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Widening Participation in Medical Education

Introduction

In many countries, individuals from low socio-economic backgrounds are underrepresented in the medical profession. They are less likely to apply to medical school; a lower proportion of those who do apply are successful in gaining place, and those who gain a place are more likely to experience financial and emotional hardship whilst studying. [1, 2, 3, 4, 5, 6, 7]

Social mobility, including fair access to professional careers, is widely seen as an important social issue. [3] Barriers to social mobility impact upon the medical community. For example, when doctors do not represent the populations they serve, the profession's ability to provide effective health care is compromised. [1,8]

There are several aspects of access to medical education which must be considered if progress is to be made in this area. These areas include: (i) raising aspirations (ii) reducing bias in application and selection processes (iii) addressing challenges to completing medical education (iv) improving the reporting of the issue (v) conducting further research in this area.

Discussion

Raising Aspirations

In many countries, it is unlikely that students from low socio-economic backgrounds will consider medicine as a suitable or realistic choice for them. In contrast medical careers have been normalised for students from affluent backgrounds and therefore often considered unproblematic, they are an alien concept for many students from lower socio-economic backgrounds. Amongst these students, there is often a perception that such a career is unattainable [1,10].

Factors of socio-cultural context and familial and institutional habitus all influence aspects of personal identity and therefore play important roles in determining aspirations. Lack of exposure to medicine as a career, poor or no subject and career advice at school, and inadequate peer and family support all contribute to the problem. In addition, the elitist image projected by the medical profession can adversely impact on the aspirations of those from low socio-economic backgrounds [10, 11].

The evidence, although limited, suggests that outreach programmes that attempt to re-orientate individual identities may only be effective if accompanied by work to re-orientate society's perceptions of the medical profession. [10] This is a potentially difficult task which may require region-specific approaches that account for cultural context. More work may be needed first to assess how low socioeconomic groups across the world perceive the healthcare profession.

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It is known that teachers and parents can have a significant influence on the career choices of young people. Evidence suggests that some teachers hold the view that students from their school are not suitable for the medical profession. [11] If students who encounter this attitude at school are similarly unsupported at home, it reduces their chances of applying to study medicine. Educating parents and teachers about the importance of a more diverse workforce and the practicalities of applying to and studying medicine may be an effective way to widen participation.

Work must be done to understand how we can alter society's perception of the medical profession and we should aim to raise the aspirations of individuals from low socioeconomic backgrounds through challenging personal identity. This may be achieved through educating parents, teachers and young people and facilitating early exposure to medical careers.

Reducing bias in application and selection processes

Schools, families and peers are often unable or unwilling to support students from low socio-economic backgrounds who wish to apply to medical school. Indeed, it may even be the case that students are discouraged from applying [10, 11].

For students who do apply, the entry requirements vary between and within countries; examples include national examinations, cognitive ability testing, psychometric testing and interviews. Evidence suggests that certain requirements disadvantage those from lower socio-economic backgrounds. For example, studies from the UK and Australia demonstrate that cognitive ability testing favours those from fee-paying schools. Some medical schools adjust their entry requirements for those from lower socio-economic backgrounds and/or run more accessible foundation courses. The impact of this on the quality of the medical profession is unclear and there is no uniform or evidence-based standard to such an approach. However, adjusting requirements should not necessarily be viewed as lowering them. The achievements which are currently most valued e.g. exam results, are not necessarily good indicators of a person's ability to be a good doctor and we must endeavour to determine which criteria are most effective at selecting suitable individuals for the medical profession. [6, 16, 17, 18, 19]

Financial barriers throughout the application process must also be considered - application fees and travel expenses to attend interviews may be a barrier. This is particularly important in the context of medicine as individuals are often advised to apply to multiple institutions to maximise their chances of success. Online interviews and exemption from application fees may reduce financial barriers.

The lack of evidence in this area suggests a need to better understand the impact that application and selection criteria has on equal access to medical education and the impact of change in these areas, to ensure that widening participation activities are

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evidence based. Financial barriers within the application process should be addressed.

Addressing challenges to completing medical education

There are financial and emotional challenges associated with completing medical school for many, however they are often more problematic for those from low socio-economic backgrounds. [1, 9]

Levels of debt vary according to individual and country factors, including tuition fees, the cost of living, whether or not students contribute financially to their family and whether or not students are studying medicine as a second degree. However, overall, students from lower socio-economic backgrounds graduate with higher levels of debt. This is despite the fact that many of them are employed throughout their time at university. [15, 16, 17,]. Tuition fees are a barrier to widening participation as it is known that institutions with higher tuitions fees have a lower intake of students from lower socio-economic backgrounds. [9]

Evidence, though limited, suggests that an individual's level of debt may influence their choice of speciality. This is further suggestion that increasing the numbers of individuals from low socio-economic backgrounds who are accepted into medical school in isolation is not enough; students must be supported throughout their time at university. [18]

It has also been acknowledged that students from lower socio-economic backgrounds face greater academic challenges than their peers. This is due to a number of reasons, including less academic support in secondary education and varied cultural and social resources. Efforts to tackle this issue that have been successful include student mentors, personalised learning programmes and positive incentives such as awards for high-quality work. [22]

There is evidence that "non-traditional" students, including those from lower socio-economic backgrounds may find it difficult to "fit in" at medical school, may have less familial support throughout their studies and may be reluctant to seek help from their university. It is for these reasons that academic and emotional support, such as counselling and mental health support, is important for widening students' participation. [10]

Supporting medical students financially and emotionally throughout their medical education is an important component of widening participation.

Improving the reporting of the issue

The existence of policy on widening participation does not necessarily mean it will be effectively implemented. Therefore, there is a requirement for monitoring and evaluation of widening participation activity. It is important that this data is accurately

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reported in a non-misleading manner. [19, 20]

The context in which this issue is reported is also important. As widening participation is an important component of developing a socially accountable profession, it should be a source of pride for medical schools. Achievements in this area should be considered when assessing institutional prestige and should be rewarded. Currently, institutional prestige is generally not determined by service-to-society but by other parameters, such as research output or league table position. Developing national or international database(s) which record performance in this area may be helpful. [21]

Institutions should monitor and evaluate widening participation initiatives that they implement and should report the data accurately. This data should be considered when assessing institutional prestige. A national or international database may be an effective way to collect comparable data from institutions.

Conducting further research in this area

It is important to gain a better understanding of which countries in the world this is a significant problem and the nature of the problem in that country. Even in countries where the scale of the problem is clear, there are still many unanswered problems.

Listed below are some of the important questions which should be answered:

1. In which countries in the world, is diversity of the healthcare workforce limited by low numbers of individuals from low socio-economic backgrounds entering into and completing medical education?
2. What are the key reasons behind low application and acceptance rates to medical school from lower socio-economic groups?
3. How can medical schools ensure that they are recruiting the best candidates from a range of socio-economic groups?
4. What are the most effective methods for widening participation in medical education?
5. What impact does graduate entry have on widening participation?
6. How can students best be supported while at university to ensure their retention, mental and physical well being, and that their speciality choices are not restricted?
7. How can the impact of changes be monitored? [1]

Calls to Action

The Medsin network will:

- Explore existing literature further to better understand in which countries this is a problem and the scale of this problem
- Contribute to further research in widening participation where needed
- Support and/or lead outreach programmes in schools in socioeconomically

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deprived areas to expose students to medical careers, raise aspirations and mentor students through the application process, whilst evaluating the impact of the work.

- Advocate for wider participation in medical education, through running local, national and international campaigns which target policy makers and educators

Medsin calls medical schools to:

- Support and/or lead outreach programmes in schools in socioeconomically deprived areas to expose students to medical careers, raise aspirations and mentor students through the application process
- Evaluate and monitor the impact that their entry requirements and changes to their entry requirements have on widening participation
- Develop and research new admission criteria that have meaningful predictive value for desired future medical practice attributes
- Exempt those from low socio-economic backgrounds from application fees and offer online admissions interviews, or reimburse travel and accommodation costs
- Financially, emotionally and academically support all students throughout their time at university
- Contribute to the reorientation of the image that the medical profession projects to society through educating teachers and parents
- Report accurately the nature and scale of the problem at their institution and the progress that they are making

Medsin calls governments to:

- Invest in free higher education to ensure that tuition fees are not a barrier to participation in medical education
- Provide financial support to medical students from lower socioeconomic backgrounds
- Ensure that schools have the infrastructure to expose all young people to a career in medicine and support them through all aspects of the application process
- Fund research to better understand this problem and the solutions

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