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WAR AND HIGHER MEDICAL EDUCATION IN UKRAINE**Pashkovskyy V.M.***MD, prof.*

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Abstract. War is a devastating event that impacts all aspects of society, including education. The education of students, especially those pursuing medical faculties, faces unique challenges during times of conflict. Medical faculties play a critical role in nurturing future healthcare professionals and ensuring the well-being of communities. However, war disrupts the usual academic environment, leading to a series of obstacles that students and educators must overcome. In this article, we explore the various challenges faced by medical students during war and the measures taken to continue their education under such extraordinary circumstances.

Key words: education, medical faculties, war.

Introduction.

War has been an unfortunate reality throughout human history, leaving behind a trail of destruction, loss, and suffering. In times of conflict, societies undergo significant upheavals, affecting all aspects of life, including education. One crucial sector that often feels the profound impact of war is higher medical education.

Ukraine has been grappling with the challenges posed by an ongoing armed conflict for several years. The Russo-Ukrainian War, which began in 2014, has significantly impacted various aspects of Ukrainian society. The situation significantly worsened after the full-scale invasion of Russian troops into Ukraine on February 24, 2022. The conflict in Ukraine has taken a heavy toll on the nation's educational infrastructure. Universities and colleges, particularly those located in regions close to the conflict zone, have faced severe disruptions. Destruction of buildings, loss of equipment, and displacement of faculty and students have been common challenges. Additionally, ongoing hostilities have created an atmosphere of fear and uncertainty, making it difficult for educational institutions to function normally (3,6).

As the war has escalated, Ukraine's economy has suffered, resulting in budgetary constraints for various sectors, including education. Higher education institutions have faced reduced funding, making it challenging to maintain educational standards and infrastructure. Moreover, research projects and academic programs have been adversely affected due to the scarcity of financial resources.

The war's prolonged duration and uncertain future have prompted a significant brain drain in Ukraine. Talented academics and researchers have sought opportunities abroad to escape the instability and seek more promising career prospects. As a result, many educational institutions have faced faculty shortages, leading to a decline in the



quality of education and research output.

Thousands of Ukrainians have been forced to flee their homes due to the conflict, including students pursuing higher education. These displaced students have encountered numerous challenges in continuing their studies. Integration into new educational institutions, recognition of prior credits, and adapting to unfamiliar environments have been obstacles they've had to overcome. However, some institutions and government initiatives have made efforts to support displaced students by offering scholarships and streamlined admission processes.

Despite the adversities brought by the conflict, Ukrainian higher education institutions have demonstrated resilience and flexibility. Many universities have restructured their curricula to address the changing needs of society during wartime. Courses focused on conflict resolution, humanitarian assistance, and reconstruction have been introduced to equip students with skills relevant to the current scenario.

In the face of turmoil, international collaborations and support have played a vital role in sustaining higher education in Ukraine. Partnerships with foreign universities and organizations have enabled knowledge exchange, research collaborations, and financial assistance. These collaborations have not only helped in rebuilding infrastructure but have also fostered academic growth and global exposure for students and faculty.

Amidst the chaos and destruction of war, education remains a cornerstone for nation-building and sustainable development. The resilience of the Ukrainian higher education system and the determination of its students and educators highlight the enduring significance of education during times of crisis. By investing in education, Ukraine can pave the way for a brighter future, fostering skilled individuals capable of rebuilding the nation.

Medical faculties play a critical role in nurturing future healthcare professionals and ensuring the well-being of communities. However, war disrupts the usual academic environment, leading to a series of obstacles that students and educators must overcome (6).

We explore the various challenges faced by medical students during war and the measures taken to continue their education under such extraordinary circumstances (1,2,4):

1. Safety and Security Concerns. During wartime, one of the primary concerns for medical students is their safety and security. The proximity of medical schools to conflict zones puts students at risk, making it challenging for them to focus on their studies. In regions where bombings, shootings, and military operations are frequent, the fear and uncertainty can affect the mental health of students and hinder their ability to learn effectively. Universities and medical institutions need to establish robust safety protocols to protect their students and ensure a conducive learning environment.

2. Disruption of Academic Infrastructure. War often results in the destruction of essential academic infrastructure. Lecture halls, laboratories, and libraries may be damaged or inaccessible due to fighting, making it difficult for medical students to attend classes and access necessary learning resources. In some cases, universities might be forced to close temporarily for safety reasons, further disrupting the students' academic progress.



3. *Shortage of Qualified Faculty.* War drives a mass exodus of people, including experienced faculty members and medical professionals, from conflict zones. The departure of qualified instructors can lead to a shortage of skilled faculty at medical schools, making it challenging for students to receive comprehensive and up-to-date education. In such situations, makeshift teaching arrangements and reliance on digital learning resources may become necessary to fill the gaps.

4. *Limited Access to Clinical Training.* Clinical training is a crucial component of medical education. However, during wartime, hospitals and healthcare facilities may become overwhelmed with casualties, reducing the opportunities for medical students to gain hands-on experience. Additionally, some hospitals may be forced to prioritize emergency care, limiting the exposure of students to various medical specialties and routine patient care.

5. *Psychological Stress and Trauma.* The psychological toll of war affects not only civilians but also students and educators. Witnessing the horrors of war and experiencing personal losses can lead to trauma and post-traumatic stress disorder among medical students. Coping with these emotional challenges can significantly hinder their learning capabilities and long-term mental well-being.

6. *Innovations in Remote Learning.* In the face of adversity, medical faculties have shown remarkable resilience and adaptability. During wartime, educators have embraced technology to facilitate remote learning, ensuring that students can continue their education despite the physical challenges. Virtual classrooms, online lectures, and teleconferencing platforms have become essential tools to bridge the gap and maintain educational continuity.

7. *Humanitarian Efforts and Experience.* Despite the challenges, war zones provide unique learning opportunities for medical students. Humanitarian organizations often step in to provide medical aid and assistance to affected populations. Students who volunteer or work with these organizations can gain valuable real-world experience in emergency medicine and disaster response, developing skills that go beyond the scope of a regular medical curriculum.

The War in Ukraine has undoubtedly left a profound impact on higher education in Ukraine. From the destruction of infrastructure to the brain drain and displacement of students, the challenges have been immense. However, amidst adversity, the resilience shown by educational institutions and their commitment to fostering knowledge and skills cannot be overlooked. International support and collaborations have played a crucial role in sustaining educational efforts during these trying times.

Opportunities Arising from Adversity (2,5,7):

1. *Focus on Emergency Medicine:* Despite the challenges, war often creates a demand for healthcare professionals with expertise in emergency medicine. Medical schools can adapt their curricula to address the specific needs of managing injuries and trauma resulting from conflict situations.

2. *Medical Research and Innovation:* In the face of adversity, medical institutions may be driven to conduct research and innovate to address the unique health challenges brought on by war. This can lead to advancements in medical technology, prosthetics, and treatment strategies.

3. *International Collaborations:* During and after conflicts, the international



community often extends support to rebuild educational institutions. Collaborations with foreign universities and organizations can help reinvigorate higher medical education and foster global connections among healthcare professionals.

4. *Resilience and Adaptability*: Students and educators in war-affected regions develop a unique sense of resilience and adaptability. These qualities can prove valuable in the medical field, where the ability to handle stressful situations and adapt to changing circumstances is critical.

As Ukraine continues its journey towards peace and stability, investing in higher education and empowering the younger generation with knowledge and expertise will remain crucial. Education will not only contribute to rebuilding the nation but will also serve as a beacon of hope for a better and brighter future.

Summary and conclusions.

The education of students of medical faculties during war is fraught with challenges that test their resilience, adaptability, and commitment to their profession. From safety concerns to academic disruptions, the impact of war on medical education is significant. However, with the collective efforts of educators, institutions, and the students themselves, the spirit of learning persists even in the face of adversity. Embracing technological innovations and humanitarian opportunities, medical faculties can continue to produce compassionate and skilled healthcare professionals who contribute to the healing and rebuilding of communities affected by conflict.

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