

HOW TO USE WESTERN EXPERIENCE TO IMPROVE LIFE AND HEALTH IN EAST EUROPEAN COUNTRIES

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INTRODUCTION

On May 1st 2023 Ukrainian Minister of Health, Viktor Liashko, made his first official visit to WHO/Europe headquarters in Copenhagen. WHO and the Ministry of Health of Ukraine underscored their long-running partnership amid the ongoing war in addressing essential health needs and strengthening the country's health systems for the future. Minister Victor Liashko met with the WHO Regional Director for Europe Dr Hans Henri P. Kluge to discuss the impacts of the war on health services and delivery, the health and care workforce, and health infrastructure – along with how Ukraine's health reforms are charting a blueprint for the years ahead. Together with the Ministry of Health, and our hundreds of health partners on the ground nationwide, including hard-to-reach and regained areas, we will continue to help maintain health services, supporting the delivery of essential supplies, vaccines and medicines where they are most urgently needed. Complementing Dr Kluge's remarks, Dr Habicht added, "While WHO has been providing continuous support in Ukraine by delivering lifesaving health supplies and bringing vital care to people even as the war rages on, we also pledge to support Ukraine's ambitious, yet realistic, health reforms packaged under the country's Health Strategy 2030 – laying the foundation for health sector recovery well into the future"¹. Discussions with WHO/Europe programme directors also included primary health care in Ukraine during and after the war, health financing, tracking and responding to outbreaks of infectious diseases, mental health and psychosocial support services, importance of rehabilitation for Ukrainian patients. Improving health and quality of life in Ukraine and other East European countries involves in multi-dimensional approach that addresses social, economic, and healthcare factors. East European countries can certainly learn and apply experiences and strategies from Western countries, tailored to their unique cultural, economic, and political contexts.

¹ Focusing on the state of health in Ukraine with an eye to the future. WHO. *Europe Press Office*. URL: <https://www.who.int/europe/news/item/01-05-2023-focusing-on-the-state-of-health-in-ukraine-with-an-eye-to-the--future>

1. Implementation of Western experience for improvement the health care system in Ukraine and East European countries

There are some strategies that can work to reach improvement of the health care systems in East European countries. First of all, it is necessary to strengthening health care system in the East European countries. Many Western countries have well established healthcare systems. East European countries could seek to improve accessibility, quality, and efficiency of healthcare services in the West. This may involve enhancing primary healthcare, integrating services, decentralizing health care delivery or promoting public-private partnership, introduction of public health schools and services.

Strengthening educational and training systems for health care professionals is crucial to reach the goal. This may involve developing or enhancing medical and public health education programs, perhaps in collaboration with Western institutions. It could also involve professional exchange programs or study abroad opportunities.

A very important measure is the creation or improvement of the public health system. In some European countries there are no separate public health schools, but only public health departments in medical schools or universities. Public health initiatives, such as vaccination programs, disease prevention and control, health promotion campaigns, etc., play a crucial role in improving public health. Sharing best practices and adopting successful strategies from Western countries can be beneficial. Research also helps identify health issues, develop solutions, and inform policy. Collaboration with Western institutions could help strengthen research capabilities.

Adopting and adapting healthcare technology used in Western countries could help improve healthcare delivery. This might involve telemedicine, electronic health records, medical devices, etc.

Western countries often have robust health policies and regulations, including those related to healthcare quality and safety, public health, environmental health, occupational health, etc. East European countries may benefit from reviewing these policies and adapting relevant elements to their context. Addressing social determinants of health, such as education, income, housing, etc., is crucial for improving health and wellbeing. This might involve social policies aimed at reducing poverty and inequality, improving education, promoting healthy lifestyles, etc. Collaboration and partnerships with Western countries, international organizations, Non-governmental organizations (NGOs) and other international institutions, can provide opportunities for resource sharing, capacity building, and learning from best practices. NGO activities may include environmental, social, advocacy and human rights work. They can work to promote social or political change on a

broad scale or very locally. NGOs play a critical part in promoting citizen participation, improving communities and developing society²

Adapting these strategies to the local context is very important, because what works well in one country may not be directly applicable or effective in another due to cultural, socioeconomic, and political differences. Hence, it's important for each country to conduct its assessments, engage stakeholders, and develop strategies that are most appropriate for their country.

In the United States medical schools and public health schools serve different purposes and offer distinct areas of study. While medical schools focus primarily on training physicians and other healthcare professionals to provide clinical care, public health schools focus on promoting and protecting the health of communities through population-based approaches. Medical schools typically provide comprehensive education and training in clinical medicine, including diagnosis, treatment, and patient care. The curriculum in medical schools is designed to prepare students to become doctors, surgeons, and specialists who can directly provide medical care to individuals. On the other hand, public health schools offer specialized education in the field of public health, which encompasses a broader perspective on health and disease prevention. Public health professionals are concerned with understanding and addressing the health needs of entire populations or communities. They work on issues such as disease surveillance, epidemiology, health promotion, environmental health, policy development, and health education.

Both medical schools and public health schools play crucial roles in the healthcare system. While medical schools primarily focus on training clinicians, public health schools train professionals to address health issues at a broader level, emphasizing preventive measures and population health. By combining the expertise from both fields, comprehensive approach to health care can be achieved. It's important to note that medical schools and public health schools often collaborate and share knowledge and resources. There can be interdisciplinary programs and joint initiatives between the two, recognizing the importance of integrating clinical care and public health approaches for effective healthcare delivery. Teaching medicine in medical schools and public health in public health schools allows for a well-rounded approach to healthcare education and practice. By training healthcare professionals in both areas, it enables a comprehensive understanding of individual patient care as well as population-based health promotion and disease prevention.

Some countries do not have such a health care system with the presence of both medical and public health separate educational institutions. In order to

² Candid learning knowledge base. What is an NGO? What role does it play in civil society?
URL: <https://learning.candid.org/resources/knowledge-base/ngo-definition-and-role/>

implement the American system in their countries, they need to follow the necessary steps. Introducing a system similar to the American model, with separate medical schools and public health schools, requires careful planning and implementation. While each country's context may differ, here are some general steps that could be considered.

The first step is assessing the current healthcare landscape in your country. Evaluate the existing healthcare system, including the availability and quality of medical education and public health infrastructure. Identify the strengths, weaknesses, and gaps in the system that could be addressed by introducing separate medical and public health schools. Second it is necessary to develop a framework or policy that outlines the goals, objectives, and rationale for introducing separate medical and public health schools. This framework should consider the country's specific healthcare needs, workforce requirements, and available resources. Third step – creation a comprehensive curriculum for both medical schools and public health schools, incorporating the essential knowledge and skills needed for each field and develop accreditation standards and processes to ensure the quality and consistency of education provided by these institutions.

Next step is to build infrastructure. Establish the necessary infrastructure for medical schools and public health schools, including facilities, laboratories, libraries, and clinical training sites. This may require collaborations with existing healthcare institutions, universities and government agencies.

Recruit qualified faculty members who have expertise in clinical medicine, public health, and relevant disciplines. Provide them with appropriate training and professional development opportunities to enhance their teaching and research skills. It is very important to establish an appropriate admission and selection process. Develop a fair and transparent admission and selection process for prospective students. This process should evaluate candidates based on their academic achievements, aptitude for the chosen field, and other relevant criteria.

Foster collaborations and partnerships with international medical schools, public health schools, and organizations. This can facilitate knowledge exchange, faculty/student exchanges, research collaborations, and access to global best practices in medical and public health education.

Gradual implementation is necessary to reach your goals. Introduce the new system gradually, allowing for a smooth transition and adaptation to the changes. This may involve phasing out the existing system while gradually increasing the enrollment in medical schools and public health schools.

Continuously monitor and evaluate the performance and outcomes of the new system. Collect data on student performance, faculty development, research productivity, and the impact on the healthcare system. Use the current

information to make necessary adjustments and improvements. Foster a culture of continuous improvement by regularly reviewing the curriculum, teaching methods, and infrastructure to ensure that the education provided meets the evolving needs of the healthcare system and society. It's important to understand that implementing a new system like the American model requires significant financial investment, stakeholder engagement, and long-term commitment. It is essential to tailor the approach to the specific needs and resources of each country while adapting best practices from countries with successful medical and public health education systems. Several countries in Europe have public health schools or institutions that offer public health programs similar to those in the United States. These institutions can be used for receiving public health education in Europe.

United Kingdom: The United Kingdom has several universities that offer public health programs and have dedicated schools or departments focused on public health education and research. Examples include the London School of Hygiene & Tropical Medicine³, Imperial College London School of Public Health, and the University of Edinburgh School of Health in Social Science⁴. The UK Annual Reports, since 2017, have published open materials that combine data and knowledge with information from other sources to give a broad picture of people's health in England. This can be an excellent example for Ukraine.

The Netherlands is known for its strong public health system and has several universities that offer public health programs. The University of Amsterdam⁵, Erasmus University Rotterdam, and Maastricht University are among the institutions with well-established public health education programs. Germany has several universities and research institutions that offer public health programs. The Charité – Universitätsmedizin Berlin, Ludwig Maximilian University of Munich, and Bielefeld University are a few examples of institutions with dedicated public health schools or programs⁶.

Sweden has a strong focus on public health and offers public health programs at universities such as the Karolinska Institute⁷, Lund University, and Umea University. These institutions provide comprehensive training in public health and conduct research in various areas of public health. France

³ The London School of Hygiene & Tropical Medicine URL: <https://www.london.ac.uk/ways-study/study-campus-london/member-institutions/london-school-hygiene-tropical-medicine>

⁴ University of Edinburgh School of Health in Social Science URL: <https://www.ed.ac.uk/health/about>

⁵ University of Amsterdam. URL: <https://www.uva.nl/en>

⁶ University of Pettekofer School of Public Health Munich URL: <https://www.en.ibe.med.uni-muenchen.de/academics/pettenkofer/index.html>

⁷ Karolinska Institutet. URL: <https://ki.se/en>

has a number of universities and institutions that offer public health programs. The Institute National de la Santé et de la Recherche Médicale (INSERM) collaborates with universities like the University of Paris⁸ and the University of Bordeaux to provide public health education and research opportunities. Spain has several universities with public health programs and departments, including the University of Barcelona⁹, University of Valencia, and Carlos III Health Institute. These institutions offer a range of public health degrees and research opportunities. Of course, while these countries have public health programs, the specific structure and organization of these programs may vary. Some may have standalone public health schools, while others may offer public health education within broader medical or health science faculties.

Introducing a public health system in countries that currently lack such a system requires careful examination of existing models and best practices. While specific official documents can vary, here are some key documents from countries with established public health systems that may provide valuable insights and guidance for introducing similar systems in Ukraine and other European countries. In England – “Public Health Outcomes Framework”: This framework outlines the key objectives and indicators for monitoring public health outcomes in England. It provides a structured approach to assessing and improving population health, which can inform the development of similar frameworks in other countries¹⁰. – “Health and Social Care Act 2012”: This legislation in England outlines the legal framework for public health functions, including the responsibilities and roles of various stakeholders. It can serve as a reference for designing legislation and governance structures for public health systems¹¹. In the Netherlands – “Public Health Act”: This act in the Netherlands outlines the legal framework for public health policies and activities. It addresses areas such as disease prevention, health promotion, emergency preparedness, and surveillance. Reviewing this act can provide insights into the legal framework required for public health systems¹².

“National Institute for Public Health and the Environment (RIVM) Strategies and Reports”: The RIVM publishes various reports and strategies that outline public health priorities, evidence-based interventions, and

⁸ University of Paris-Sorbonne. URL: <https://www.sorbonne-universite.fr/en>

⁹ University of Barcelona. URL: <https://web.uv.es/en/web/ub/>

¹⁰ “Public Health Outcomes Framework”: URL: <https://fingertips.phe.org.uk/profile/public-health-outcomes-framework>

¹¹ “Health and Social Care Act 2012”. URL: <https://www.legislation.gov.uk/id/ukpga/2012/>

¹² “Public Health Act”. URL: <https://www.ejournals.eu/pliki/art/5956/>

surveillance methodologies. These documents can inform the development of strategies and policies in other countries¹³.

In France – “French Public Health Law”: France has a comprehensive public health law that covers various aspects of public health, including surveillance, health promotion, prevention strategies, and emergency preparedness. Studying this law can provide insights into the legal framework necessary for the public health system¹⁴.

“National Health Strategy”: France periodically publishes national health strategies that outline priorities and objectives for improving public health. These strategies can provide a roadmap for setting goals and priorities when developing public health system¹⁵.

2. Implementation in Ukraine of a Western system of medical and public health education

Implementing a system similar to the American model in low-income countries like Ukraine can be a complex undertaking. However, with careful planning and strategic implementation, we are sure that it is possible to make progress on the way of developing successful medical and public health education systems. First, we need to conduct a comprehensive assessment of the healthcare needs and priorities in Ukraine. Identify the major health challenges, prevalent diseases, and gaps in healthcare services to guide the development of medical and public health education programs. Next we need to develop a policy framework that emphasizes the importance of medical and public health education and their role in improving population health in Ukraine. Establish institutions or revitalize existing ones to oversee the implementation and management of medical and public health schools.

Seek collaborations and partnerships with international organizations, universities, and philanthropic foundations that can provide technical assistance, expertise, and resources. Engage in knowledge sharing, faculty exchanges, and joint research projects to strengthen the capacity of medical and public health education in Ukraine. Design comprehensive and tailored curricula for medical schools and public health schools in Ukraine. Ensure the curricula reflect the specific health needs of the country and align with international standards. Incorporate practical training and experiential learning opportunities to enhance the skills of future healthcare professionals.

¹³ “National Institute for Public Health and the Environment (RIVM) Strategies and Reports”. URL: <https://www.rivm.nl/en>

¹⁴ “French Public Health Law”. URL: https://www.cairn-int.info/article-E_SPUB_123_0253--the-case-for-a-new-french-public-health.htm

¹⁵ “National Health Strategy” URL: https://sante.gouv.fr/IMG/pdf/pnsp_version_8_pages_anglais.pdf

Invest in faculty development programs to enhance teaching skills, research capabilities, and expertise in clinical medicine and public health. Provide training opportunities, workshops, and mentorship programs to empower faculty members and ensure high-quality education.

Allocate resources to establish or improve the infrastructure necessary for medical and public health schools. This includes modern facilities, well-equipped laboratories, libraries, and access to clinical training sites. Seek partnerships with healthcare facilities to provide practical training opportunities for students.

Since Ukraine is now considered a low-income country, it is very important to create scholarship programs and financial support mechanisms to enable students from disadvantaged backgrounds to pursue education in medical and public health schools. This can help attract and retain talented individuals who may not have had the means to pursue higher education otherwise.

It is necessary to provide gradual implementation of this program. Start with a pilot phase, focusing on a few institutions initially, and gradually expand the program over time. This allows for careful monitoring, evaluation, and necessary adjustments before scaling up.

Develop accreditation processes and standards to ensure the quality of education provided by medical and public health schools. Regularly assess and monitor the performance of institutions, faculty, and students to maintain high standards and continuing improvement.

Encourage and support research activities in medical and public health schools. Promote a culture of innovation, evidence-based practice, and problem-solving to address local health challenges effectively.

Conduct public awareness campaigns to highlight the importance of medical and public health education in improving healthcare services and population health. Engage with policymakers, stakeholders, and the community to advocate for investments in medical and public health education.

It's crucial to recognize that implementing such changes will require significant investment, collaboration, and long-term commitment from various stakeholders, including the government, academia, healthcare organizations, and the international community. Continued support and adaptation based on the unique context of Ukraine will be essential to successfully introduce and sustain the system of separate medical and public health schools. What can be the best sources of financing of public health schools in low-income East European countries? Financing public health schools in low-income countries can be challenging, but there are several potential sources of funding that can be explored. One of the best sources is

Government. Governments can allocate funds from their national budgets to support public health schools. Advocacy efforts can be made to highlight the importance of investing in public health funding education and workforce development. Collaborating with government agencies responsible for health and education can help secure dedicated funding streams.

Public health schools in low-income countries can seek financial support from international aid organizations and donor agencies. These organizations often have specific funding programs for health-related initiatives, including education and capacity building. Building partnerships with these entities and aligning proposals with their priorities can increase the chances of securing funding. Engaging in public-private partnerships can provide a sustainable funding source for public health schools. Collaboration with private sector organizations, such as healthcare companies, pharmaceutical companies, or foundations, can help generate financial support through grants, sponsorships, or research collaborations. These partnerships can also provide opportunities for joint projects and knowledge exchange. Collaborating with international academic institutions or universities can bring financial support to public health schools in low-income countries. This can include joint research projects, faculty exchanges, or capacity-building initiatives funded through academic partnerships. Seek out institutions with existing public health programs and organizations that prioritize global health initiatives. Public health schools can actively pursue research grants and funding opportunities. Governments, international organizations, and research foundations often provide grants for research programs in public health. Building research capacity and developing strong research proposals can increase the likelihood of securing funding for specific research initiatives. Establish scholarship and fellowship programs to support students pursuing public health education. Seek funding from philanthropic organizations, international scholarships, or national scholarship programs to provide financial assistance to deserving students. Encouraging alumni and successful professionals to contribute to scholarship funds can also be beneficial. While low-income countries may face limitations in charging high tuition fees, exploring reasonable tuition fees for students can generate some revenue to support the operations of public health schools. Implementing cost-recovery measures, such as continuing education programs or consultancy services, can also contribute to self-financing efforts. Develop fundraising strategies to engage alumni and other stakeholders in supporting public health schools. Alumni networks can be leveraged for donations, mentorship programs, or career development initiatives. Organize fundraising events, campaigns, and alumni reunions to create a sense of community. It's important to understand that a combination of these funding sources, tailored to the specific context and resources

available in each low-income country, is often necessary. Public health schools should explore multiple avenues and continuously seek opportunities for financial sustainability and growth. Developing strong partnerships, demonstrating impact, and showcasing the value of public health education are crucial in attracting funding from various sources.

The creation of public health societies and associations can be a valuable strategy to support fundraising efforts for public health schools. Public health societies and associations can provide a platform for networking and collaboration among professionals, researchers, and policymakers in the field of public health. Through these networks, connections can be established with potential donors, philanthropic organizations, and funding agencies that may be interested in supporting public health education and research. These societies and associations can establish grants and scholarships to support students pursuing public health education. By creating dedicated funding opportunities for students, they can contribute to alleviating financial barriers and attract more individuals to the field of public health. Public health societies and associations can organize fundraising events, campaigns, and initiatives to raise funds for public health schools. These activities can include conferences, seminars, charity walks, crowd funding campaigns, or other creative fundraising endeavors that engage the public and stakeholders in supporting public health education. Additional information can be received from: Official website of Public Health in England¹⁶, UK government Official website¹⁷, Dutch government official website¹⁸, and Official website of the French Ministry of Health¹⁹.

3. Possible role of public health graduates during the war in Ukraine

During times of war, graduates from public health schools can play significant roles in supporting the health and well-being of the population of Ukrainians, affected by aggressive action of Russia. There are some potential roles and contributions that public health graduates can make during wartime. Public health graduates can contribute to emergency response efforts by participating in disaster management teams. They can help coordinate and implement public health interventions, assess health risks, and provide emergency medical care.

Public health professionals can monitor and track the occurrence of diseases among affected populations. They can establish disease surveillance

¹⁶ Official website of Public Health in England. URL: <https://www.gov.uk/government/organisations/public-health->

¹⁷ UK government's official website. URL: <https://www.gov.uk>

¹⁸ Dutch government's official website. URL: <https://www.government.nl/>

¹⁹ Official website of the French Ministry of Health. URL: <https://solidarites-sante.gouv.fr/>

systems, conduct epidemiological investigations, and implement measures to control and prevent diseases outbreaks.

Public health graduates can provide essential healthcare services, especially for vulnerable populations affected by war. They can work in mobile clinics, refugee camps, or temporary healthcare facilities to provide primary care, immunizations, and mental health support.

Public health professionals can engage in health education campaigns to raise awareness about hygiene practices, disease prevention, and safety measures during war. They can disseminate information through community outreach programs, educational materials and communication channels to empower communities to protect their health.

Public health graduates can contribute to ensuring access to clean water and sanitation facilities, which are often disrupted during conflicts. They can assess and address waterborne diseases, promote hygiene practices, and support the establishment of safe water sources and sanitation infrastructure.

Public health professionals with expertise in mental health can provide psychosocial support to individuals and communities affected by war, they can offer counseling, trauma-informed care, and mental health interventions to address the psychological impact of the war.

Public health graduates can advocate for policies and interventions that promote the protection of health and well-being during wartime. They can work with government agencies, NGOs, and international organizations to influence policy decisions, allocate resources and prioritize public health needs.

Public health professionals can contribute to research efforts by conducting studies on the health effects of war and its implications for the affected populations. They can collect and analyze data to inform evidence-based interventions and policy recommendations.

It's important to note that the specific roles and contributions of public health graduates during wartime will vary depending on the context, resources available, and the nature of the conflict. Flexibility, adaptability, and collaboration with other healthcare professionals and organizations are crucial to effectively address the health challenges during times of war.

4. Collaboration between public health specialists and medical doctors

Collaboration between public health specialists and medical doctors is crucial during world disasters like COVID-19 or war to ensure an effective and coordinated response. There are several key ways in which they can collaborate. Public health specialists and medical doctors should collaborate in developing comprehensive response plans and strategies. This includes identifying the specific health needs and priorities, allocating resources, and coordinating efforts to address both individual patient care and population health.

Regular and open communication channels should be established between public health specialists and medical doctors. This allows for the exchange of critical information on disease surveillance, outbreak response, treatment protocols, and public health measures. Sharing knowledge and expertise enhances decision making and enables a unified approach. Public health specialists can collaborate with medical doctors to conduct epidemiological investigations, track disease spread, and identify potential outbreaks. Medical doctors can provide crucial clinical data and patient information that aids in surveillance, contact tracing, and risk assessment. Another area for collaboration – public health specialists can provide clinical guidance and training to medical doctors, ensuring they are updated on best practices, treatment protocols, and infection prevention and control measures. This collaboration enhances the ability to deliver quality of healthcare and maintain safety standards. Public health specialists and medical doctors can collaborate in developing and implementing public health interventions, such as vaccination campaigns, quarantine measures, and health promotion strategies. They can also contribute to policy development, advocating for evidence-based approaches to protect public health and ensure equitable access to healthcare. During crises, healthcare systems may face significant challenges. Public health specialists and medical doctors also can collaborate to address system-level issues, such as resource allocation, surge capacity planning, and healthcare workforce management. This partnership ensures an efficient and coordinated response to meet the demands of the situation. Collaboration between public health specialists and medical doctors is crucial in providing mental health and psychosocial support to affected individuals. They can jointly develop interventions and referral pathways to address the psychological impact of disasters on both patients and healthcare providers.

Public health specialists and medical doctors can collaborate on research initiatives and evaluation studies to assess the effectiveness of interventions, treatment approaches, and public health measures. This collaborative research helps inform evidence-based practice and improve future response effort. Overall, close collaboration, mutual respect, and effective communication between public health specialists and medical doctors are essential for a comprehensive and integrated response during world disasters. By leveraging their respective expertise and working together, they can ensure the best possible outcomes for both individual patients and the broader population.

CONCLUSIONS

There are several developed Western countries have well established healthcare systems. East European countries could seek Western experience to improve accessibility, quality, and efficiency of healthcare services. This

may involve enhancing primary healthcare, integrating services, decentralizing health care delivery or promoting public-private partnership, introduction of public health schools and services. Improving health and quality of life in Ukraine and other East European countries involves in multi-dimensional approach that addresses social, economic, and healthcare factors. East European countries can certainly learn and apply experiences and strategies from Western countries, tailored to their unique cultural, economic, and political contexts. Public health schools in low-income countries can seek support from international aid organizations and donor agencies. These organizations often have specific funding programs for health-related initiatives, including education and capacity building. Building partnerships with these entities and aligning proposals with their priorities can increase the chances of securing funding. Public health specialists and medical doctors can collaborate in developing and implementing public health interventions, such as vaccination campaigns, quarantine measures, and health promotion strategies. They can also contribute to policy development, advocating for evidence-based approaches to protect public health and ensure equitable access to healthcare in their country.

SUMMARY

There are some strategies that can work to reach improvement of the health care systems in East European countries. First of all, it is necessary to strengthening health care system in the East European countries. Many Western countries have well established healthcare systems. East European countries could seek to improve accessibility, quality, and efficiency of healthcare services in the West. This may involve enhancing primary healthcare, integrating services, decentralizing health care delivery or promoting public-private partnership, introduction of public health schools and services. It's important that the specific roles and contributions of public health graduates during wartime will vary depending on the context, resources available, and the nature of the conflict. Public health specialists and medical doctors can collaborate in developing and implementing public health interventions, such as vaccination campaigns, quarantine measures, and health promotion strategies. They can also contribute to policy development, advocating for evidence-based approaches to protect public health and ensure equitable access to healthcare. The specific roles and contributions of public health graduates during wartime will vary depending on the context, resources available, and the nature of the conflict. Flexibility, adaptability, and collaboration with other healthcare professionals and organizations are crucial to effectively address the health challenges during times of war.

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