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Comment on: Socioecological factors associated with metabolic and bariatric surgery utilization: a qualitative study in an ethnically diverse sample

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Obesity continues to affect a growing number of adults and children in the United States [1,2], leading to significant rates of chronic disease, decreasing quality of life and health span, and rising healthcare costs [3-5]. Metabolic and bariatric surgery (MBS) is increasingly recognized as the most effective and durable treatment for individuals who suffer from severe obesity [6-8], yet marked access disparities by race and socioeconomic status have been described [9-12]. The specific mechanisms behind these disparities are not well understood, although a combination of system, provider, and patient-level factors are thought to play a role [11]. The authors of this manuscript should be commended for directly exploring the latter using qualitative methods, and providing evidence to the factors that contribute to patients proceeding with and succeeding after MBS [13]. Importantly, the authors' decision to recruit a racially diverse population should be highlighted, as this is too often overlooked during trial design [14,15]. Unfortunately, the underrepresentation of nonwhite individuals within study cohorts frequently leaves, otherwise thoughtfully conducted research, with findings that are not representative of racial minorities, and hence should not be generalized to them [16].

Success after any surgical procedure relies heavily on adequate preoperative preparation and thoughtful postoperative care, but few conditions place this burden so heavily on patients and their support network as does MBS. For example, a recent study by Erdogdu et al. [17] demonstrated that health literacy not only has an inverse relationship with preoperative BMI, but also a positive relationship with postoperative weight loss. Though much preoperative multidisciplinary support is provided to patients seeking MBS, it is they who must ultimately overcome significant barriers to proceeding with surgery [18], and undertake meaningful lifestyle changes to ensure its long-term success.

The crucial effect of primary care provider (PCP) support on the likelihood of undergoing MBS has been previously explored, with studies identifying an up to 5-fold increase in the likelihood of serious consideration of MBS among patients whose PCP recommends it compared with those whose PCP does not [19]. Nevertheless, prior work has identified a significant reluctance by PCPs to introduce surgical options for the management of obesity to their patients. For example, Primomo et al. [20] conducted a survey of 388 patients with severe obesity and found >70% of them reported their PCP had not introduced MBS as a treatment option. Moreover, PCPs have been found to be 40% to 50% less likely to discuss MBS with black patients compared with whites, which introduces a disparity early in the care journey [19]. This disparity is of particular importance, as nonwhite patients are more likely to consider MBS when the option is introduced by their PCPs [19], and they are equally as likely as white patients to proceed with surgery once evaluated at a specialized weight center [21]. More recent studies have identified a positive trend in PCP attitude toward MBS, though marked deficiencies in provider education regarding management guidelines as well as willingness to refer for surgical evaluation still remain [22]. Furthermore, the most commonly reported barriers to referral are concerns regarding surgical complications and long-term outcomes, despite a growing body of evidence demonstrating excellent long-term (i.e., 10–20 yr) weight loss and rates of cardiovascular disease resolution after MBS, with minimal risks [6,8,23,24].

Past discriminatory experiences were also identified by the authors as having a positive effect on proceeding with MBS. This finding is consistent with previous reports of an inverse relationship between an individual's quality of life when living with obesity and the likelihood they would consider MBS [25]. Importantly, black patients have been found to have higher quality of life when living with obesity than their white counterparts, perhaps explaining the former's lower likelihood of initial consideration of MBS [25]. This again highlights the important role PCPs play in educating their patients regarding the negative health effects associated with long-term exposure to severe obesity and its related conditions, a process that must certainly take into account patient preference and quality of life, while at the same time exploring beyond it. This is particularly important considering the authors' finding that a desire to achieve resolution of co-morbidities was a primary facilitator of proceeding with MBS, again emphasizing the crucial importance of adequate patient education.

Another important finding of this study is the relationship between the availability of healthy foods and exercise facilities, and success after MBS. This point is not to be overlooked, as it is this same scarcity that contributes to the increased prevalence of obesity among racial minorities and individuals of low socioeconomic status in the first place [26-30]. The solution to this problem will invariably require a realignment of incentives between policy makers, employers, and payors (both public and private) that prioritizes primary prevention and early intervention, instead of delayed management of the chronic disease burden that arises from long-term exposure to obesity and its related conditions.

In parallel with efforts geared toward primary prevention, it is crucial to continue to raise awareness of the importance of early referral for multidisciplinary evaluation, and of the superior benefits of MBS for individuals with severe obesity [7]. Unfortunately, MBS

remains greatly underutilized, with <1% of adults [23] and <.1% of children and adolescents [24] who are medically eligible actually receiving it, and with significant disparities in access among those who do. The recent statement published by the American Academy of Pediatrics [31,32] supporting the use of MBS among children and adolescents with severe obesity is a reassuring sign of an overall change in attitude, but significant work remains ahead. The authors of this manuscript are to be commended for elucidating several of the factors that contribute to patients proceeding with and succeeding after MBS, as this work will help guide resource allocation toward those appropriate areas. Nevertheless, concerted efforts should be directed at similarly elucidating and combating system and provider-level barriers keeping this population from accessing the most effective and durable treatment for their disease, which ultimately results in the perpetuation of long-standing, ever-growing health disparities.

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