

Assessing The Physical And Psychological Well-Being Of Palestinian Medical Students Arriving At Rawalpindi Medical University

Mehwish Riaz¹, Rizwana Shahid², Omaira Asif³, Muhammad Umar⁴, Mahjabeen Qureshi⁵, Tahira Amjad⁶

1. Assistant Professor, Medicine, Rawalpindi Medical University 2. Associate Professor, Community Medicine, Rawalpindi Medical University 3. Assistant Director, DME, Rawalpindi Medical University 4. Vice Chancellor, Rawalpindi Medical University 5. Senior Demonstrator, Rawalpindi Medical University 6. Associate Professor, Community Medicine, Foundation University.

Corresponding author: Dr. Rizwana Shahid, drriz_shahid@yahoo.com

Abstract

Objective: To assess the physical and psychological well-being of Palestinian medical students carried out at Rawalpindi Medical University.

Methods: A cross-sectional descriptive survey was carried out to analyse the physical and psychological health of Palestinian medical students who arrived at Rawalpindi Medical University in a desperate scenario. Apart from measuring vitals, Ophthalmic and ENT examinations of medical students were also done. Their comorbidities were also inquired, and influenza and typhoid vaccines were administered. Depression among students was categorised by using the Patient Health Questionnaire (PHQ-9) scale. Data was analysed by using Microsoft Excel 2016 software. Descriptive statistics were applied.

Results: Of the 36 Palestinian medical students reaching RMU for continuation of medical education, 19 were males. The mean age of the students was 22.4 ± 1.45 years. Around 29 students were subjected to a physical and psychological health assessment. They were physically fit and healthy. 11 students were mildly depressed, and female students were comparatively more depressed than males.

Conclusion: The medical students of Gaza were physically fit but depressed due to the disaster in their homeland.

Keywords: physical health, psychological well-being, depression.

Introduction

The Israeli Palestinian conflict led to massive, devastating effects. Unrivalled bombardment in Gaza and its neighbouring regions led to more than 100,000 casualties and the displacement of approximately 2.3 million people.¹ Where the environment was massively destroyed by extraordinary shelling and attacks, how could the well-being of humans escape this dreadful violence? People died either due to bombing or due to lack of food, water and other necessities of life.²

Illicit airstrikes and the demolition of enormous residential areas, infrastructure, sanitation and healthcare facilities caused succumbing to starvation.³ Gaza Strip has been subjected to persistent violent attacks with immense fatalities.⁴ Most of the people confronted with unusual situations or disasters during these attacks were likely to develop anxiety and post-traumatic stress disorder.⁵ One out of the five people residing in conflict-affected regions had probability of coming forth with numerous mental health issues.⁶ The women and children are highly vulnerable to such disorders.⁷

The World Health Organisation (WHO) has reported substantial deterioration of mental health among inhabitants of Gaza due to violence, massive deaths and displacements. All these emphasise the need for moral support and care in addition to international aid and emergency response.⁸ Although there are multiple barriers to rehabilitation of war-afflicted communities,⁹ yet prompt mental health support of the victims is of paramount significance for sustaining their lives afterwards.¹⁰ In distressing circumstances, where healthcare facilities are overwhelmed with casualties and humans are succumbing to interregional conflict, access to mental healthcare and

Contributions:

MR - Conception, Design
OA, MQ - Acquisition, Analysis,
Interpretation
RS - Drafting
RS - Critical Review

All authors approved the final version to be published & agreed to be accountable for all aspects of the work.

Conflicts of Interest: None

Financial Support: None to report

Potential Competing Interests: None to report

Institutional Review Board

Approval

22-08-2025

Rawalpindi Medical University

Review began 07/04/2025

Review ended 23/08/2025

Published 29/09/2025

© Copyright 2025

Riaz et al. This is an open access article distributed under the terms of the Creative Commons Attribution License CC-BY-SA 4.0., which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.



How to cite this article: Riaz M, Shahid R, Asif O, Umar M, Qureshi M, Amjad T. Assessing The Physical And Psychological Well-Being Of Palestinian Medical Students Arriving At Rawalpindi Medical University. JRM. 2025 Sep. 29;29(3). <https://doi.org/10.37939/jrmc.v29i3.3021>

psychological support becomes unachievable.¹¹ According to the United Nations International Children's Emergency Fund (UNICEF), more than a million Palestinian children are in dire need of mental health services due to their higher vulnerability to depression and anxiety.¹²

In the wake of the heartbreaking scenario of Palestine, the higher authorities of Pakistan took a benevolent step to support the medical students of Gaza.¹³ Rawalpindi Medical University of Pakistan also moved forward in facilitating and catering for the distressing Palestinian medical students for the continuation of their medical education.¹⁴ The Prime Minister of Pakistan directed the concerned authorities to ensure completion of Palestinian medical students in fully funded programs.¹⁵ On arrival at RMU, these students were subjected to a complete physical and mental health examination following a warm welcome and orientation session. This was meant to deliver essential assistance or healthcare services to the medical students as they have moved to a culturally different region, and their adjustment also demands moral and psychological support. This phase was also intended to familiarise them with various healthcare facilities in teaching hospitals affiliated with Rawalpindi Medical University.

Materials And Methods

A cross-sectional descriptive study was done to assess the physical and psychological well-being of 36 Palestinian medical students arriving at RMU, but 29 among them underwent physical and psychological health evaluation. Apart from determining their vital signs, ophthalmic and ENT examination was also carried out. They were also interviewed for any comorbidities and vaccination status. The Patient Health Questionnaire scale (PHQ-9) was used to measure the psychological well-being of the medical students who reached RMU from Al-Azhar University. This tool has been verified as having excellent internal consistency and good convergent validity. The criteria for categorising mental health by this scale,¹⁶ are illustrated below in Table 1.

Table 1: PHQ-9 scale criteria for classifying mental well-being

PHQ-9 Score	Depression Severity
0-4	Non-Minimal
5-9	Mild
10-14	Moderate
15-19	Moderately Severe
20-27	Severe

Data was analysed by using Microsoft Excel 2016 software. Descriptive statistics were applied.

Results

Of the 44 medical students of Al-Azhar University who were intended to come to RMU for continuation of the medical studies, 36 were able to reach and enrol, and 19 of them were males. The mean age of the students was 22.4 ± 1.45 years. Most (69.4%) of them were 22 years old, as depicted below in Figure 1. The parents of 17 students were residents of Gaza, while those of 12 and 2 were living in Egypt and Canada, respectively. The students were subjected to a physical health assessment by analysing their vitals, comorbidities, vaccination status, and visual and ENT disorders. Of the 36 medical students, 29 and 27 had a history of influenza and typhoid vaccination, respectively. On examining their physical health, most of them were physically fit with vitals within normal range and no diagnosed ENT or ophthalmic deformity. However, only 2 male students had a past medical history of asthma, and one female student was identified with Polycystic Ovaries (PCOs) and another one with Inflammatory Bowel Disease (IBD). One male and one female student had a past surgical history of visual lens replacement. Their psychological well-being was measured by using the PHQ-9 scale. Of the 29 students assessed for psychological health, one student was normal, and 11 had mild depression as presented below in Figure 2.

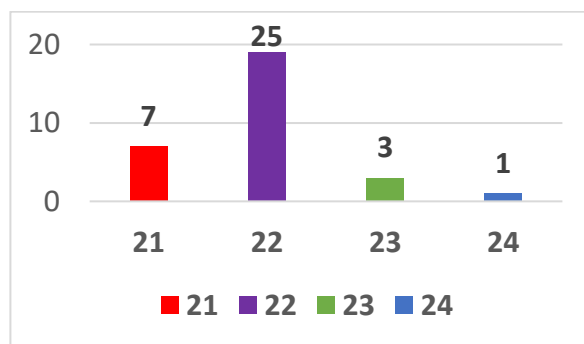


Figure 1: Age of medical students of Gaza

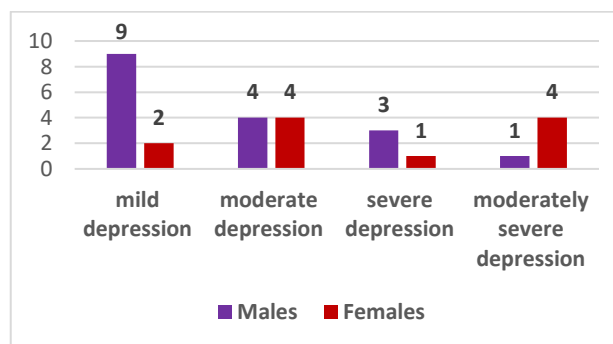


Figure 2: Psychological well-being of Palestinian medical students

Discussion

Of the 36 medical students from Gaza reaching RMU for continuation of studies, 19 were males. Their mean age was 22.4 ± 1.45 years. The Government of Pakistan was quite generous to facilitate these students in continuation of medical and dental education by bestowing moral, social and financial support.¹⁷ The main objective of the physical health analysis of these students was to deliver optimum healthcare and services to them, as they had come from a conflict-hit region of the world. Palestine has been subjected to an unbearable humanitarian disaster with approximately 70% expiries among women and children.¹⁸ According to WHO, approximately 355,000 children were administered polio vaccination in Central and Southern Gaza.¹⁹ Vaccination of the disaster-affected communities is of paramount significance to minimise the spread of infectious diseases like typhoid and cholera.²⁰ Gaza medical students enrolling at RMU for continuation of education were also subjected to typhoid and influenza vaccines. The health of these students was the top priority for the definite attainment of the learning outcomes that were mentioned in their purpose-built curriculum. Mental health is an essential element of health. WHO defines health as “a state of composite physical, mental, social and spiritual well-being”. Mental well-being is over and above the absence of mental ailments.²¹ On psychological well-being assessment of Ghaza medical students in the current study, only 1 was found free of depression, while 11 were categorised as mildly depressed. Around 8 and 4 students were diagnosed with moderate and severe depression, respectively, as depicted in Figure 2. Depression, anxiety and post-traumatic stress disorders have been recognised as the principal mental ailments prevailing among conflict-affected regions of the globe.²² A cross-sectional survey by Aldabbour B et al among medical students of the Gaza Strip following Israeli bombardment revealed that 63.4% of them were suffering from post-traumatic stress disorder.²³ According to another cross-sectional study among Palestinian medical students, 16.7% of them suffered personally from a mental disorder, and only 5.7% of them consulted a psychiatrist for mental illness. About 42.6% of these students also communicated with mentally ill people.²⁴ The rising prevalence of mental illnesses among inhabitants of Gaza was attributed to numerous factors like disruption of healthcare facilities, damage to buildings, lack of food and safe drinking water. Moreover, lack of adequate media coverage also seemed to be the main obstacle in the provision of basic life necessities to the victims.²⁵ The stringent efforts of the WHO in addressing the mental health issues of war-afflicted regions of Palestine cannot be underestimated. It made available the valuable resources to train the healthcare workforce to support the helpless and victimised individuals.²⁶ The targeted interpositions and holistic analysis of the mentally sick population, including medical students, can prove beneficial in enhancing the morale and mental health of the war-afflicted population and hence mitigate the frequency of mental disorders.

Conclusions

The Palestinian medical students are mentally depressed due to the conflict that led to the demolition of their native land. One-on-one counselling and psychological support can help a great deal to mitigate depression among students.

References

1. Aasi J. Environmental harm resulting from Israeli bombing of Gaza: Legal Aspects. *Arab Studies Quarterly* 2025; 27-43. <https://doi.org/10.13169/arabstudquar.47.1.0027>.
2. Ahmed K, Gayle D, Mousa A. “Ecocide in Gaza”: Does scale of environmental destruction amount to a war crime? *The Guardian* 2024.
3. Hopeless, starving and besieged. Israel’s forced displacement of Palestinians in Gaza. November 14, 2024.
4. World Health Organization. Mental Health in emergencies. 2022
5. Charlson F, van Ommeren M, Flaxman A, Cornett J, Whiteford H, Saxena S. New WHO prevalence estimates of mental disorders in conflict settings: A systematic review and meta-analysis. *The Lancet* 2019; 394(10194): 240-248. [https://doi.org/10.1016/s0140-6736\(19\)30934-1](https://doi.org/10.1016/s0140-6736(19)30934-1)
6. Abudayya A, Bruaset GTF, Nyhus HB, Aburukba R, Tofthagen R. Consequences of war-related traumatic stress among Palestinian young people in the Gaza Strip: A scoping review. *Ment Health Prev* 2023; 32: 200305. <https://doi.org/10.1016/j.mhp.2023.200305>.
7. Bürgin D, Anagnostopoulos D, Vitiello B, Sukale T, Schmid M, Fegert JM. Impact of war and forced displacement on children’s mental health-multilevel, needs-oriented, and trauma-informed approaches. *Eur Child Adolesc Psychiatry* 2022; 31(6): 845–853. <https://doi.org/10.1007/s00787-022-01974-z>.
8. Aqam I. A narrative review of mental health and psychological impact of the war in Gaza. *East Mediterr Health J* 2025; 31(2): 89-96. <https://doi.org/10.26719/2025.31.2.89>.
9. Qutishat M. Mental health rehabilitation in Gaza: Addressing the impact of ongoing war conflict on access and challenges, A systematic review. *Disaster Medicine and Public Health Preparedness* 2025; 19(e33): 1-7. <https://doi.org/10.1017/dmp.2025.34>.
10. Al-ghzawi HM, ALBashtawy M, Azzeghaiby SN, Alzoghbaibi IN. The impact of wars and conflicts on mental health of Arab population. *Int J Humanit Soc Sci* 2014; 4(6): 237–242.
11. Shorab A, Nassef M, Subhi A, Giwa BL, Buheji M. Health in the crossfire-Analysing and mitigating the multifaceted health risks of the 2023 war on Gaza. *Public Health Research*. 2024;14(1):1–11. <http://dx.doi.org/10.5923/j.phr.20241401.01>.

12. People in need. Providing psychological relief to 8,200 children and their families in Gaza, thanks to donations from the Czech people. Mar 19, 2025.
13. The Jordan Times. Pakistan launches initiatives to help Palestinian medical students. Oct 15, 2024. .
14. Dawn. 44 medical students from Gaza to attend classes at RMU from today. Nov 4, 2024.
15. Ministry of Information and Broadcasting. Pakistan Embassy facilitates departure of 27 Palestinian medical students to Lahore.
16. Rahman MA, Dhira TA, Sarker AR, Mehareen J. Validity and reliability of the Patient Health Questionnaire scale (PHQ-9) among university students of Bangladesh. *PLoS ONE* 2022; 17(6): e0269634. <https://doi.org/10.1371/journal.pone.0269634>.
17. Arab News. First batch of 27 Palestinian medical students arrive in Pakistan to continue studies. Oct 14, 2024.
18. Reliefweb. Public Health Situation Analysis (PHSA) on hostilities in the occupied Palestinian territory (oPt) – 10 December 2024.
19. United Nations. The question of Palestine. Sep 6, 2024.
20. World Health Organization. Vaccination in Humanitarian emergencies.
21. WHO. Health and well-being- the Global Health Observatory.
22. Moreno-Chaparro J, Piñeros-Ortiz S, Rodríguez-Ramírez L, Urrego-Mendoza Z, Garzón-Orjuela N, Eslava-Schmalbach J. Mental health consequences of armed conflicts in adults: an overview. *Actas Esp Psiquiatr*. 2022;50(2):68–91.
23. Aldabbour B, Abuabada A, Lahlouh A, Halimy M, Elamassie S, Sammour AA, et al. Psychological impacts of the Gaza war on Palestinian young adults: a cross-sectional study of depression, anxiety, stress, and PTSD symptoms. *BMC Psychol* 2024; 12: 696. <https://doi.org/10.1186/s40359-024-02188-5>.
24. Aldabbour B, Abuabada A, Elhissi A, Abu-El-Noor N, Wafi J, Asad MD, et al. Medical student attitudes toward mental illness: A cross-sectional study from Gaza strip, Palestine. *The Egyptian Journal of Neurology* 2024 Sep; 60(1): 116. <https://doi.org/10.1186/s41983-024-00889-7>.
25. Abed Alah M. Echoes of conflict: the enduring mental health struggle of Gaza's healthcare workers. *Confl Health*. 2024 Mar 14;18(1):21. <https://doi.org/10.1186/s13031-024-00577-6>.
26. Abu-Ras W, Almoayad F, Bakry HM, Alammari D, Kelly PJ, Aboul-Enein BH. Interventions to promote mental health in the Occupied Palestinian Territories and Palestinian refugees: A scoping review. *Int J Soc Psychiatry*. 2024 Sep;70(6):1037-1054. <https://doi.org/10.1177/00207640241259995>