To describe the characteristics of undergraduate medical students (Nature) and of the medical education program components (Nurture) at the University of British Columbia (UBC, Canada), Centre universitaire de Sherbrooke (UdeS, Quebec, Canada) that predict family physicians’ recruitment in non-metropolitan areas.

Doing so, we found that medical students’ personal characteristics as well as respective programs’ components were very different at UBC and UdeS.

Differences in students’ characteristics involved mean age at admission, educational background and pre-admission tests and academic scores. Moreover, the universities have different program components and mandates to prepare to non-metropolitan areas. They have specific mandates and missions and operate within different provincial jurisdictions regarding medical human resources management.

Even if the overall rates of eventual family practice in a non-metropolitan area cannot and should not be compared between the two schools, some similarities in the trends observed for both universities are instructive.

The “nature” of students admitted to medical school, mainly their past experience with living in a non-metropolitan area, will have an impact on the future place of practice for those who were trained as family physicians.

The “nurture” components of the medical program is strongly related to the future place of practice of family physicians, mainly their exposure to a non-metropolitan practice during their clerkship.

These findings have also been reported in the literature.

The major strengths of this study:

• Provides empirical evidence of the characteristics of students admitted to medical school (Nature) and of the medical program (Nurture) that influence choice of practice in non-metropolitan areas.

• Uses a theoretical framework for the analysis and understanding of the “nature” and “nurture” factors that drive choice of practice in non-metropolitan areas.

• A limitation of this study is the quality of administrative data used for analysis. There was a significant amount of missing data as well as some inconsistencies in the data available. Cleaning data, recording and standardizing the variables between the two universities was a major challenge. The effort and amount of resources required should not be underestimated.

We also recognize that using a dichotomous variable (metropolitan/non-metropolitan area) for the concept of underserved areas provides limited information as it does not take into account factors such as the distance from a major academic medical center.

Another limitation of this study is the nature of variables which does not provide a comprehensive understanding of the factors influencing physicians’ placements. Other variables related to their personal, professional and community environments, as well as those related to the candidate process of the students (social representations, fears, beliefs...) would be useful.

Conclusion

Life experience in a non-metropolitan area before entering medical school and the degree of exposure to non-metropolitan medical practice during the clerkship are strongly related to a family physician’s practice setting in a non-metropolitan area.

These results have implications for admission procedures and development of clerkships in non-traditional settings.

The results of this ongoing study will be used as a baseline for a series of studies on the impact of a different pre-clerkship educational program on medical physician workforce.

This exploratory study raises the need for a systematic and standard evaluation of the effectiveness of educational programs for administrative, educational and research purposes. It also indicates that systemic studies using mixed-methods and multilevel analyses will be necessary to fully understand the forces that drive medical graduates to establish their practice where they are most needed.