

## CAPSULE COMMENTARIES

# Capsule Commentary on Lafata et al., Medication Adherence Does Not Explain Black-White Differences in Cardiometabolic Risk Factor Control among Insured Patients with Diabetes

Ana M. Palacio, MD, MPH

University of Miami, Miami, FL, USA.

J Gen Intern Med 31(2):223

DOI: 10.1007/s11606-015-3510-4

© Society of General Internal Medicine 2015

The study by Lafata et al. evaluated whether medication adherence mediated racial disparities in achieving HBA1c, LDL or SBP targets among diabetics.<sup>1</sup> The authors found that blacks had poorer medication adherence compared to whites in all three classes of medications, and were less likely to achieve clinical targets. Racial disparities persisted in multivariable models that included medication adherence and treatment intensification. The strengths of the study are the inclusion of patients from multiple sites and the use of objective adherence and outcome data. A limitation was the use of an adherence definition that required having at least two prescriptions filled, since the exclusion of subjects with no or one refill could have introduced bias.

Other investigators have reported persistent disparities in cardiovascular outcomes between black and white subjects after adjusting for variables such as adherence, income, education, or burden of disease.<sup>2</sup>

This study highlights the complexity of the factors influencing disparities in health outcomes, which are diverse and dynamic and include a range of environmental exposures that shape beliefs, behaviors and interactions with the health system.<sup>3</sup> The authors appropriately advocate the systematic evaluation of multiple types of barriers among subjects not reaching quality targets. This is important, since improvements in quality of care have not eliminated disparities. Chin et al. concluded that reducing disparities requires six key steps which include making equity a priority of quality improvement efforts and designing interventions based on the local root causes.<sup>4</sup>

The patient-centered model of care may facilitate this individualized approach and should be a focus of future research. In the meantime, we must be careful in how we interpret the evidence. Factors such as medication adherence, depression, health literacy, or income play a role, though don't completely explain differences in clinical outcomes among minorities.<sup>5</sup> This should not diminish efforts to recognize or target them. In this study, the percentage of black subjects achieving targets was higher among adherent subjects. We should continue to search for factors that more fully explain disparities, but also develop strategies to improve known mediators of outcomes, among those medication adherence. Equity must be a priority.

**Conflict of Interest:** The author has no conflicts of interest with this article.

**Corresponding Author:** Ana M. Palacio, MD, MPH; University of Miami, Miami, FL 33136, USA (e-mail: apalacio2@med.miami.edu).

## REFERENCES

1. Lafata JE, Karter AJ, O'Connor PJ, Morris H, Schmittiel JA, Ratliff S, Newton KM, Raebel MA, Pathak RD, Thomas A, Butler MG, Reynolds K, Waitzfelder B, Steiner JF. Medication adherence does not explain black-white differences in cardiometabolic risk factor control among insured patients with diabetes. *J Gen Intern Med.* doi:10.1007/s11606-015-3486-0.
2. Collins SD, Torguson R, Gaglia MA Jr, et al. Does black ethnicity influence the development of stent thrombosis in the drug-eluting stent era? *Circulation.* 2010;122(11):1085-90.
3. Kramer MR, Valderrama AL, Casper ML. Decomposing black-white disparities in heart disease mortality in the united states, 1973-2010: An age-period-cohort analysis. *Am J Epidemiol.* 2015.
4. Chin MH, Clarke AR, Nocon RS, et al. A roadmap and best practices for organizations to reduce racial and ethnic disparities in health care. *J Gen Intern Med.* 2012;27(8):992-1000.
5. Smedley B, Stith A, Nelson A. Unequal treatment confronting racial and ethnic disparities in health care. Washington DC: National Academy Press; 2002.

This comment refers to the article available at: <http://dx.doi.org/10.1007/s11606-015-3486-0>.

Published online September 29, 2015