



Original Article

Failure Factors of Medical Students in Private and Public Sector Medical Colleges of Peshawar, Khyber Pakhtunkhwa

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ABSTRACT

In the medical world, stress and anxiety are very communal to manage educational affairs. Motivation is a failure among medical students is a very crucial point of discussion. **Objective:** To find factors that led to failure of medical students in public and private sector medical colleges. **Methods:** Qualitative approach was adopted for this cross-sectional study. Fourteen in depth interviews were carried out. Purposive sampling was implemented for this study that included medical students who failed in any one year of their medical journey, of public and private sector medical colleges in Peshawar. **Results:** Out of total interviewed participants, 64% of the respondents were female while 36% of the respondents were males. Amongst the total respondents, 71% were from private medical colleges whereas, 29% were from public medical colleges. 79% of respondents wanted to continue with same profession whereas 21% of respondents did not wanted to continue with their medical profession. Three main factors were observed that lead towards failure of medical students in public and private medical colleges. These factors include lack of peer support, instructor's teaching attitude and pressure from institute and family. **Conclusions:** This study identified lack of peer support, instructors' teaching attitude, and pressure from the institute and family as primary factors leading to the failure of medical students in public and private colleges in Peshawar. Despite these challenges, 79% of students remain motivated to continue their medical careers.

INTRODUCTION

Stress and anxiety are communal to manage educational affairs in medical world. Persistent engagement in activities and practical's bound medical students to achieve their educational goals and worry about their future in medical world. Study pressure, result worry and tension of failure results in student poor performance and ultimately failure in examination. Keeping this entire situation in mind, key purpose of this study is to focus on strengths of medical students such as motivation after failure in both public and private sector medical colleges of Peshawar. The inverse relations between failure and success make medical students more involved in situation to revise their skills and identify weak points through self-

assessment [1]. This increases student's strengths and motivates students to decrease chances of failure in public and private medical colleges in future. However, it is pertinent to discuss that most medical students struggle to find motivation after failure in public and private medical colleges. Their attitude, behavior and approach to find motivation to bounce back become less desirable for them. In this regard, this study focused to explore how strengths of these medical students remain in cage [2]. For medical students, failure in both public and private medical colleges is a nightmare considering social, moral and psychological implications. Social and moral implications makes medical student less resistant to this unwanted tragedy [3].

Student's psychological condition also turns into a complete blackout. Their resistance against this mental blockade becomes very hard.

This study focused on factors that cause medical students to fail in their exams in public and private medical colleges.

METHODS

This study was conducted from 24th February to 25th August 2023. In the start, to carry the research approval from the Advance Studies and Research Board (ASRB) (ASRB001457/ES/IHPE) was taken at 29/07/2021. Also, permission was taken from the Khyber Medical University (KMU) to initiate the data collection procedure. Informed consent was obtained from all participants prior to data collection. Qualitative approach was used to explore strengths and motivation in medical students of public and private medical colleges in Peshawar. This research study used Brannan research protocols which mentioned that qualitative research study provides researchers with deeper insight of issues [4]. These issues can become subjective because data derived in qualitative research study is based on experiences, opinions and thoughts [5]. Moreover, a qualitative approach is more efficient in finding social issues that require a large number of data. This type of study also allows researcher to perceive responses differently by focusing on subjectivity of collected data instead of objectivity [1]. Key reason behind non-probability purposive sampling as a sampling method is the research objectives, as researcher cannot include all students of all colleges or medical colleges. Therefore, inclusion criteria was set to include medical students of public and private medical colleges in Peshawar who failed in at least anyone year of their medical journey. Use of this technique allowed researcher to be relevant in participant's selection. Interviewing selected medical students was main data collection method to answer research questions that was thought suitable to explore motivation after failure. Fourteen participants were interviewed to explore the research questions, generate information such as new themes and in-depth knowledge about research questions [5]. To avoid missing any fundamentals of the research a task based systematized data collection procedure was used to ensure that all tasks were completed within allotted time [6].

RESULTS

Amongst the total respondents 10 (71%) were from private medical colleges whereas, 4 (29%) were from public medical colleges, as shown in figure 1.

Medical College Distribution

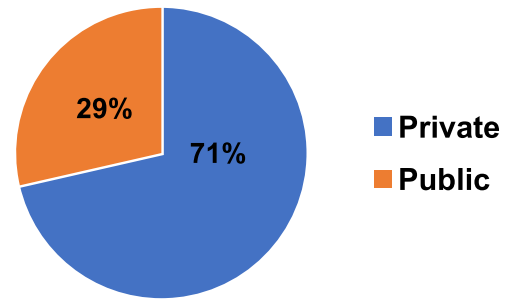


Figure 1: Distribution of Participants Based on Medical College
During conduction of analysis it was reflected that students failed their exams because of lack of peer support, teaching attitude of instructors and too much pressure from institute and family, as shown in figure 2.

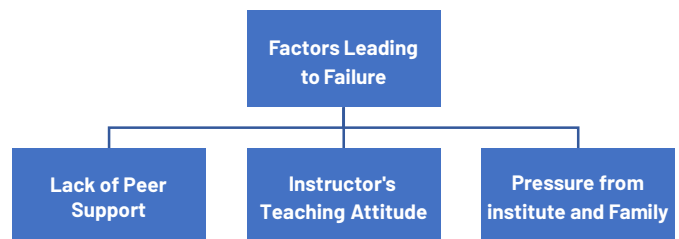


Figure 2: Factors Leading to Failure of Medical Students

Failure does not impact the ambition of medical students as they are still motivated towards learning skills, clearing exam and endeavoring for better in their carrier. In the current survey among all interviewed participants 79% of respondents wanted to continue with same profession where as 21% of respondents did not want to continue with their medical profession, as shown in figure 3.

Continue Same Profession

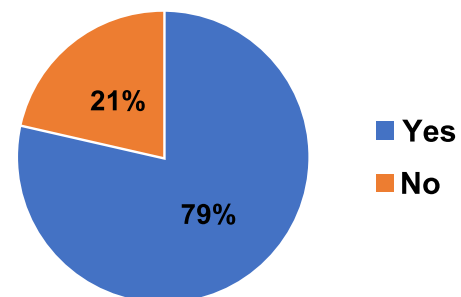


Figure 3: Chart Showing Percentage of Continuation of Same Profession after Failure

Various factors have emerged after conducting analysis for positives gained after failure, as shown in figure 4.

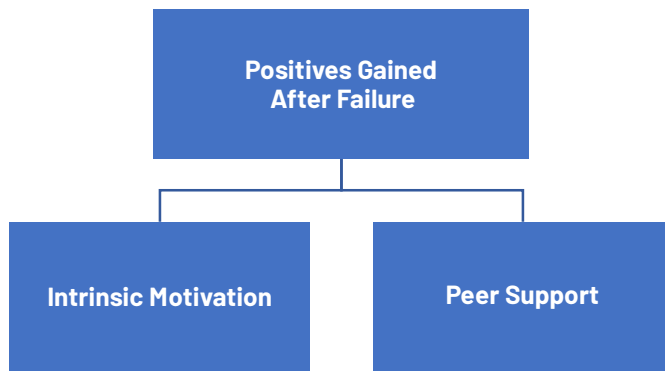


Figure 4: Positives Gained After Failure

DISCUSSION

Our study emphasizes the critical role of peer support in medical education, highlighting that the absence of this support poses significant challenges for students. More precisely, 71% of our respondents came from private medical schools, where there was very little peer support. This result supports the work of Graves J *et al.*, in 2022, who also stressed the value of social connections among medical students for group study peer support and empowerment [7]. Strong peer interactions were associated with a 20% greater test pass rate in students than in those without such support, according to Graves J *et al.*, which is consistent with our findings that group study increased motivation and performance. In a similar vein, Abrams MP *et al.*, in 2022 suggested peer-support initiatives to improve the medical student community and came to the conclusion that peer support provides medical students with translational skills useful for their residency and professional responsibilities [8]. Our discovery that a key contributing reason to student failure was a lack of peer support is supported by the 75% of participants in their survey who said that peer support helped them acquire practical skills. Teacher-student relationship have changed as medical education has moved toward self-directed, student centered learning. In our survey, 64% of women and 36% of men said that their dedication and morale were greatly impacted by the attitude of their teachers. This is supported by Mercer C in 2018, who reports that the little availability of doctors for supervision made it impossible for 70% of medical students in their studies to get necessary information outside of lectures [9]. This outcome is consistent with our finding that, when asking for assistance outside of class, many students felt abandoned. Schiekirka-Schwake *et al.*, in 2017, further emphasized how the absence of open data on medical school instructors distorts the quality of instruction and makes it more difficult for students to learn. It is consistent with our finding that students often lacked the help and explanations they needed from teachers because 60% of them believed that insufficient instructional support

hampered their academic achievement [10]. Findings from our study revealed that institutional and familial pressures significantly contribute to medical students' exam failures. Students face recurring pressure, often comparing their performance to that of older family members, which exacerbates their stress and hinders their ability to succeed. Enhancing family dynamics and fostering greater cooperation with medical students have been shown to have a positive impact on their overall well-being and academic performance [11]. Driven by expectations from their families and their academics, medical students often have serious concerns about their mental health. According to our survey, 21% of participants did not want to continue in their field while 79% did. This is consistent with the findings of Bergmann C *et al.*, in 2019, who found that the demands of their families and their studies caused significant levels of stress in 65% of medical students [12]. In keeping with our discovery that family pressure is a major factor in student failure, Hussain A *et al.*, also reported that 68% of students felt that high parental expectations negatively affected their academic and personal life [13]. Strong intrinsic motivation was shown by the large majority 79% of students who are still driven to pursue their medical professions in spite of the obstacles. According to Hussain A *et al.*, changing words like "failed" to "not yet" may greatly increase student motivation and morale. Our finding of intrinsic motivation among students after failure is supported by their research, which found that 85% of students felt more driven after positive reinforcement [13]. During clinical rotations in particular, Sarkis AS *et al.*, in 2020 found that autonomous motivation motivates students to continue their studies even after setbacks. Their result that 80% of students who interacted with patients during rotations felt more motivated is consistent with our discovery that 79% of students maintained their motivation in the face of academic failures [14, 15]. Good things that come of failing include more inner drive and peer support. In a study of Failure, Panja A pointed out, results in a stronger resolve and the formation of encouraging peer ties [16]. It was found that peer support is essential to academic resilience, which is consistent with this. According to Hayat AA *et al.*, students who received emotional support after a setback were 30% more motivated, which improved their academic feelings and performance going forward [17]. Failure often provokes suspicious hopes that diminish the inspiration which in turn causes further challenges. Not only that but, failure habitually persuades contemplation and contributes in self-exhaustion and depression that causes hindrance with their work and achievements [18]. Data of certain studies on failure as well successful students revealed that it is quite difficult to determine aspects on overall medical field. They consider the tendency for medical

undergraduates to assume as compound learning strategies as superficial, deep and strategic [19]. This supports the fact that 79% of students were still driven to pursue medical jobs. Recent studies have further emphasized these points. For instance, a study on the state of clinical education by BMC Medical Education in 2023 reported that the personal characteristics of students and instructors significantly impact clinical education effectiveness. The study highlighted that instructor performance and student interaction was rated at average levels, stressing the need for better educational planning and evaluation. Another study on academic burnout by BMC Medical Education in 2023 found that a substantial percentage of students experience academic burnout, influenced by demographic factors such as gender, parental education, and living expenses. These studies underscore the multifaceted challenges medical students face, reaffirming the importance of supportive educational environments and mental health resources [20].

CONCLUSIONS

This study identified three primary factors contributing to the failure of medical students in both public and private medical colleges in Peshawar: lack of peer support, the teaching attitude of instructors, and pressure from the institute and family. Despite these challenges, the majority of students 79% expressed a desire to continue pursuing their medical careers, indicating a strong level of resilience and motivation. These findings highlight critical areas that need attention to support medical students and reduce failure rates.

Authors Contribution

Conceptualization: MK

Methodology: MK, AZ, UA

Formal analysis: PS, TS

Writing, review and editing: MK, PS, AZ, SH, TS

All authors have read and agreed to the published version of the manuscript.

Conflicts of Interest

The authors declare no conflict of interest.

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REFERENCES

- [1] Alda RR, Utomo B, Hasan H. Correlation between stress level and learning motivation of pre-clinical medical student in faculty of medicine universitas airlangga. *Jurnal Ilmiah Mahasiswa Kedokteran Universitas Airlangga*. 2020 Jan; 11(1): 18-22. doi: 10.20473/juxta.V11i12020.18-22.
- [2] Ahmed MS, Hassan F, Ullah S, Shaid F, Sabih M. Strength of motivation among public and private dental students for the field of education: A comparative and correlational study. *Journal of College of Physicians and Surgeons Pakistan*. 2021 Apr; 31: 461-5. doi: 10.29271/jcpsp.2021.04.461.
- [3] Holland C. Critical review: medical students' motivation after failure. *Advances in Health Sciences Education*. 2016 Aug; 21: 695-710. doi: 10.1007/s10459-015-9643-8.
- [4] Pintado-Outumuro E, Morin-Fraile V, Salvador-González B, Benito L, Julve-Ibáñez M, Sancho-Campos MP et al. Exploring the factors influencing evidence-based approaches to advanced chronic kidney disease: a qualitative study involving nurses and physicians. *BioMed Central Primary Care*. 2024 May; 25(1): 177. doi: 10.1186/s12875-024-02418-0.
- [5] Vehovar V, Toepoel V, Steinmetz S. Non-probability sampling. In: Lavrakas PJ. *The SAGE Handbook Of Survey Methods*. SAGE Publications Ltd; 2016. 329-345. doi: 10.4135/9781473957893.n2.
- [6] Opdenakker RJ. Advantages and disadvantages of four interview techniques in qualitative research. *InForum Qualitative Sozialforschung Forum: Qualitative Social Research* 2006 Sep; 7(4): 11.
- [7] Graves J, Flynn E, Woodward-Kron R, Hu WC. Supporting medical students to support peers: a qualitative interview study. *BioMed Central Medical Education*. 2022 Apr; 22(1): 300. doi: 10.1186/s12909-022-03368-w.
- [8] Abrams MP, Salzman J, Espina Rey A, Daly K. Impact of providing peer support on medical students' empathy, self-efficacy, and mental health stigma. *International Journal of Environmental Research and Public Health*. 2022 Jan; 19(9): 5135. doi: 10.3390/ijerp19095135.
- [9] Mercer C. Family medicine faces shortage of doctors willing to teach. *Journal of Canadian Medical Association*. 2018 May; 190(21): E666. doi: 10.1503/cmaj.109-5604.
- [10] Schiekirka-Schwake S, Anders S, Von Steinbüchel N, Becker JC, Raupach T. Facilitators of high-quality teaching in medical school: findings from a nationwide survey among clinical teachers. *BioMed Central Medical Education*. 2017 Dec; 17: 1-8. doi: 10.1186/s12909-017-1000-6.
- [11] Huang Z, Zhang L, Wang J, Xu L, Wang T, Tang Y et al. Family function and life satisfaction of postgraduate medical students during the COVID-19 pandemic: the mediating role of meaning in life and depression. *Heliyon*. 2022 Apr; 8(4): e09282. doi: 10.1016/j.heliyon.2022.e09282.

- [12] Bergmann C, Muth T, Loerbroks A. Medical students' perceptions of stress due to academic studies and its interrelationships with other domains of life: a qualitative study. *Medical Education Online*. 2019 Jan; 24(1): 1603526. doi: 10.1080/10872981.2019.1603526.
- [13] Hussain A, Khan HM, Ahmer H, Zafar S, bin Altaf S, Ahmed S et al. Effect of parental relationships on stress levels of students in a medical college. *Journal of Shifa Tameer-e-Millat University*. 2021 Aug; 4(1): 39-43. doi: 10.32593/jstmu/Vol4.Iss1.131.
- [14] Orsini C, Evans P, Jerez O. How to encourage intrinsic motivation in the clinical teaching environment?: a systematic review from the self-determination theory. *Journal of Educational Evaluation for Health Professions*. 2015 Apr; 8: 12. doi: 10.3352/jeehp.2015.12.8.
- [15] Sarkis AS, Hallit S, Hajj A, Kechichian A, Karam Sarkis D, Sarkis A et al. Lebanese students' motivation in medical school: does it change throughout the years? A cross-sectional study. *BioMed Central medical education*. 2020 Dec; 20: 1-0. doi: 10.1186/s12909-020-02011-w.
- [16] Panja A. Failures can be the pillars of success. *British Medical Journal*. 2003 Nov; 327(7423): 1115. doi: 10.1136/bmj.327.7423.1115.
- [17] Hayat AA, Salehi A, Kojuri J. Medical student's academic performance: The role of academic emotions and motivation. *Journal of Advances in Medical Education & Professionalism*. 2018 Oct; 6(4): 168.
- [18] Ebrahimzadeh F, Ghorbani M, Mardani M. The prevalence of academic failure and its underlying factors in Lorestan university of medical sciences. *Yafte*. 2015; 17(4).
- [19] Rawolle M, Schultheiss OC, Strasser A, Kehr HM. The motivating power of visionary images: effects on motivation, affect, and behavior. *Journal of Personality*. 2017 Dec; 85(6): 769-81. doi: 10.1111/jopy.12285.
- [20] Asadi M, Noorian S, Motefakker S, Heydari F, Shahsavari N, Senmar M. The state of clinical education and factors affecting effective clinical education: the point of view of nursing and midwifery students. *BioMed Central Medical Education*. 2023 Dec; 23(1): 967. doi: 10.1186/s12909-023-04957-z.