

“The Dilemma of the American Conscience”: The Delivery of Health Care for Asthma in Pregnancy Based on Health Insurance Status in the United States: A Call to Action



Sigrid Payne DaVeiga, MD Philadelphia, Pa

“Imagine that you are creating a fabric of human destiny with the object of making men happy in the end, giving them peace and rest at last, but that it was essential and inevitable to torture ... only one tiny creature ... and to found that edifice on its unavenged tears, would you consent to be the architect on those conditions?”—Fyodor Dostoyevsky, The Brothers Karamazov, 1880

Maternal health has received much attention of late, given recent shocking epidemiologic data establishing high rates of maternal morbidity and mortality in the United States compared with other countries. In 2016, the GBD 2015 Maternal Mortality Collaborators published a study describing how US maternal mortality was rising dramatically as it declined in every other developed country in the world.¹ Other studies have focused on the racial and ethnic disparities in severe maternal morbidity and mortality in the United States.^{2–4} Concerns for disparities in asthma treatment and outcomes also focus on racial and ethnic disparities as well as socioeconomic factors among populations that suffer more extremely from the condition.⁵ The burden of race and ethnic, psychosocial, and socioeconomic factors is well known to weigh heavily on outcomes, morbidity, and mortality for both asthma and pregnancy. Asthma is among the most common preexisting conditions in pregnancy and as Murphy and Schatz⁶ articulate in a recent review, asthma in pregnancy must be approached carefully and thoughtfully by the health care team because this scenario is truly a “hit for two.”

In this issue, Cohen et al⁷ undertake the unwieldy process of reviewing more than 2,600,000 pregnancies identified through 2 large US health care claims databases to describe the prevalence, severity, and control of asthma during pregnancy in the United States.⁷ Notably, the review lend itself to some interesting comparisons because at the outset, the patients were divided into 2 revealing cohorts, a group of 604,420 patients with private

insurance and a group of 2,071,359 patients with public insurance, or Medicaid. In framing this particularly vulnerable population of patients through the lens of insurance coverage and claims data, Cohen et al describe some fascinating findings in the clinical course and care of these patients.

First, Cohen et al define asthma severity on the basis of medications dispensed from 90 days before the last menstrual period to delivery where Global Initiative for Asthma steps 0 to 2 were considered mild, step 3 moderate, and steps 4 to 5 severe.⁸ The number of pregnancies complicated by asthma in the publicly insured cohort (6%) was double that in the privately insured cohort (3%). Rates of severe asthma were comparable between the privately (19%) and publicly (19%) insured pregnant women. Flores et al⁹ also recently described that among women of child-bearing age (18–44 years) in the United States, asthma prevalence and asthma attack in the past year was highest among women with Medicaid/State Children’s Health Insurance Program insurance.

Cohen et al⁷ further defined poor asthma control as 5 or more short-acting β -agonist prescriptions dispensed or 1 or more asthma exacerbations from the last menstrual period to delivery. Although publicly insured women had apparently milder asthma based on treatments dispensed before pregnancy for their asthma, a substantially larger number of pregnant women who were publicly insured (28%) had poorly controlled asthma during pregnancy compared with those with private insurance (17%). Cohen et al⁷ state that considering longitudinal associations, initial asthma severity was not a good predictor for asthma control during pregnancy.

Cohen et al⁷ focused on the analysis of medication patterns based specifically on medications actually dispensed from a pharmacy to a patient. A large number of patients with poorly controlled asthma were not dispensed a long-term controller—38% of privately and 43% of publicly insured patients.⁷ Previous studies suggest that maternal and fetal outcomes can be improved with proper asthma management including controller medications that have been studied for safety in pregnancy.^{10,11} There were noteworthy patterns in dispensing medications for asthma with variance between the 2 divergently insured cohorts in the Cohen et al⁷ study. The most notable discordances included dispensing of at least 1 short-acting β -agonist for 80% of privately insured patients compared with 69% of publicly insured patients and for inhaled corticosteroid/long-acting β -agonist dispensing, the frequency for privately insured patients was 25% compared with 18% for publicly insured patients. For patients on any type of inhaled corticosteroid, including inhaled

Pulmonology Allergy Problematic Asthma (PAPA) Clinic, The Children’s Hospital of Philadelphia, Division of Allergy and Immunology, Philadelphia, Pa
Conflicts of interest: The author declares no relevant conflicts of interest.

Received for publication June 20, 2019; accepted for publication June 20, 2019.

Corresponding author: Sigrid Payne DaVeiga, MD, Pulmonology Allergy Problematic Asthma (PAPA) Clinic, The Children’s Hospital of Philadelphia, Division of Allergy and Immunology, 3401 Civic Center Blvd, Philadelphia, PA 19134.
E-mail: daveigas@email.chop.edu.

J Allergy Clin Immunol Pract 2019;7:2681–2.
2213–2198

© 2019 American Academy of Allergy, Asthma & Immunology
<https://doi.org/10.1016/j.jaip.2019.06.019>

corticosteroid/long-acting β -agonist, the dispensing rates in the first, second, and third trimesters were 59%, 54%, and 52% for privately insured patients compared with 44%, 38%, and 32% for publicly insured patients. These overall low rates of adherence are generally reflected throughout asthma literature, but the important finding here is the dramatically lower rate of dispensing of necessary drugs for asthma for those publicly insured compared with privately insured.

There is mounting concern that Medicaid insurance is resulting in discriminatory care in some settings. A recent lawsuit filed by 5 individual Medicaid beneficiaries against the state of California argued that the program's health services for the poor were so bad that they amounted to discrimination.¹² Patients cite delays in care or lack of access to care, particularly to specialists and surgeons, under Medicaid coverage. The Pew Charitable Trusts reported that California's Medicaid, Medi-Cal, has the third lowest reimbursement rates for doctor services in the country. These low reimbursement rates are implicated in low rates of access to care because some physicians and institutions are not willing or able to offset this financial cost. Physicians in states where Medicaid rates are closer to Medicare reimbursement rates report accepting new Medicaid patients at a higher rate.¹³ On average, Medicaid paid 72% of what Medicare reimbursed in 2016 and a National Ambulatory Medical Care Survey by the Centers for Disease Control and Prevention found significant discrepancies in the percentages of providers willing to accept privately insured patients over publicly insured patients.¹⁴ There are now more than 85 million people with Medicaid in the United States and the demand for care that cannot be accessed by some patients could potentially grow.

Furthermore, many previous studies have indicated that race plays a role in disease care and outcomes. According to the US Census, currently 77% of the general population is white and 13% is black/African American. A striking demographic finding appears in the Cohen et al⁷ study where 40% of the publicly insured patients identify as white and 32% as black/African American. It is commendable that Cohen et al⁷ have emphasized the dramatic differences between privately and publicly insured populations in their study and highlight the representation of a generally under-represented demographic. It is noticeable, though, that the racial demographic data are not available for the privately insured patients in the Cohen et al⁷ study, making it difficult to comment on the role of race in the findings of this study. The keyhole of perspective based on insurance status alone is intriguing and worthy of further investigation, particularly with regard to completed preventative care visits, referrals to specialist care for asthma, and provider prescribing patterns, distinct from dispensing patterns, for pregnant patients with asthma.

In conclusion, it is incumbent upon us as clinicians to provide the standard of care for every patient and that our prescribing practices should not be steered by inherent bias or dictated by the type of insurance a patient has. Our cohesion as a team of

providers, OBGYN, general practitioner, and asthma specialists must be integrated and clear. In a country where prescription and practices of care are already losing clinician oversight as insurance companies create formularies and mandate excessive prior authorization practices, we must continue to do what is right for every patient and particularly in the case of a pregnant mother, where our decisions affect 2 or more individuals simultaneously. The edifice of current American medicine should not be founded on the diminution of care to any individual. In today's dilemma of cultural conscience, the edifice of current American medicine cannot be founded on the diminution of care to any individual.¹⁵

REFERENCES

1. GBD 2015 Maternal Mortality Collaborators. Global, regional, and national levels of maternal mortality, 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet* 2016;388:1775-812.
2. Creanga AA, Bateman BT, Kuklina EV, Callaghan WM. Racial and ethnic disparities in severe maternal morbidity: a multistate analysis, 2008-2010. *Am J Obstet Gynecol* 2014;210:435. e1-8.
3. Leonard SA, Main EK, Scott KA, Profit J, Carmichael SL. Racial and ethnic disparities in severe maternal morbidity prevalence and trends. *Ann Epidemiol* 2019;33:30-6.
4. Somer SJH, Sinkey RG, Bryant AS. Epidemiology of racial/ethnic disparities in severe maternal morbidity and mortality. *Semin Perinatol* 2017;41:258-65.
5. Fitzpatrick AM, Gillespie SE, Mauger DT, Phillips BR, Bleeker ER, Israel E, et al. Racial disparities in asthma-related health care use in the National Heart, Lung, and Blood Institute's Severe Asthma Research Program. *J Allergy Clin Immunol* 2019;143:2052-61.
6. Murphy VE, Schatz M. Asthma in pregnancy: a hit for two. *Eur Respir Rev* 2014;23:64-8.
7. Cohen JM, Bateman BT, Huybrechts KF, Mogun H, Yland J, Schatz M, et al. Poorly controlled asthma during pregnancy remains common in US. *J Allergy Clin Immunol Pract* 2019;7:2672-80.
8. Global Initiative for Asthma. Pocket guide for asthma management and prevention; 2015. Available from: https://ginasthma.org/wp-content/uploads/2016/01/GINA_Pocket_2015.pdf. Accessed January 12, 2016.
9. Flores KF, Bandoli G, Chambers CD, Schatz M, Palmsten K. Asthma prevalence among women aged 18 to 44 in the United States: National Health and Nutrition Examination Survey 2001-2016. *J Asthma* 2019;1-10.
10. Rejno G, Lundholm C, Larsson K, Larsson H, Lichtenstein P, D'Onofrio BM, et al. Adverse pregnancy outcomes in asthmatic women: a population-based family design study. *J Allergy Clin Immunol Pract* 2018;6:916-22.
11. Zetstra-van der Woude PA, Vroegop JS, Bos HJ, de Jong-van den Berg LT. A population analysis of prescriptions for asthma medications during pregnancy. *J Allergy Clin Immunol* 2013;131:711-7.
12. Beitsch R. Are Medicaid's payment rates so low they're discriminatory? September 22, 2017. Available from: <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2017/09/22/are-medicare-payment-rates-so-low-theyre-discriminatory>. Accessed September 22, 2017.
13. Masterson L. Medicaid reimbursement, not expansion status, affects doctors' acceptance of new patients. April 11, 2019. Available from: <https://www.healthcaredive.com/news/mcicaid-reimbursement-not-expansion-status-affects-doctors-acceptance-o/552476/>. Accessed April 11, 2019.
14. King R. Medicaid enrollees last in line when docs accepting new patients. January 24, 2019. Available from: <https://www.modernhealthcare.com/article/20190124/NEWS/190129962/mcicaid-enrollees-last-in-line-when-docs-accepting-new-patients>. Accessed January 24, 2019.
15. LeGuin UK. The ones who walk away from Omelas: a story (variations on a theme by William James). *Utop Stud* 1991;2:1-5.