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Commentary: Is experience judgment or bias?

Thomas Vierhout, MS,^a and
Meghana R. K. Helder, MD^b

The study by Patrick and colleagues¹ suggests that with lower neighborhood socioeconomic status (NSES) comes increased risk of mortality and morbidity. It also seems that people living in less affluent neighborhoods receive fewer arterial grafts. The interplay of race and NSES is only addressed momentarily in the article by looking at median NSES for each racial group. African Americans and Hispanics had a lower NSES than Asians and Caucasians. Nevertheless, this is a timely article given the renewed public outcry against racial injustice. Racism and its historic effect on neighborhood makeup and wealth² are public health issues, and this article shines a light on a potential target for intervention from cardiac surgeons.

Although this racial disparity is not clearly spelled out in the article, the assumption is that more Hispanics and African Americans hold lower NSES and as such have a higher risk for stroke, renal failure, prolonged ventilation, and composite morbidity and mortality. This risk holds true even when adjusting for such variables as diabetes mellitus, cerebrovascular disease, and lung disease. So something about a lower NSES leads to higher complications that are not fully explained by

Thomas Vierhout, MS, third-year medical student (right), and Meghana R. K. Helder, MD (left)

CENTRAL MESSAGE

Use of multiple arterial grafts during CABG may not only improve surgical outcomes but also decrease health disparities between patients of different socioeconomic statuses.

comorbidities. The authors point to access to healthy food, lower use of beta-blockers, and increased stressors as potential issues. Another potential issue is lack of understanding of coronary disease in lower NSES populations. Perhaps a target for intervention is more outreach (even by surgeons and not just cardiologists) to poorer communities or more targeted marketing by our professional organizations.

Even more startling is that there is a 6.3% 10-year survival difference between the highest NSES quartile versus the lowest quartile. The authors also point out that there is a decreased use of multiple arterial conduits in lower NSES populations, which likely has a causal relationship given that previous studies have shown increased survival with use of multiple arterial conduits.^{3,4} So this becomes the factor that we can control as surgeons and a real

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opportunity for self-evaluation. Bilateral internal thoracic artery use with its potential drawbacks of vasospasm⁵ and initial hypoperfusion^{6,7} may discourage surgeons who have had previous bad experiences from using multiple arterial conduits, especially in patients whom they deem less compliant. But if the multiple arterial conduits could bridge a 6.3% difference in survival between patients, we need to reconsider our experience and, thus, our judgment. If nothing else, we need to inform our judgment of the higher risk we put our patients with lower NSES at by continuing the status quo.

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Commentary: Are cardiac surgeons treating patients of lower socioeconomic status differently?

Richard Lee, MD, JD, MBA, and Neal Weintraub, MD

A recent article by Patrick and colleagues¹ implies that the answer to the question, Are cardiac surgeons treating patients of lower socioeconomic status differently? is: Yes.

Patrick and colleagues¹ elegantly develop a model defining lower socioeconomic status (SES) using 17 US Census Bureau variables in patients undergoing coronary artery bypass grafting at the University of Pennsylvania and define status at block group level. The Penn team divided the patients into neighborhood SES quartiles, demonstrating that patients in lower socioeconomic quartiles have worse short-term and long-term outcomes. There is also an inverse association to the use of arterial grafts,

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CENTRAL MESSAGE

Neighborhood socioeconomic status impacts outcomes after coronary artery bypass grafting; it is doubtful that the impact can be altered by surgical decisions.

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raising the question of a relationship between long-term outcomes and lack of multiarterial grafting.

As a heart surgeon and cardiologist who are also scientists, this concerns us. The implication is that as providers, we may implicitly or explicitly be biased against offering optimal treatment to this group. Although this may be true, it makes all of us who took and believe that we follow the Hippocratic Oath uncomfortable. Anything that makes us uncomfortable is certainly worth consideration.