ticipant recruitment and enrollment; judge the appropriateness of the outcomes; and evaluate dissemination of results. A more immediate measure of success may be the award of funds to carry out the study because demonstration of meaningful engagement is a core aspect of funding. This work was part of a successful application for the Comparing Outcomes of Drugs and Appendectomy study, a pragmatic clinical trial funded by Patient Centered Outcomes Research Institute.[6] Patient engagement is increasingly important in surgical research, and we encourage others to share their strategies. Just as dissemination of clinical findings leads to improvements in outcomes, dissemination of engagement strategies may increase the success of future studies.

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US Surgeons' Perceptions of Racial/Ethnic Disparities in Health Care: A Cross-sectional Study

Across the field of surgery, racial/ethnic minorities present with higher incidence and prevalence of surgical disease and worse postoperative outcomes.[1-4] Even after adjusting for contributing factors, such as socioeconomic and insurance status, differences persist in the receipt and outcomes of care.[1-4] Research suggests that racial/ethnic disparities in surgical care stem from a complex interplay of patient, provider, and systematic factors.[1] As health care professionals, surgeons play a key role in patients' outcomes. Surgeons' lack of awareness of racial/ethnic disparities in surgical care may impede actions to alleviate gaps in care. The objective of this pilot study was to assess current US surgeons' awareness of racial/ethnic disparities in surgical outcomes and processes of surgical care.

Methods | A 21-question anonymous online survey was sent from July 1, 2013, to March 31, 2014, to a randomly selected sample of 536 practicing general surgeon members of the American College of Surgeons. The questionnaire, described in detail elsewhere,[5] was adapted from work conducted among cardiologists and cardiovascular surgeons in 2004 by Lurie et al[6] and Taylor et al.[7] The modified survey, designed to be completed in 10 to 15 minutes, was validated based on in-depth cognitive testing performed by 5 external surgeon reviewers. The Johns Hopkins University School of Medicine Institutional Review Board approved the study. Completion of the survey required provision of written informed consent.

Data analysis was conducted from April 1, 2014, to November 30, 2015. Analytical methods for the study have been previously described.[5] In brief, descriptive statistics were tabulated for each question using Pearson χ^2 tests, with 2-tailed $P < .05$ considered significant. Responses were weighted for nonresponse bias using demographic characteristics ascertained for both respondents and nonrespondents. To further account for potential confounding owing to sex, race/ethnicity, affiliation with an academic medical center, practice setting (rural, urban, or suburban), geographic location (West, Midwest, South, or Northeast), and year of graduation from medical school, multivariable logistic regressions weighted for nonresponse bias and adjusted for significant differences in demographic factors were performed.

Table. Demographic and Practice Characteristics of Responding Surgeons Reporting Racial/Ethnic Disparities in Surgical Care

Characteristic	In Health Care in General, No. (%)	*P* Value[a]	In Their Hospital or Clinic, No. (%)	*P* Value[a]	In Their Own Practice, No. (%)	*P* Value[a]
Sex						
Male	39/118 (33.1)	.17	12/118 (10.2)	.36	5/118 (4.2)	.78
Female	24/54 (44.4)		8/54 (14.8)		3/54 (5.6)	
Race/ethnicity						
White	46/129 (35.7)	.65	14/129 (10.9)	.38	6/129 (4.7)	.89
Nonwhite	17/43 (39.5)		7/43 (16.3)		2/43 (4.7)	
Practice setting						
Urban	38/110 (34.5)	.46	8/110 (7.3)	.18	5/110 (4.5)	.90
Nonurban	25/62 (40.3)		9/62 (14.5)		3/62 (4.8)	
AMC affiliation						
Yes	52/137 (38.0)	.53	16/137 (11.7)	.89	7/137 (5.1)	.57
No	11/35 (31.4)		4/35 (11.4)		1/35 (2.9)	
Year graduated from medical school						
Before 2000	33/90 (36.7)	.84	7/90 (7.8)	.07	1/90 (1.1)	.003[b]
After or in 2000	31/82 (37.8)		14/82 (17.1)		9/82 (11.0)	
Overall	63/172 (36.6)		20/172 (11.6)		8/172 (4.7)	

Abbreviation: AMC, academic medical center.

[a] Two-tailed *P* values taken from χ^2 tests.

[b] $P < .05$.

Results | As previously reported, of the 536 surgeons contacted, 172 (32.1%) completed the survey.[5] Most respondents were male (118 [68.6%]) and self-identified with non-Hispanic white race/ethnicity (129 [75.0%]). Asian (16 [9.3%]), non-Hispanic black (7 [4.1%]), Hispanic (11 [6.4%]), and other (9 [5.2%]) races/ethnicities comprised the remainder of respondents. A slight majority of respondents (90 [52.3%]) graduated before 2000. Most respondents practiced in urban settings (110 [64.0%]), were affiliated with an academic medical center (137 [79.7%]), and had more than 5 surgeons in their practice (101 [58.7%]).[5]

Overall, reported surgeon awareness of racial/ethnic disparities was low: 63 surgeons (36.6%) agreed that racial/ethnic disparities exist in health care; 20 (11.6%) thought that racial/ethnic disparities were present in their hospital or clinic; and 8 (4.7%) reported disparities within their personal practice. The **Table** shows the results of a stratified comparison based on differences in the demographic factors of health care professionals. Whether male or female, white or nonwhite, urban or rural, affiliated with an academic medical center or not, or graduates of medical school before vs after 2000, all groups of health care professionals exhibited a relative reduction of 54.8% to 78.9% in the likelihood of reporting racial/ethnic disparities when the practice environment moved from health care in general to their hospital or clinic. The difference was even more pronounced when considered for health care in general relative to a surgeon's personal practice, with a relative reduction of 71.0% to 97.0% in the likelihood of reporting racial/ethnic disparities in care.

Discussion | As evidence documenting racial/ethnic disparities grows and the US population becomes increasingly diverse, urgent action is needed to reduce disparities in surgical care. Health care professionals, as leaders in their field, play an essential role, whether through support of related research or implementation of changes in clinical practice. Nevertheless, despite recognition of health care professionals as a contributing factor,[1] the results of our study reveal that, among a national sample of general surgeons, only one-third openly acknowledge that racial/ethnic disparities in surgical care exist.

Careful consideration and further exploration of a larger sample of health care professionals, including surgeons and surgical staff, are warranted to understand what these results mean in terms of surgeon awareness and education regarding racial/ethnic disparities, health care professionals' willingness and ability to acknowledge the reality of personal responsibility, and a lack of understanding as to why such disparities occur.

An important step will involve investment in purported interventions to increase awareness, including workforce diversification, educational initiatives aimed at improving cultural dexterity, and collaborative endeavors led by health care professionals, such as the American College of Surgeons Committee on Optimal Access. To move from awareness to acknowledgment to action, the involvement of health care professionals must not be ignored.

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COMMENT & RESPONSE

Deliberate Self-harm Following Bariatric Surgery

To the Editor We read with interest the recently published article by Bhatti et al,[1] not the least because of the wide media coverage that this article has received around the world since its release.[2-6] By the very nature of it being a retrospective, observational study that has been more commonly reported in the media as a relative (>50%) rather than an absolute (1.3 events per 1000 patient-years) difference, we are concerned about the potential implications of this study[1] for both health care policy makers and the lay public without further evidence.

To better understand these results and their validity, it would be pertinent to know how representative this population-based cohort was. Could the authors please elaborate on how many patients underwent any of the various types of bariatric surgery (including laparoscopic adjustable gastric bands) in the Ontario, Canada, private health care sector or private clinics during the same time period, and what proportion of overall bariatric surgery this cohort constituted. It is highly conceivable that patients managed in the private health care sector, with its vastly different levels of availability of resources, may have different outcomes.

Furthermore, it would be useful to know the waiting times from initial referral to bariatric surgery in the Ontario Health Insurance Plan. Protracted waiting times, uncommon in private health care, lead to increased stress and a reduced quality of life and could conceivably confound postoperative psychological complications.

Given that the vast majority of Australian and American bariatric surgical procedures are undertaken in the private health care sector, the generalizability of these Canadian findings may be limited. Also, it is possible that those bariatric patients who have committed self-harm were different from the general public in many ways, including their nonpsychiatric comorbidities, thus making comparisons to the baseline population rate less valid. It is also possible that self-harm was related to unsatisfactory outcomes or complications after bariatric surgery. The omission of these data has significantly limited us from accurately interpreting the findings of this study.[1]

Finally, given the known preponderance for recidivism in deliberate self-harm cohorts, Bhatti et al[1] should have also reported whether a statistical difference existed between before bariatric surgery and after bariatric surgery, based purely on the number of patients per 1000 patient-years rather than on the number of events per 1000 patient-years. They only performed a very limited subanalysis, excluding patients with 4 or more presentations and including patients with up to 3 presentations, which may have affected the internal validity of their study.[1]

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