

Medical student selection and society: Lessons we learned from sociological theories

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Abstract

The aim of this study was to show the interaction between the society, applicants and medical schools in terms of medical student selection. In this study, the trends to implement social factors in the selection process were highlighted. These social factors were explored through functionalism and conflict theories, each focusing on different categories of social factors. While functionalist theorists pay attention to diversity in the selection process, conflict theorists highlight the importance of socio-economic class. Although both theories believe in sorting, their different views are reflected in their sorting strategies. Both theories emphasize the importance of the person-society relationship in motivation to enter university. Furthermore, the impacts of social goals on the selection policies are derived from both theories. Theories in the sociology of education offer an approach to student selection that acknowledges and supports complexity, plurality of approaches and innovative means of selection. Medical student selection does not solely focus on the individual assessment and qualification, but it focuses on a social and collective process, which includes all the influences and interactions between the medical schools and the society. Sociological perspective of medical student selection proposes a model that envelops the individual and the society. In this model, the selection methods should meet the criteria of merit at the individual level, while the selection policies should aim at the society goals at the institutional level.

Keywords: Medical Student Selection, Medical Student, Medical education, Society.

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Introduction

Medical student selection faces many challenges; as there is an imbalance between the number of students who apply and those that can be accommodated, only a limited number of applicants. The first impression is that as this selection process allows the best students to be accepted, it is an acceptable method; however, the real problem lies in determining how the best students are defined. Routinely, medical schools assess applicants in terms of examination results based on individual applicant characteristics. The question that arises is that which should be considered the best selection, the student who had performed best at the entry examination or the one

who will perform best in a lifetime of medical practice in the society (1)?

A balancing act for admission to medical school seems to be the fair and appropriate answer: Be fair to the applicants and to the society by choosing those with the potential to be good doctors (2). There is widespread agreement that applicants should be selected on wider criteria than scores of entry exams (3,4). Medical schools are to benefit the individual not as a goal but as a means to shape a more progressive and productive society (5).

Medical schools must encourage participation in higher education by setting clear admissions criteria that if met, offer access to any applicant regardless of socioeco-

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conomic background. Universities should actually minimize barriers and seek a student body that reflects in some measure the broad spectrum of the society, including lower income and disadvantaged groups. Universities should also provide academic and professional programs relevant to the individuals and society and to the local, state, and national and international communities (5).

This notion highlights the importance of developing a close relationship between the applicants, society and medical schools. Understanding and organizing medical student selection in this sense calls for a more profound and basic theoretical approach in sociology. We begin to understand medical student selection through the eyes of sociology, as we believe that medical education has been enriched by perspectives and knowledge developed in sociology (6). Perspectives on sociology open a new path to determine our choices and policies in selecting students in medical education.

In this study, we aimed to explore how student selection is understood and conceptualized and to offer some promising theoretical considerations and their implications for practice. Sociology, its theories and perspectives on education do not directly focus on student selection, but their extension to this new field could help us understand and organize it. Thereby, the focus of this article was not on the selection methods per se, but rather, on the relationship between the society, medical schools, and applicants. In other words, our approach examined the policies of the student selection, the relationships between methods and policies and the impact of social factors on them.

Introduction to Sociology of Education

The sociology of education is the study of educational structures, processes and practices from a sociological perspective. This means that the theories, methods and the appropriate sociological questions are used to better understand the relationship between educational institutions and society, both at the micro and macro levels (7). As a

source of information and training for future teachers, and as a source of information for policy makers, sociology continues to draw attention to the social context of what goes on in education. In either case, the sociology of education uniquely focuses on the social context of educational structures and processes, and its contribution will continue to be invaluable for understanding and reforming educational systems, particularly as they change to accommodate new social needs and new technologies (8).

There are two major theories in this field: Functionalist and conflict theories, which reflect underlying beliefs about education and its relationship with the society. Yet, with renewed calls for medical student selection, both conflict and functionalist theoretical perspectives should be reviewed. Within each theoretical framework, the authors begin with a definition of education from that viewpoint and then discuss implications for medical student selection (8-10).

The Functional Approach to Education

In the functionalist theory, education serves many important functions in the society. It transfers moral values, ethics, politics, religious beliefs, habits and norms to the next generation and prepares them for life in the society; this is called socialization. Therefore, education as a social institution develops around central needs or problems of the society. The socialization process is carried out primarily in the family. However, as societies become more complex and the path to becoming a doctor become more twisted, other elements are necessary to continue the process (6-8).

The functional approach makes several assumptions about education that requires some attention. Functionalists perceive modern society as a system in which success is achieved; ability and work are more important than being given something or inheriting. The poor should have the same opportunities to enjoy high-status jobs as the rich. Functionalists view society as an expert society, one that needs people who

are highly trained and who have developed specialized skills. Modern society is becoming more and more complex, and this implies an ever-increasing need for expertise and technical knowledge. Functionalists also perceive modern society as a democratic society in which an educated citizenry is an informed citizenry composed of people who are more likely to make responsible and informed decisions, are likely to be less prejudiced and more tolerant, and who are more concerned with the quality of life and social justice.

Functionalists view education as providing a number of obvious and important functions: Passing on the culture of the society, facilitating the mixing and merging different classes and ethnic groups, creating the informed citizenry necessary in a complex society, producing cognitive skills, screening, sorting and selecting talents and abilities, developing new knowledge and providing scientific discoveries. Functionalists hope for a sorting mechanism that is truly class and colorblind, in which the sharper and harder-working students are rewarded by being placed in the higher classes. This is basically linked to merit (11,12).

Governments have asked for medical selection systems to be reviewed, as current systems persistently fail to widen participation for lower socio-economic groups independent of gender and ethnicity. Education is a strong determinant of later-life income and opportunities; and hence, a major contributing factor to patterns of poverty, social immobility and inequality. A review is specifically needed to evaluate the contribution of various initiatives and policies engaged by medical schools to broaden their admission of disadvantaged groups, and review medical school selection processes through the lens of widening access (10,13).

A rationale for a wider access to medicine is to improve healthcare provision by ensuring that doctors are representative of the society they serve to provide the best possible care to the population (11). This ra-

tionale assumes that increasing the diversity of the medical workforce will improve healthcare based on the assumption that "like would treat like". The data supporting this assumption comes from the U.S. where the approach to WA is a race-conscious affirmative action rather than class-focused meritocratic activities favored in the UK (14).

Additionally, those students who receive education in more diverse medical schools gain a greater understanding of other people from different socio-cultural backgrounds, and this increases their ability to provide healthcare to those with backgrounds different from their own.

The Conflict Approach to Education

Conflict theorists view education quite differently than the functionalists. First, conflict theorists see a struggle among the competing groups to control education. The struggle for control represents each group's attempts to advance its own set of interests and instill its own values in the education system. Second, the struggle among the groups is unequal, as the privileged class with the superior power and resources always has the upper hand (7).

Conflict theory looks at the disintegrative and disruptive aspects of education. These theorists argue that education is unequally distributed in the society and is used to separate groups based on class, gender, or race. Therefore, educational level is a mechanism for producing and reproducing inequality in the society. Educational level, according to conflict theorists, can also be used as a tool for discrimination, such as when potential employers require certain educational credentials that may or may not be important for the job. It discriminates against minorities, working-class people, and women – those who are often less educated and least likely to have credentials because of discriminatory practices within the educational system (7-9).

Inequality of access is due to wider societal and economic issues, which are beyond the power of individual universities and

medical schools, or ministry of health. Addressing class barriers to attainment is a political mandate, the one that should be targeted during the pre-school and early years of school, and not to be left to secondary school level where social class inequalities are increased even further (15-17).

With respect to medical student selection, it seems that some selection processes such as traditional interviews and autobiographical submission, lose their discriminating power and are biased in favor of those from higher socio-economic classes as they become susceptible to coaching. There is a considerable degree of uncertainty around the nature and strength of the relationship between predicted or actual grades at the current level and attainment as a doctor in the UK setting (14-17).

Some policies such as deficit model, affirmative action and foundation program have been designed and inserted to neutralize the impact of socio-economic class. The “deficit model” presupposes that young people from disadvantaged backgrounds lack the necessary knowledge, skills and/or qualifications to successfully apply for university admission. Affirmative action is based on defining quotas, percentage plans and targeted recruitment for lower income and disadvantaged groups. Foundation programs (see “Getting ready”) address inequalities in attainment. Another approach is the use of contextual data in the admissions

process. Contextual data means setting an application in its educational or socio-economic context, such as acknowledging the type of school attended. Supporting Professionalism in Admissions (SPA) has produced an extensive report that outlines the rationale, possible methods and outcomes when the use of contextual data is possible in the university admissions process (14-17).

Conclusion

The aim of this study was to demonstrate the interaction between the society, applicants and medical schools in terms of medical student selection (Fig. 1). In this study, the trend to implement social factors in the selection process was highlighted. These social factors were explored through functionalism and conflict theories, and it was shown that these theories focus on different categories of social factors. While functionalist theorists pay attention to diversity in the selection process, conflict theorists highlight the importance of socio-economic class. Although both theories believe in sorting, their different views are reflected in their sorting strategies. Both theories emphasize the importance of person-society relationship in the motivation to enter university. Furthermore, the impacts of social goals on the selection policies are derived from both theories.

The perspectives on sociology, both im-

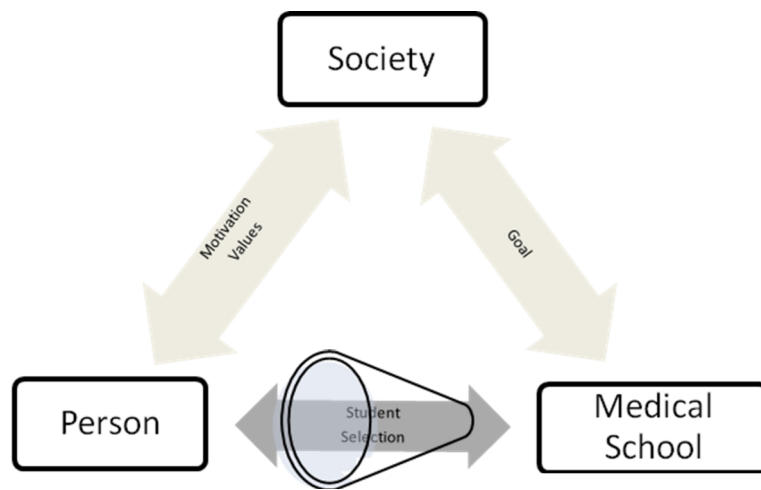


Fig. 1. The Relationship between the Society, Applicants and Medical schools

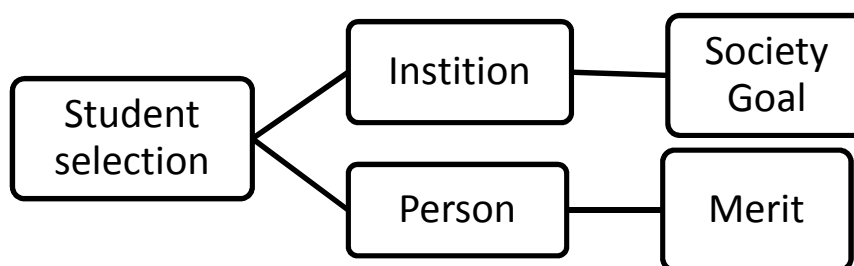


Fig. 2. Medical Student Selection Model

PLICITLY and explicitly, embody the theories and beliefs we hold about student selection. Medical student selection influences the doctors' life from the day of entry into medical school until the last day of practice. Medical student selection is driven by society concerns and professional needs.

Perspectives on student selection are embedded in the theories. The organization of medical education must define certain assumptions about the relationship between the society, medical institution and medical school.

Theories in the sociology of education offer an approach to student selection that acknowledges and supports complexity, plurality of approaches and innovative means of selection. Medical student selection does not solely focus on the individual assessment and qualification, but it focuses on a social and collective process, which includes all the influences and interactions between the society and medical schools. Sociological perspective of medical student selection proposes a model that both envelops the individual and the society (Fig. 2). In this model, the selection methods should meet the criteria of merit at the individual level, while the selection policies should aim at the society goals at the institutional level.

Our view underlies the theoretical perspectives, which may provide guidance in the future.

It seem to be no financial or reputation incentives for medical schools to widen participation at the current time. Moreover,

there are several risks including the possibility of accepting those students who may struggle and bring down the institutional tariff if admitted with lower academic achievement. Therefore, it may be argued that poor progress with WA in medicine is not necessarily a purposeful negative intention of medical schools. Markers that contribute points to national league tables can reward medical school initiatives and admission of students from lower socioeconomic backgrounds financially and reputationally.

References

1. Leinster S. Selecting the right medical student, *BMC Medicine* 2013;11:245-247.
2. Hughes P. Can we improve on how we select medical students? *J R Soc Med* 2002 Jan;95(1):18-22.
3. Reede JY. Predictors of success in medicine. *Clin Orthop Rel Res* 1999;362:72-7.
4. Greengross S. What patients want from their doctors. In: Allen I, Brown P, Hughes P, eds. *Choosing Tomorrow's Doctors*. London: Policy Studies Institute 1997:12-19.
5. Aubrey Douglass J. *The conditions of admission: Access, Equity, and the Social Contract of Public Universities, California*: Stanford University Press 2007.
6. Mann KV. Theoretical perspective in medical education: past experience and future possibilities, *Med Educ* 2011;45(11):60-8.
7. Hallinan MT. *Handbook of the sociology of education*, Sage 2006.
8. Girotti J A, Soon Park Y, Tekin A. Ensuring a fair and equitable selection of students to serve society's health care needs *Med Edu* 2015;49:84-92.
9. Maudsley RF. Content in context: medical education and society's needs. *Acad Med* 1999;

74:143-5.

10. Global Consensus for Social Accountability of Medical Schools. Global Consensus for Social Accountability of Medical Schools. www.healthsocialaccountability.org. 2010. [Accessed 21 November 2013.]
11. Komaromy M, Grumbach K, Drake M, Vranizan K, Lurie N, Keane D, et al. The role of black and Hispanic physicians in providing health care for underserved populations. *N Engl J Med* 1996; 334:1305-10.
12. Mullan F, Chen C, Petterson S, Kolsky G, Spagnola M. The social mission of medical education: ranking the schools. *Ann Intern Med* 2010; 152:804-11.
13. Strasser R, Hogenbirk JC, Minore B, Marsh DC, Berry S, McCready WG, et al. Transforming health professional education through social accountability: Canada's Northern Ontario School of Medicine. *Med Teach* 2013;35:490-6.
14. Powis D, Hamilton J, McManus IC. Widening access by changing the criteria for selecting medical students. *Teach Teach Educ* 2007;23:1235-45.
15. Steinecke A, Beaudreau J, Bletzinger RB, Terrell C. Race-neutral admission approaches: challenges and opportunities for medical schools. *Acad Med* 2007;82:117-26.
16. Odom KL, Roberts LM, Johnson RL, Cooper LA. Exploring obstacles to and opportunities for professional success among ethnic minority medical students. *Acad Med* 2007;82:146-53.
17. Lieberman SA, Ainsworth MA, Asimakis GK, Thomas L, Cain LD, Mancuso MG, et al. Effects of comprehensive educational reforms on academic success in a diverse student body. *Med Educ* 2010;44:1232-40.