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LETTERS TO THE EDITOR

Quantifying the "glass ceiling": the versatility of the Gini Coefficient in medical education

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Quantifier le « plafond de verre » : La polyvalence du coefficient de Gini en éducation médicale

To the Editors,

I read with great interest the study by He and colleagues.[1] regarding the qualitative barriers and "gendered constraints" in academic leadership. While identifying these lived experiences is critical, I argue that medical education must explicitly advance from describing inequity to measuring its mathematical magnitude using versatile quantitative tools.

I propose adopting the Gini Coefficient. My research group has previously demonstrated the cross-disciplinary versatility of this metric, successfully applying it to contexts as disparate as the operational efficiency of surgical scheduling and the spectral analysis of heart rate variability. Since the Gini coefficient accurately quantifies distributional imbalances in both administrative workflows and physiological stress, it is uniquely suited to objectively measure the distribution of "academic capital."[2,3]

Institutions can generate a precise metric by constructing a Lorenz Curve that plots the cumulative percentage of the faculty population against the cumulative share of leadership roles held. A coefficient closer to 1 would mathematically reveal the vertical segregation described by the participants in He et al.'s study. Implementing the Gini Index would allow faculties to longitudinally monitor whether their policies are truly "flattening the inequality curve" or if institutions remain, as the authors noted, "slow to adopt change."

By grounding the description of gendered constraints in a standardized metric, the Gini coefficient empowers institutions to move beyond qualitative observation, offering a robust quantitative mechanism to track the dismantling of the 'glass ceiling' over time.

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