

Research Article

Perspectives of Stakeholders on the inclusion of Personality Assessment in the Admission Policies of Medical Colleges: A Qualitative Study

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Abstract

Background: Joining the health care force as a doctor is a dream that flourishes in the minds of majority of youngsters in Pakistan, making the admission process highly competitive. Currently, our admission criteria only caters the knowledge domain of the applicants while research argues that personality of the candidates should also be considered when selecting the cream of the nation for one of the most critical profession of medicine.

Objective: The objective of this research was to investigate stakeholders' perspectives on the incorporation of personality assessment as a component of the admission requirements for medical colleges in Pakistan.

Methods: An exploratory qualitative study was conducted using a multi-center approach, where participants from three different stakeholder groups involved in medical college admissions in Pakistan (Governing body members, experienced academic staff, and medical scholars) were interviewed. The analysis method used was thematic analysis.

Results: The stakeholders reached a consensus that the current admission criteria need to be revised, although opinions were varied regarding the inclusion of personality assessment in the admission process. The stakeholders identified conscientiousness, agreeableness, neuroticism, extraversion, and openness to experience as the key personality features to be evaluated for medical college admissions, in descending order of importance.

Conclusion: This study highlighted the need to revise and expand the existing admission criteria, while also revealing a diversified feedback to the proposal of introducing personality appraisal as part of the medical college admission standards as they may pose significant obstacles.

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Keywords | Personality assessment, stakeholders' views, medical schools, admission standards.

Introduction

Each year, a considerable number of candidates worldwide submit applications for admission in

medical colleges, while the number of available seats remains limited.¹ Thus, the process of selection becomes an intense and critical one, with medical colleges striving to choose the most qualified applicants. This delicate process involves the interests of various stakeholder groups, including applicants, medical apprentices, and faculty.

Traditionally, the process of selecting candidates for



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the medical profession was solely based on evaluating intellectual aptitude, primarily based on knowledge of the candidates only. However, there is now an increasing recognition that personal qualities, characteristics, integrity and principles are also indispensable,^{2,3} and should be taken into account during the medical college selection approach.

Healthcare providers have a social responsibility to the society they serve.⁴ This responsibility goes beyond simply having strong academic credentials and clinical skills. The society also expects future doctors to possess other personal qualities, including moral obligation, adaptability, and relationship building aptitude.

The government policy for admissions to medical colleges in Pakistan include passing an entry test (MDCAT) which has been given 50% weightage, passing F.Sc (Pre-medical)/HSSC/Equivalent) and SSC/ Matriculation/Equivalent with 40% and 10% weightage respectively.⁵ Therefore, the vast majority of Pakistani medical colleges rely solely on the scholastic records of candidates seeking admission,^{6,7} with no consideration given to individual's personality, behaviors and temperament as admission criteria. Although few medical schools like Agha Khan Medical University and Shifa College of Medicine include interviews and personal statements in their admission criteria, still; there is currently no literature available gathering input from stakeholders on the inclusion of personality appraisal in the admission strategy of medical colleges in Pakistan.⁸ The purpose of this study is to address this gap and explore the views of Pakistani medical stakeholders on the potential use of personality assessment as a mandatory admission criterion. The results may improve the selection process for medical students by incorporating the knowledge and experience of different stakeholder groups, in order to inform the selectors about the benefits and challenges that may arise from the addition of another criterion to the admission process of medical colleges in Pakistan.

Methods

The research employed a qualitative and exploratory approach to examine and interpolate the perspectives of stakeholders on the implementation of personality evaluation in the admission strategy of medical colleges in Pakistan.

Table 1: *Demographics of the contributors*

| | Associates of governing body | Expert academic staff | Scholars |
|---|------------------------------|-----------------------|----------|
| Number of interviewees | 6 | 11 | 8 |
| Medical colleges | | | |
| Public | | 6 | 4 |
| Private | | 5 | 4 |
| Gender | | | |
| Male | 4 | 8 | |
| Female | 2 | 3 | |
| Age | | | |
| 20-25 years | | | 8 |
| 35-45 years | 2 | 1 | |
| 55-65 years | 4 | 10 | |
| Administrative positions of the experts | | | |
| Assistant registrar PMDC | 1 | | |
| Dean Institute of Public Health, JSMU | 1 | | |
| Pro Vice Chancellor, KEMU | 1 | | |
| Rector health sciences, University of Lahore | 1 | | |
| Technical officer, Health Professional Education, WHO | 1 | | |
| Principal and director Medical Education, UOL | 1 | | |
| Dean Institute of Public Health and Preventive Medicine, KEMU | | 1 | |
| Heads of department | | 10 | |

Table 2: *Questions Assorted for Interviews*

| | |
|----|---|
| 1. | Could you provide more details about the admission process when you were a student and explain the ways in which it differs from the present enrollment procedure? |
| 2. | What, in your view, are the advantages and disadvantages of the present admission standards? |
| 3. | What is your stance on incorporating evaluations of personality features, such as conscientiousness, agreeableness, and extraversion, in today's acceptance qualifications? |
| 4. | Which three personality traits do you consider the most significant for inclusion in the admission standards? |
| 5. | Why do you think that the evaluation of personality traits has not been incorporated into the admission criteria of medical colleges in Pakistan up until now, in your opinion? |
| 6. | What obstacles do you anticipate if there are plans to introduce evaluations of personality traits into the admission criteria of medical colleges in Pakistan in the future? |

The Advanced Study Research Board and Ethical Committee of The University of Lahore, Pakistan (ERC/

11/19/12) granted approval for this study. The inclusion criteria for participants were senior faculty members holding positions such as director, chairperson, vice-chancellor, deputy principal, department lead, academic board members and council for medical education of the supervisory body, Pakistan Medical and Dental Council (PMDC), and medical aspirants in their first or final year. The study was carried out in multiple centers across Pakistan: including University of Health Sciences, Lahore (Punjab), Jinnah Sindh Medical University, Karachi (Sind), Khyber Medical University, Peshawar (KPK), Bolan University of Medical and Health Sciences,

Quetta (Baluchistan) And National University of Medical Sciences, Islamabad along with their affiliated public and private medical colleges, covering four provinces and the capital city.

Maximum variation sampling, a type of purposive sampling was used for this study. A total of 25 interviews were taken till saturation was achieved. Interviewees included six representatives of PMDC, eleven experienced faculty members from six medical colleges, and eight medical aspirants from six medical colleges. Table I provides the demographic details of the contributors.

Table 3: *Distribution of themes, sub-themes, categories and excerpts from the study*

| Themes | Sub themes | Categories | Excerpts |
|--|--|--|---|
| Obligations to alter admission protocols | Flaws of current admission standards | No growth | "There is no significant difference in the admission criteria for medical colleges during my time and now. Essentially, it is an evaluation of knowledge in biology, physics, and chemistry." |
| | | Memory evaluation | |
| | | Score rigging | |
| | | Uninspired | "The current admission policy is deemed unsuitable as it is not aligned with the health requirements of the people of Pakistan. If the admission criteria fail to address the health concerns of the community, then it is not considered a fit in criteria". |
| | | Not aligned with community demands | |
| | | Unjustifiable tardiness in acceptance process | "The admission process was significantly delayed, taking nearly six months to complete". |
| | | Recurrent manipulation of benchmarks | "The admission policy is subject to frequent manipulations within short intervals". |
| | | Money making | "The implementation of an entry test has resulted in the proliferation of numerous academies that have established themselves as commercial enterprises". |
| | | Heavy burden | |
| | | Imbalanced systems of pedagogy | "Coming from an impoverished region where food and water are scarce, hunger management takes precedence as the primary concern for the local population". |
| | Reasons for decline in admission standards | Judicial intervention | "Even in cases of admission to a particular medical college or re-evaluation of exam results, the legal system and courts become involved". |
| | | Unreliable | "The basis of our admission criteria is weak, and it can be exploited by anyone". |
| | | Impartial admissions for public and private medical colleges | "The former PMDC was led by a retired judge, but it remains unclear how a judge could possess the expertise to evaluate medical professionals". |
| | | Fairly visible process | |
| | | Chooses the most outstanding individuals | |
| | | Plentiful chances | |
| | | Indifferent behavior of state | |
| | | Unqualified non-professional managers | |
| | | Hesitation and reservation of authoritative positions | |
| | | shortcomings | |
| | | Apprehensions | |
| | | | "Decision makers are comfortable with the status quo and are hesitant to deviate from the traditional educational system. It's understandable that they fear potential legal consequences if they depart from the established framework". |

| | | | | |
|--|---|--|---|---|
| Perspectives on the integration of personality assessment into admission requirement | Diverse outlooks | Firmly endorse | “Personality plays a crucial role in the development of a competent healthcare professional. As healthcare providers are responsible for addressing healthcare concerns within the community, their personality traits are critical in establishing a strong doctor-patient relationship”. | |
| | | Hypothetically effective approach | “In theory, the idea seems plausible. However, in countries like Pakistan, implementing it with accountability and honesty may pose significant challenges”. | |
| | | Deny | “I firmly oppose the idea because our nation is not that much refined yet to conduct a task with integrity. Favoritism is rampant, and our educational system is not sufficiently cultivated to back the integration of personality evaluation”. | |
| | Outcomes | Personal effects | "I pursued a career in medicine at the insistence of my mother and always felt somewhat out of place in my academic pursuits. Looking back and assessing my personality, I believe that I may have been better suited for a career in law rather than medicine”. | |
| | | Communal effects | “A significant proportion of scholars lack the basic personality attributes to handle the pressure that comes with medical profession, leading them to give up. As a result, around 80,000 medical graduates have left the profession, which is a setback for both the state and society”. | |
| | | Emotional and behavioral effects | "I have noticed that numerous students are grappling with tension and apprehension, and I am uncertain about how they will bear the strain that comes with medical profession". | |
| | | Institutional effects | “Assessing the personality of medical profession applicants is crucial when considering the ultimate objectives, such as producing graduates with leadership traits, the ability to work collaboratively, exceptional social skills, and sensitivity, who will ultimately work in healthcare institutions”. | |
| | Principal personality features to analyze | Conscientiousness | Ambitious | “It is essential to evaluate an applicant's level of diligence, kindness, and fidelity when considering them for entrance to medical profession”. |
| | | | Focused | |
| | | | Reliable | |
| Agreeableness | | kindness | "In my opinion, assessing an applicant's fairness, kindness, and love for the medical profession is crucial, as one must have a genuine interest and dedication towards this field to succeed". | |
| | | truthfulness | | |
| | | Selflessness | | |
| Low on neuroticism | | Emotional sensitivity | "For admission into the honorable profession, it is crucial to assess inner strength, introspection, and conviction". | |
| | | positivity | | |
| | | Self-awareness | | |
| Openness | | Visionary skills | "In my opinion, for candidates aspiring to enter the multifaceted profession of medicine, where knowledge is rapidly increasing and novelty is constant, it is important to possess qualities such as tolerance, inspiration, and imagination". | |
| | Progressiveness | | | |
| Extraversion | Assertive | “Effective interaction proficiency, self - confidence, and approachable are crucial personality features for doctors. Even if a doctor possesses excellent education and is skillful, the ability to explain a medical condition to a patient or deliver bad news with kindness is equally important. Without these traits, a doctor may not be well-received by society”. | | |
| | Expressiveness | | | |
| | Affability | | | |

| | | | |
|---|-----------------------------|---|--|
| Barriers to the adoption of personality assessment in admission prerequisites | Moral dilemmas | Even handedness | “Providing equal education to students across the country would be a significant challenge due to the varying education systems, such as public/private, metric, FSC/O, and A levels, which make it difficult to compare students' abilities”. |
| | | Neutral and reliable process | “Ensuring the credibility of the process and preventing the manipulation of results to benefit certain preferred candidates is a significant obstacle to overcome. It is crucial to ensure that the assessment is based solely on the candidates' personality traits and not biased in favor of any particular applicant who did not perform well on the academic side but is given an undue advantage under the pretext of personality evaluation”. |
| | Budgetary constraints | Assets | “The main obstacles include the relocation of resources, securing funds, organizing workforce, preparing the evaluators, determining the significance of personality evaluation, and dealing with opposition from candidates, parents, and management”. |
| | | workforce | |
| | Community issues | Framework | |
| | | Productivity | |
| | | Communal acceptability | “A new standard will face resistance from the society and may result in commotion and discord”. |
| | Administrative problems | Social perspective | |
| | | Grassroots organizing | “A significant effort will be required on the part of medical educationists to bring this matter to the forefront of major discussions”. |
| | Legislative issues | Resistance movements | “The implementation of reforms in a delicate field such as medical education requires the cooperation and influence of multiple departments, including the judicial system. This poses a significant challenge, as the court may need to intervene either on its own or in response to appeals from candidates or parents”. |
| | | Legal meddling | |
| | Statutory compliance issues | Statutory renovation | “If non-cognitive evaluation is going to be used for admissions, a well-structured system similar to the ISSB in the army needs to be established by the PMDC/universities”. |
| | | Evaluation instrument development and validation | “Defining personality traits with precision and objectivity is challenging, and currently there is a lack of valid instruments for measuring them. Moreover, the instruments that are being used in developed countries have not been validated for our local context”. |
| | | Uniform instrument construction and guideline develop | |

Semi-structured interviews were conducted with respondents using both face-to-face and telephonic modes from January to April 2020. The interviews, which lasted for 20-30 minutes, included probing questions. Table II presents the questions used for the interviews. The questionnaire was self-developed. A thorough literature review was performed using the key terms and their combinations incorporating Boolean operators. The categories emerged were scrutinized thoroughly for comprehensive meanings. The categories were aligned to develop five main themes. Questions were constructed around the themes to ascertain the way of thinking and understanding of study participants regarding the research problem.

The questionnaire initially developed was sent to the experts to be checked for accuracy, clarity, representativeness and relevance by experts.

The questions were pilot tested through semi structured interviews of four stakeholders (one student, two professors and one admission committee member of university of Lahore).

The views of informants were recorded in audio format and manually transcribed verbatim. The methods of triangulation; peer debriefing, transcript verification and reflection were used to safeguard the quality of the study. Memos were taken to aid in future retrieval and utilization of the data. The authors employed a

manual thematic analysis approach.⁹

Results

Using qualitative analysis, the transcribed data was divided into four themes, which are presented in Table III. According to all stakeholders, the existing admission standards should be revised and expanded, as they appear to have more shortcomings than advantages. Stakeholders attributed the lack of action on this issue to the state's indifference and the presence of unqualified personnel in critical decision-making positions.

The results presented in Table IV indicate divergent views from stakeholders regarding the inclusion of personality appraisal in the medical acceptance standards. Those in favor of incorporating personality evaluation in admittance prerequisites, believed that doing so would have positive effects on intrinsic development, interpersonal communication, social engagement, psychological balance, and organizational performance.

The interviewees identified specific qualities, including conscientiousness, agreeableness, low neuroticism, extraversion, and openness to experience, that they deemed important to evaluate for enrollment in medical colleges in Pakistan. Additionally, they raised concerns about the moral, financial, communal, diplomatic, legislative, and administrative challenges that would need to be addressed if personality appraisals were to be incorporated into the enrollment guidelines for medical colleges.

Table 4: Response from stakeholders

| Stakeholders | Response | | | Overall total |
|----------------------------|----------------|--|------|---------------|
| | Firmly endorse | Hypothetically effective approach but not practically applicable | Deny | |
| Governing body associates | 4 | 1 | 1 | |
| Experienced academic staff | 4 | 4 | 3 | |
| Scholars | 5 | 2 | 1 | |
| Total | 13 | 7 | 5 | 25 |

Discussion

Presently, there is a discourse in the medical fraternity regarding the expansion of access to medical education.¹⁰

This can be achieved through various modifications in admission strategy, such as considering non-academic qualities like soft skills, sports skills, interviews, and situational judgment tests (SJTs).¹¹ In our study, stakeholders frequently commented on the static and unchanging nature of admission policy, which impedes responsiveness to the rapid changes happening in the world. Similar is the situation in many Low and middle income countries, where the medical school admission process is non-flexible and recruiting aspirants who perform very high in the secondary schools end exam.¹² In Iraq the only criteria to medical admission is scoring above 90 % in the secondary school final exam.¹³

The stakeholders pinpointed several factors contributing to the delayed admission policies, including state inaction and non-medical personals such as retired judiciary members, having no experience in policy making occupying the crucial positions of policy makers. A study conducted in Pakistan about challenges in achieving optimum outcomes in healthcare shared this perspective of the stakeholders.¹⁴

Data from our study indicated that limited assets, training and education, time constraints, and a multitude of aspirants against insufficient evaluators were significant obstacles to progress in admission policy. Similar barriers were indicated in Indonesia as well as Japan to medical selection policies.¹⁵ A study conducted in Pakistan on admission process also corroborated these perceptions.¹⁶

According to a logical principle, an individual's personality should influence their performance, and research has demonstrated that successful individuals often possess certain dispositional characteristics that result in greater job satisfaction among their colleagues and apprentices.¹⁷ However, there are conflicting opinions regarding the use of personality evaluations in enrollment criteria. While some strongly advocate for its use,¹⁸ others are hesitant or even opposed to it considering that, defining non-academic attributes poses a challenge, as their nature remains elusive. It's unclear whether these attributes are enduring or context-dependent. Moreover, most metrics assessing non-academic traits for medical school admissions typically account for less than 20% of outcome variance. Furthermore, desirable non-academic traits may harbor less favorable aspects. Rejecting applicants based on their performance

in non-academic evaluations could potentially impact their self-esteem.¹⁹ Similarly, there were differing viewpoints among stakeholders regarding the appraisal of personal traits in medical selection.

Several doctors may face tremendous challenges throughout their lives, and these difficulties may lead to extreme feelings of remorse and regret, self-doubt and insecurity, and even self-injurious behavior.²⁰ The participants in our study suggested that administering personality screening during the recruitment process to recognize these features can be advantageous in enhancing the quality of life for these applicants and providing early intervention. Similar suggestions have been advocated by a study conducted in United States.²¹ The stakeholders identified the sub-traits of Conscientiousness and Agreeableness as the primary personality components that should be evaluated for entrance to the medical profession. Lambe and Bristow in 2010, put forwarded the recommendation of evaluating facets of Conscientiousness and Agreeableness for medical schools admissions, which were later supported by AAMC in 2013.^{22,23}

In contrast to Steven Hurwitz and colleagues' findings,²⁴ medical students have consistently identified and emphasized the importance of testing the personality factor "Low on Neuroticism" and its sub-components as a top priority for medical admissions.

The stakeholders expressed their concern that maintaining fairness, accountability, and conciseness of medical admission criteria would be a significant challenge after the inclusion of personality testing. This concern is supported by a systematic review that highlights the lack of validity and reliability of personality assessment instruments, as well as their vulnerability to partiality.³ Additionally, Huber and colleagues showed apprehensions of experts about the intentional deception by applicants during personality tests.²⁵ However, Hojat et al argued that by providing suitable directives and assessing replies on a social desirability scale, deliberate manipulations and preconceived misreporting can be identified, and the operational validity of the tools can be sustained.²⁶

The stakeholders highlighted fiscal hurdles as a major obstacle, which research has shown to persist from the outset and continue to pose difficulties in the future.²⁷ One of the common hurdles in policy revision is resistance from those who are affected by it. Thus, the stakeholders

were apprehensive about the potential opposition from the community. This type of opposition has been witnessed before when Central Induction Policy (CIP) was introduced and is seen in other regions worldwide as well.²⁸

The stakeholders expressed their belief that one of the major challenges will be to establish a strong and independent governing body. This challenge has also been highlighted by Subrata Chattopadhyay in the context of India.²⁹

It is the first study to explore and interpret the views of stakeholders about including personality traits as part of admission policy of medical colleges in Pakistan. This study identified the barriers to introducing personality traits in admission policy of medical colleges of Pakistan. It has come up with recommendations that if taken into consideration can benefit the admission process to a large extent.

Patients, members of the society and applicants who are denied medical admissions are also important stakeholders but could not be included in the study due to time constraints. Due to time constraints, establishing fresh questions from the data and follow-up interviews were not possible.

Conclusion

The decision of medical selection, which carries significant weight, involves several parties such as aspirants, selection panel members, academic staff, associates of governing body, community individuals, and patients.

The stakeholders expressed that the current selection policy should be updated and widened to better serve the healthcare system. While there were diverse perspectives among the stakeholders regarding the incorporation of personality evaluation in the admission requirements of medical institutions, they acknowledged its potential benefits in addressing daunting challenges.

While personality appraisal may not solve all the challenges associated with medical admissions, including it as one of the selection criteria can still offer benefits.

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Authors' Contribution:

JU: Conception & design, data collection, drafting of article

RAK: Analysis & interpretation of data, critical revision for important intellectual content

RY: Analysis & interpretation of data, critical revision for important intellectual content

KM: Conception & design, analysis & interpretation of data, drafting of article, final approval

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