

## VIEWPOINT

# Reproductive Healthcare Access and the Cardiologist's Role Addressing Hypertensive Disorders of Pregnancy and Cardiovascular Risk



Malamo E. Countouris, MD, MS, Agnes Koczo, MD

**H**ypertensive disorders of pregnancy (HDP) prevalence and incidence are increasing in the United States, affecting up to 8% of pregnancies and 15% of birthing individuals.<sup>1,2</sup> HDP carry high maternal morbidity and contribute significantly to maternal mortality.<sup>3</sup> The rise in HDP prevalence is partially due to rising rates of prepregnancy cardiovascular risk factors such as obesity, diabetes, and chronic hypertension. Prevalence of HDP is high in the South and Midwest regions (including Louisiana, Ohio, Missouri, Kentucky, and South Carolina), areas where individuals capable of pregnancy have a higher proportion of prepregnancy cardiovascular risk factors as well.<sup>3-5</sup> There is a dose-effect of prepregnancy cardiovascular risk factors, particularly driven by hypertension and diabetes, such that having >1 risk factor is associated with more adverse maternal and fetal outcomes.<sup>6</sup>

Abernathy et al<sup>7</sup> have now shown that states with restrictive abortion access have a higher proportion of pregnancies with live births complicated by HDP as compared with states with protective abortion access (8.2% in restrictive states vs 6.9% in protective states). Contrary to this, when looking state by state, it should be noted that some of the top 10 states with the highest prevalence of HDP (New Hampshire, Alaska, Oregon, and Vermont), actually have more protective abortion policies and access.<sup>4</sup> In the Abernathy et al<sup>7</sup> study, birthing individuals in

restrictive abortion states had a higher proportion of prepregnancy cardiovascular risk factors including obesity, diabetes, and chronic hypertension despite being younger. Although the authors were unable to perform adjusted or causal inference analyses, one could hypothesize that part of the increase in HDP rates in abortion-restrictive states is related to the higher proportion of prepregnancy cardiovascular risk factors. As referenced in the paper, Medicaid expansion states have been shown to have higher prepregnancy enrollment in Medicaid, better prenatal care, and subsequently more HDP diagnoses. Expansion also correlated with a decline in HDP-associated low birth weight infants.<sup>8</sup> Both higher prepregnancy risk factors and Medicaid expansion could contribute to the noted differences in HDP prevalence by state.

Future studies are needed to assess causal mechanisms for the association between abortion restrictions, prepregnancy cardiovascular risk factors, Medicaid expansion, and HDP. Is it the lack of adequate reproductive health care access in abortion-restrictive states that contributes to disproportionately higher rates of unintended pregnancies in individuals at high-risk for HDP? Or is it that there are more individuals at high-risk for HDP in abortion-restrictive states? Longitudinal studies that compare the effects of changes in abortion policy on HDP prevalence over time may help delineate between these mechanisms. Additionally, studies are needed to investigate the impact of interventions providing more accessible reproductive health care resources on HDP prevalence.

One of the major concerns highlighted by this study is that limiting abortion access to individuals in areas with higher rates of prepregnancy

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From the Division of Cardiology, Department of Medicine, University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania, USA.

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cardiovascular risk factors and higher rates of HDP may have implications for both short- and long-term cardiovascular risk. In addition to the peripartum adverse effects of HDP, recurrent pre-eclampsia has been associated with an increased risk of later life complications including hypertension, ischemic heart disease, and heart failure.<sup>9</sup> As demonstrated by Medicaid expansion, improving abortion and other reproductive health care access may help prevent and identify HDP earlier and thus reduce short-term maternal and fetal complications as well as long-term-associated cardiovascular risk.

As cardiologists, we have a vital role to play in optimizing cardiovascular health and cardiovascular outcomes among reproductive age women and birthing individuals. Cardiologists should incorporate reproductive health in their approach to prevention of cardiovascular disease. A cardiologist who is well-versed in contraceptive counseling can educate high-risk patients or those on teratogenic medications on the importance of effective contraception.<sup>10</sup> Having streamlined referrals from cardiology to family planning gynecologists can also help patients more easily access needed reproductive care. For birthing individuals, cardiovascular care starts pre-conception and extends through delivery and into the postpartum period. Furthermore, we should align

ourselves with obstetricians and pediatricians to care for postpartum individuals with cardiovascular complications through the vulnerable first year postpartum. This is particularly relevant in abortion-restrictive states.

Individuals in the United States deserve equitable access to reproductive health care that includes abortion access to help prevent adverse maternal outcomes. Cardiologists are well positioned to impact the incidence of HDP and associated adverse cardiovascular outcomes. Care for individuals at risk for HDP should start with involvement of a longitudinal provider in the preconception period and bridge through the postpartum period.

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**ADDRESS FOR CORRESPONDENCE:** Dr Malamo E. Countouris, University of Pittsburgh, Heart and Vascular Institute, 200 Lothrop Street, Pittsburgh, Pennsylvania 15213, USA. E-mail: [countourisme@upmc.edu](mailto:countourisme@upmc.edu). [@malamo512](https://twitter.com/malamo512).

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