequate visits (eg, home blood pressure cuff, fetal heart rate monitor, reliable Internet, or smartphone). Expansion of telemedicine has the potential to be one of the most significant and lasting changes to the health care system that have arisen due to the pandemic. However, unless lawmakers choose to make these changes permanent, insurance coverage of telehealth is set to expire. In June 2020, the president of the American College of Obstetricians and Gynecologists urged payers to maintain expanded telehealth coverage policies indefinitely, noting that telemedicine addressed barriers to access, reduced emergency department visits and readmissions to

the hospital, and improved adherence to treatment guidelines.<sup>23</sup>

Continued coverage of telehealth is an important policy solution to maintaining access to prenatal care during the economic recovery from the pandemic. However, policies should be implemented to ensure equitable access to telemedicine services. Closed-captioning services or interpreter services should be made available for those who are hard of hearing. Audio-only services should be covered to the same extent as video services so that patients without access to a smartphone can still safely access telemedicine services. Finally, insurance coverage of home equipment such as blood pressure cuffs and home scales is essential to ensure that patients living on low incomes can use telemedicine to the same extent as patients who are able to purchase this equipment on their own.

Prenatal care is an essential component of maternal and child well-being, and usage of prenatal care tends to decline during times of economic downturn. Increased enrollment in WIC and equitable utilization of telehealth are important policy solutions that may improve maternal and child health outcomes during economic recovery from COVID-19 as well as future periods of economic upheaval.

### Birth Outcomes

There is a body of evidence showing an association between economic downturn and adverse birth outcomes, including preterm birth (PTB), small for gestational age, and low birth weight (LBW). One landmark study found that distressing economic news alone leads to birth weight reductions; this outcome was observed after announcements of future job losses before actual mass plant closures.<sup>24</sup> Although the literature has not reached a consensus, increased outcomes such as PTB, small for gestational age, and LBW have been described.<sup>25</sup> One study reported a 16% increase in odds of PTB for unemployment experienced during the first trimester during the Great Recession. This was supported by a subsequent paper from the group showing the same increased risk for PTB even when controlling for maternal factors that may affect outcomes.<sup>26</sup> Other studies have supported this finding, noting increase in fetal growth restriction and LBW, especially among mothers with less than a high school education.<sup>27,28</sup>

Prior studies have also established that residence in a low-income neighborhood is a chronic stressor that may lead to epigenetic changes. The effects of the COVID-19 pandemic have proven to further exacerbate existing inequalities. Due to social determinants of health such as occupation and household composition that make social distancing challenging, pregnant people who are Hispanic or Black have had disproportionately higher rates of severe acute respiratory syndrome coronavirus 2 infection, hospitalization, and death.<sup>29</sup>

A study analyzing the impact of “maternal social vulnerability” and neonatal outcomes found that a higher vulnerability index was associated with a nearly 5-fold higher risk of neonatal test result positivity. Maternal primary residence ZIP code was used to determine Social Vulnerability Index (SVI). SVI comprises variables, including socioeconomic status, household composition/disability, and minority status/language, along with housing/transportation type.<sup>30</sup> Although newborns positive for severe acute respiratory syndrome coronavirus 2 appeared to have minimal burden of illness directly from infection, those born as a result of worsening maternal COVID-19 symptoms were more likely to be premature or preterm, needing resuscitation in the delivery room and/or requiring longer hospital stay.<sup>31</sup> This finding implies the potential for long-term consequences that span generations depending on how heavily a community is affected by the economic and social changes resulting from the pandemic.

Given that nearly one half of US births are financed by Medicaid, state and federal legislative efforts to expand access to Medicaid and extend coverage to 12 months’ postpartum may help mitigate widespread adverse birth outcomes stemming from the economic recession.<sup>32</sup> Extended coverage could help facilitate longer follow-up for medical complications that resulted from pregnancy and promote safer birth spacing through improved access to contraception.<sup>33</sup> Efforts should target optimal pregnancy spacing after the birth of a child due to the levels of short interpregnancy interval (<18 months) being a risk factor for adverse outcomes, including PTB and LBW.<sup>34</sup> With Appareddy et al<sup>34</sup> specifically showing interpregnancy intervals <6 months being substantially higher for the low-income women making less than \$25,000 per year, this population would likely have access to Medicaid and benefit from extended coverage.

Past Medicaid expansions have been successful in narrowing gaps in PTB and LBW, particularly among Black infants, per Brown et al.<sup>35</sup> Historically, extending Medicaid coverage from 60 days to 1 year is a long and time-consuming process states must undergo. However, the passage of the American Rescue Plan Act in March 2021 allowed for a simpler process for states to apply for the 12-month Medicaid extension.<sup>36</sup> This has the potential to directly affect maternal and neonatal morbidity and mortality.

### Contraception

Before the COVID-19 pandemic, access to contraception was already limited by barriers such as direct cost, insurance coverage gaps, and access to providers or pharmacies.<sup>37</sup> During the implementation of stay-at-home orders, these barriers have been exacerbated by the increase in unemployment rates, lack of child care, limited transportation options, transition from in-person office visits to telemedicine, and the concern for contraception prescription refills.<sup>38</sup> Women have been more likely than men to have lost their jobs, and by being unemployed, many have correspondingly lost their work-related health insurance, resulting in reduced access to health care.<sup>39,40</sup>

During the 2008 recession, fertility rates in the United States declined by 4% among all women aged 15 to 44 years. Although studies have shown that this decline was due to several factors, increased contraception use was likely a significant contributor to this decline.<sup>38,41</sup> One study evaluating contraceptive use during the recession reported that, among unmarried women, declining economic conditions resulted in more consistent contraceptive use, use of more effective contraceptive methods, and increased probability of contraceptive use, especially for women of low socioeconomic status.<sup>41</sup> The Guttmacher Institute attributed this increase in contraceptive use to anxiety surrounding economic stress, including unemployment and foreclosure rates. Women also expressed increased interest in long-acting reversible contraceptives (LARCs) during the recession, with 12% of women who were not already using an LARC expressing interest in switching to one.<sup>42</sup>

Although contraceptive use increased during the 2008 recession, some studies showed that economic instability also led to inconsistent use. The Guttmacher Institute reported that 23% of the women or people who menstruate surveyed had a harder time paying

for birth control than in the past, 18% of the active birth control users reported inconsistent use as a way to save money, and 42% felt they could not afford to miss work to visit a physician or clinic to obtain an effective contraceptive method.<sup>42</sup>

From initial analyses of the impact of the COVID-19 pandemic on women's sexual and reproductive health (SRH), economic and social changes have once again shown constrained access to contraception and other SRH services, even as the full effects of the crisis continue to evolve. Among women and people who menstruate aged 18 to 49 years, 33% of those surveyed had trouble getting their birth control, 27% reported increased worry about their ability to afford contraception, 34% wanted to get pregnant later, and, among those with concerns about reduced access to contraception, 23% reported interest in LARCs because of the pandemic.<sup>43</sup>

When directly comparing the effects that the 2008 recession had on SRH, the impact of the pandemic has already had larger consequences for reproductive health goals and behaviors. A higher proportion of women reported delayed or canceled contraception care because of the pandemic than the 2008 recession (39% vs 24%), women are now more careful than previously regarding contraception use (39% vs 29%), and women are more worried than before about affording contraception (25% vs 23%).<sup>43</sup>

Furthermore, the closure of schools and universities in compliance with social distancing mandates limited access for women and teens who relied on school or university-based clinics to receive contraception, which in turn may impede contraceptive use due to confidentiality concerns, inability to establish care with a new provider, or inability to afford contraceptives out of pocket. Although telemedicine approaches may have ultimately expanded access to SRH services for adolescents and young adults, individuals who have been disproportionately affected both socially and economically by the COVID-19 pandemic may still not have access to online health care to obtain contraception.<sup>44</sup> If telemedicine is used, adolescents at home with family may not have a private space where they feel comfortable discussing their contraception options.<sup>45</sup>

Mobile care units are a Medicaid-eligible clinic structure that have shown efficacy with providing quality care in hard-to-reach settings and vulnerable populations.<sup>46–50</sup> To help address contraception needs,

specifically among uninsured patients who lacked access due to cost, a pilot study of a free LARC program in a Florida mobile health center was performed. The program provided comprehensive contraceptive counseling and free access to LARC devices, which included the levonorgestrel intrauterine device (IUD), copper IUD, and subdermal contraceptive implant. The initiative at the mobile center resulted in a 10% uptake of LARCs, which was higher than the overall prevalence rate in the United States for the period being studied.<sup>51</sup> LARC uptake in the patient population under study was also significantly higher compared with the 3% reported earlier by another mobile health center program that only offered hormonal IUDs as an option in 2017.<sup>52</sup> This finding suggests that when cost is not a barrier, economically disadvantaged women and people who menstruate desire access to reliable contraception. Although access to effective contraception is important, it is also equally important to ensure that these methods are provided to all communities, especially to marginalized communities without coercion and by using a shared decision-making model. Directly targeting vulnerable populations could be an avenue to support more women in reproductive planning.

Based on a study examining the impact of Ohio's Affordable Care Act Medicaid expansion, there was a significant increase in the continuous enrollment of women in Medicaid and the use of LARCs through 6 months' postpartum, which could contribute to decreased risks of unintended and short interval pregnancies.<sup>53</sup> However, among the newly unemployed, more than one half will obtain Medicaid coverage in states that expanded coverage under the Affordable Care Act, whereas only around one third will receive Medicaid in the 15 states that have not expanded coverage.<sup>40</sup> The time the pandemic is anticipated to continue is unknown; thus, investment into or expansion of existing mobile care units and Medicaid expansion can provide an important avenue for addressing the reduced access to reproductive care and other medical services during this pandemic.

## CONCLUSIONS

As with other health impacts of COVID-19, it is challenging to apply all lessons learned from the Great Recession to the current economic crisis and its implications for reproductive health. The pandemic is an amalgamation of a health crisis and economic

crisis at a level we have not previously experienced. In addition, the pandemic came at a time when the country was already facing systemic inequities widening access barriers to reproductive health care that disproportionately affect women of color. This is most starkly reflected in the growing maternal mortality crisis. Thus, as we look to the 2008 recession for lessons, it is also important to note the differences. Between 2007 and 2009, the recession impaired global markets, leading to high unemployment rates and housing instability. In contrast, the current economic crisis is the direct impact of necessary social distancing mandates in the midst of a pandemic. This in turn led to high unemployment rates, housing instability, and a high mortality rate. However, the existing literature on recessions and reproductive health provides a resounding body of evidence for the need for state and federal investment in programs that ensure continued access to comprehensive reproductive health care as well as meaningful health policy that creates positive and lasting impacts of SRH.

## DECLARATION OF INTEREST

None declared.

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