Geographical Origins of Medical Students: Impact on Preferred Practice Locations

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Abstract

Context: In France, as in many countries, doctors are poorly distributed across the territory. Measures have been deployed to attract and maintain doctors in deficit areas via financial incentives or improvement of practice conditions. On the other hand, very few responses concern the training of doctors. Our objective here is to document the determinants of medical students' preferences for practice location before choosing their specialty and residency location. We assume that personal factors will influence these choices and that some of them can be addressed by public authorities to reconsider medical education.

Materiel: we send a survey to 83.7% of 6th year medical students who chose a residency position in 2022. We received 3,525 responses, resulting in a response rate of 43% out of the 8,039 medical students contacted.

Methods: Our outcome variable is an unordered categorical variable indicating the preferred practice location area for medical students assigned in a specialty (Rural and suburban areas, large cities, other cities and "I don't know") and those assigned in general medicine (Urban, surburban or rural areas or "I don't know"). Using a multinomial multinomial logit, we estimate the probability of indicating a preferred practice location choice l for 8 groups of preferred practice areas. Our main interest variable is the geographical background.

Results: Medical students assigned to a medical specialty are significantly less likely to hail from a rural background compared to those assigned to general medicine. Conversely, a higher proportion of those pursuing a medical specialty spent their childhood in big cities. Regarding behavioral variables and personality traits, we find that medical students assigned to general medicine are significantly more risk-averse than those pursuing a medical specialty. Econometric results show that geographical origins play a significant role in the preferred practice location area. For instance, compared to students who lived in large cities, students who lived in rural areas have a 13-point higher probability of indicating a desire to practice in a rural area when assigned to general medicine and a 7.2-point higher probability of indicating a rural or suburban area when assigned to a specialty.

Conclusion: Our results suggest that recruiting students with a variety of geographical and socio-economic profiles may result in a more harmonious geographical distribution. It therefore seems interesting to question the way in which students are selected in order to diversify their geographical and social profiles