Barton et al1 describe the prevalence of nonanemic iron deficiency (NAID) among a cohort of 62,685 US and Canadian women from the Hemochromatosis and Iron Overload Screening (HEIRS) Study. Three definitions of NAID were used: (1) combined transferrin saturation less than 10% and ferritin less than 15 ng/mL (HEIRS definition; to convert to micrograms per liter, multiply by 1), (2) serum ferritin less than 15 ng/mL (World Health Organization [WHO] definition), and (3) serum ferritin less than 25 ng/mL (National Health and Nutritional Examination Survey [NHANES] definition).1 The study stratified results by self-reported race and ethnicity, which included 7 groups: Asian, Black, Hispanic, Native American, Pacific Islander, White, and other (unknown or reported 2 or more groups).1 Unsurprisingly but importantly, the prevalence of NAID significantly increased across definitions in the order of HEIRS (3.12%), WHO (7.43%), and NHANES (15.33%).1 Moreover, the prevalence of NAID was significantly higher among individuals who identify as Black or Hispanic compared with those who identify as Asian or White, irrespective of the applied laboratory definition.1

Iron deficiency is the leading cause of years lived with disability among women of reproductive age.2-5 It is a factor clearly associated with maternal death and morbidity (including diminished IQ), and it is correctable, and, thus, unnecessary, in high-income, middle-income, and low-income geographic settings.2-5 The findings from Barton et al1 add to the growing body of evidence of NAID and iron deficiency anemia (IDA) health disparities among minoritized groups in high-income countries. Race and ethnicity are social constructs that influence access to goods, services, and opportunities, including good health, within society.4 Low socioeconomic status, food insecurity, decreased access to health care (including oral and intravenous iron therapy), Black race, Hispanic ethnicity, and heavy menstrual bleeding are well known risk factors for NAID and IDA.2-4 Prior studies have demonstrated glaring racial disparities in screening for anemia among pregnant women.6 In a large population-based cohort study in California,6 Black pregnant patients had the highest incidence of antepartum anemia (21.5%), followed by Pacific Islander patients (18.2%) and American Indian and Alaska Native patients (14.1%). The high prevalence of anemia among Black patients in the US undoubtedly contributes to the alarming statistic that Black women are 5 times more likely to die from postpartum hemorrhage than White women.4,7 Unfortunately, instead of approaching race and ethnicity as critical social determinants of health and acknowledging the multiple impacts of a discriminatory medical system, race and ethnicity have often been inappropriately held as biological beliefs genetically determining the basis of physiology and pathophysiology.2,4,8

Adding to the vulnerable intersectional (interdependent systems of discrimination or disadvantage) storm of NAID, there is a concern that current ferritin thresholds are inappropriately low and leave a large section of the population, specifically female individuals who are at greatest risk, with undiagnosed, and thus untreated, disease.2 Although Barton et al1 used ferritin cutoffs from the WHO and NHANES of less than 15 ng/mL and less than 25 ng/mL, respectively, these are below the generally accepted threshold of less than 30 ng/mL in adults.1,2 Importantly, there is a growing body of literature suggesting that a ferritin level of less than 50 ng/mL is an early indicator for NAID on the basis of normalization of iron gastrointestinal absorption and metabolism.2,5

Given that the prevalence estimates of NAID are based on inappropriately low ferritin clinical cutoffs, the true prevalence of NAID in the cohort of Barton et al1 is likely much higher. To effectively address multiple systemic barriers to care, public health structural solutions, accompanied by carefully developed implementation strategies, are urgently needed. For example, in Ontario, the
most populous province in Canada, an ongoing initiative called Raise the Bar\(^9\) will change the lower limit of normal of ferritin for adults to a clinical decision limit of less than 30 ng/mL across community laboratories and hospitals coupled with an implementation strategy.

There is no physiological advantage to NAID and IDA in women of reproductive age, and there is evidence supporting screening for NAID and IDA.\(^5\) Being a woman and having NAID is not normal. Being a woman and having IDA is not normal. Being a Black woman, Indigenous woman, or woman of color and having NAID or IDA is not normal. The findings from Barton et al\(^1\) support the importance of applying evidence-based definitions for iron deficiency, especially among Black and Indigenous women and women of color. It bears repeating: NAID and IDA are associated with morbidity and mortality. NAID, IDA, and their consequences are preventable, but screening practices and guidelines are inconsistent. To date, no screening program has been developed for female individuals of reproductive age.\(^2\) Furthermore, the stigma surrounding heavy vaginal bleeding further fosters desensitization and maladaptation.\(^2\) Individuals of low socioeconomic status are at higher risk of NAID or IDA owing to low dietary iron intake and limited access to oral and/or intravenous iron therapy.\(^2\) Thus, the most vulnerable are also the least likely to be tested and treated, which further exacerbates the oppressive cycle imposed by a discriminatory structure.\(^2\) To facilitate better care, we must dismantle structural racism and sexism that is inappropriately normalizing NAID and IDA in women.

In response to the findings of Barton et al,\(^1\) we ask, would the world ever allow for the passive acceptance of laboratory screening definitions that came with the slightest risk of diminished opportunity to address a correctable condition associated with White male mortality, morbidity, and decreased productivity? It is frankly unimaginable. It is time for women and their allies in medical positions of power to stand firm and structurally raise the bar to enhance early detection of NAID in all women.\(^5\) We must do this for all women but especially for those who continue to experience oppression within the health care system, which is an extension of oppression existing outside of it.\(^8\)


