The Unheard Voices of 'First in Family' Medical Students

Alexa Moschella[1]

[1]Faculty of Medicine, University of Ottawa, Ottawa, ON, Canada

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Decades of research has demonstrated that medical student and physician diversity is associated with enhanced educational experiences, improved patient care outcomes, and culturally competent healthcare. [1–10] Despite these findings, a variety of groups continue to be underrepresented in medicine (URiM). [11] Since 2010, the Association of Faculties of Medicine of Canada (AFMC) has made public commitments to addressing the issue of representativeness and inclusion in medical school admissions; specifically focusing on removing barriers that impede URiM applicants. [12] As a result, medical schools across Canada have introduced specialized application pathways, such as Black, Indigenous, and low-income background streams, to increase accessibility and promote the recruitment of URiM candidates. [13–15]

Historically, equity, diversity, and inclusion (EDI) efforts in medical education have focused on ethnic, racial, and financial minorities in medicine [16]; however, an important URiM population that has been regularly overlooked is 'first in family' (FiF) medical students.

As defined by the Higher Education Act, FiF students are students with parents who did not obtain a bachelor's degree or higher.[17] The term FiF is newly identified as a category in education research to investigate the unique experiences of individuals for whom the culture of higher education is new. [18,19] FiF status presents an additional dimension of disadvantage, that plays a notable role in shaping students' mentality and experiences as applicants, learners, and practicing physicians. [20]

FiF students are particularly impacted by limited social capital, which is defined as social networks and relationships that provide access to guidance and opportunities. [20] In Canada, medical students are more likely than the general population to have parents who have attained high levels of formal education. [21] Non-FiF students are more likely to have expert guidance in higher education as a result of inherited social networks that are easily accessible. [20] FiF students not only lack these networks, but also face consequential barriers tied to self-concept, which includes perceiving a medical degree as an unattainable goal or an exclusive preserve of the social elite. [22] These factors may not only cause FiF students disproportionate stress during the application process, but they may also deter them from applying entirely. Issues tied to self-concept persist after admission, with FiF medical students reporting challenges 'fitting in' amongst their peers, and difficulty reconciling with a new identity that is unfamiliar to their friends and family. [23]

Despite these challenges, the FiF background cultivates resiliency and perseverance, as students are able to achieve a milestone that generations before them have not. [23] It fosters an appreciation to attend medical school and become a physician, which harbors commitment to the field. These are valuable qualities to capture in the physician workforce, as patients with similar experiences can relate to resiliency in the face of adversity. [23]

There is currently no published data on the proportion of Canadian medical school applicants or medical students who are FiF. In addition, the FiF population has not been formally identified by the AFMC as a population of concern in admissions recruitment or social accountability efforts. [24] The lack of published information on this population leaves many questions unanswered.

Due to the novelty of studying the FiF population, the literature is limited in number and sample size, which has presented challenges in describing this group. Collectively, the term 'low socioeconomic status' has been used to identify students from low-income households, who

consequently, are more likely to have parents who are not university educated. [20] This collective definition assumes that FiF status co-occurs with a low-income background. Although studies have shown that FiF students report financial difficulties and holding jobs while studying medicine full time [17,20], it is unclear if all FiF students face financial obstacles. Therefore, demographic data on FiF status and economic status should be collected distinctively, to better understand the diverse experiences that may exist within this group and address both financial and non-financial barriers.

Furthermore, the ratio of Canadian FiF applicants to accepted FiF candidates is also unknown. This presents a challenge in identifying which areas in pursuing medicine (applying, gaining admission, or during medical school) that FiF students may need support. Studies have pointed to the importance of family, teachers, and mentors in motivating students to apply to medical school. [25,26] Attitudes toward the application process, including confidence, resourcefulness, and perseverance are also known to affect the application experience and influence results. [26] Once in medical school, having personal connections to health professionals provides advantages, such as access to clinical or research opportunities, that may not be available to students from non-medical families. [23] These concepts may help to explain obstacles to FiF recruitment and/or the FiF experience during medical school.

The most appreciable limitation implicated by FiF membership is restricted social networks, guidance, and resources in the context of higher education. Therefore, it is plausible that an appropriate action step is to provide access to social support that is lacking. Mentorship programs have been routinely used throughout EDI initiatives in medicine to help students navigate personal and systemic barriers. [27] Studies show that when executed well, these programs have a significant impact on forging connections, building social capital, and improving student success. [20,28] However, students respond best to mentors with similar backgrounds and shared experiences, which facilitates discussion about overcoming similar challenges and adversities. [20,28] Therefore, a matched FiF mentee to FiF mentor initiative would likely be most effective but may be limited by the number of FiF senior students or physicians to act as mentors.

In conclusion, the considerable knowledge gaps regarding Canadian FiF students in medicine presents a pressing call to action for Canadian medical schools and the AFMC to collect more information about this understudied population. As members of the medical community, it is our responsibility to advocate for a medical workforce that accurately reflects the diversity within our society and ensures equitable opportunities for all aspiring physicians. This will forge a healthcare system equipped to address the unique needs of patients from a diverse array of backgrounds.

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