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Treatment system adaptations during war: lessons from Ukrainian addiction treatment providers

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Abstract

Background: The war in Ukraine has posed significant challenges to the healthcare system. This paper draws upon expert consultations, held between December 2022 and February 2023, focused on HIV/AIDS, addiction, and mental health service delivery during the first year of this war, and following the Global Mental Health Humanitarian Coalition panel discussion in May 2022.

Objectives: This commentary presents the experiences of frontline healthcare workers in Ukraine, challenges, and local adaptations to meet the increased mental health needs of healthcare

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providers. We aimed to document the adaptations made in the addiction healthcare system and to acknowledge the changes in vulnerabilities and lessons learned.

Results: Burnout among healthcare providers delivering addiction, HIV/AIDS and mental health services became more visible after the second half of 2022. Challenges included increased workload, contextual threats, lack of job relocation strategies, and money-follow-the-patient policies.

Recommendations: The lessons from the first year of war in Ukraine hold significant generalizability to other contexts. These include enabling bottom-up approaches to tailoring services and allowing healthcare providers to respond to the dynamics of war in an effective and active manner. Other recommendations include departmental-specific resources and strategies, particularly as vulnerable groups and challenges are unstable in humanitarian contexts.

Conclusions: Globally and in Ukraine, healthcare workers need more than applause. Along with monetary incentives, other strategies to prevent burnout, ensure sustainable capacity building, job relocation opportunities, and bespoke adaptations are imperative to protect healthcare providers' wellbeing and overall public health.

Keywords

Ukraine; healthcare; adaptations; resilience; crises; addiction treatment

The Russian invasion of Ukraine on February 24th 2022, has resulted in over 8 million refugees and about 5 million internally displaced persons (UNHCR, 2022) and has caused significant damage to the healthcare infrastructure, triggering rapid adaptations to healthcare delivery. Having worked at the intersection of HIV, addiction, and aging in Ukraine since 2017 (Rozanova et al., 2020, 2022), our team continued to examine the impact of the war on patients and providers. This commentary describes the challenges caused by the crisis and the novel service adaptations that have resulted, drawing on a panel discussion convened by the Global Mental Health Humanitarian Coalition (GMHHC, 2022) in May 2022 and on expert consultations held between December 2022 and February 2023, with addiction and HIV clinicians across five Ukrainian regions (Zhytomyr, Dnipro, Kherson, Donetsk, and Kyiv). We aimed to document the adaptations made in the addiction healthcare system to acknowledge the changes in vulnerabilities, and summarize the lessons learned.

Before the 2022 Russian invasion, the Ukrainian addiction treatment system had made considerable progress in bringing medications for opioid use disorder (MOUD) to scale (Bojko et al., 2016; Bromberg et al., 2022; Dumchev et al., 2017). While the average number of patients with opioid use disorder (OUD) on MOUD remained well below the recommended 20%, some clinics did increase their patient numbers to close to that goal (Altice et al., 2022; Public Health Center of the MoH of Ukraine, 2022), with implementation help led by international expert teams supported by the Global Fund and the national government (Madden et al., 2017). Nevertheless, the war escalations have triggered fears that the conflict may destroy these achievements (Kazatchkine, 2022). Some commentators predicted that the Ukrainian healthcare system would collapse because of limited supplies, understaffing, and increased service demand (Altice et al., 2022; Goto et al., 2022). Twelve months into the war, pharmacies, specialized clinics, and general

hospitals continued to provide treatment, albeit with severe operational challenges, including water and electricity outages (Altice et al., 2022). The continuation of addiction treatment was made possible due to innovations and adaptations of services during the COVID-19 pandemic (Rozanova et al., 2022) and significant efforts by the Ukrainian Government (Public Health Center of the Ministry of Health of Ukraine, 2022), driven by ingenuity and technological innovations. However, the main reason addiction treatment has weathered the storm thus far is the healthcare workforce itself.

Disruptions in the homemade and synthetic opioids market in the war's early weeks led to a 6.9% increase in persons with OUD presenting to MOUD clinics for treatment (Altice et al., 2022). While Ukrainian addiction treatment providers were already working before onset of the 2022 conflict to scale up treatment and meet the objectives set by the Ministry of Health, their efforts intensified after the 2022 Russian invasion. Face-to-face and telephone consultations with administrators, doctors, nurses, psychologists, and social workers from Kyiv City AIDS Centre, Narcological Clinical Hospital "Sociotherapy" and Kramatorsk Narcological Dispensary (Donetsk region) revealed that this collective effort was made unselfishly, emphasizing moral victory among Ukrainian service providers. Examples of local and contextual adaptations include psychiatrists delivering outpatient mental health services via telemedicine and inpatient psychological first aid on an unpaid basis. In response to massive displacement, clinicians prepared emergency portable copies of medical records and distributed them to patients to allow treatment continuity, conducted home consultations and dropped off medications for people in vulnerable groups (GMHHC, 2022). As evidence of success of these intensified efforts, many patients who initiated MOUD after the invasion remained in care (Bromberg et al., 2022). Although some patients did return to street drugs after the drug market eventually stabilized and with the return of more easily available supply of other drugs (e.g., amphetamines, smoking mixtures and spices), 18.1% of OUD patients who began methadone treatment remained in MOUD programs (Altice et al., 2022).

The healthcare reform in Ukraine since 2017 aims to "*implement the achievement of three key indicators - ensuring the availability, quality and free of charge of medical care for Ukrainians*" (Ministry of Health of Ukraine, 2023). Evidence from other similar healthcare optimization reforms suggests (at least initially) that healthcare workers must care for more patients and perform more tasks with strained staff and fewer resources (Guerrero et al., 2017). When healthcare funding is tight, addiction treatment is often society's last priority (Greene et al., 2021; Roborgh et al., 2022), including in Ukraine, where addiction providers have worked under limited resources for years (International Centre for Policy Studies (ICPS), 2005; The Conversation, 2022). Continuation of the healthcare reform during the war entailed extra demands to already thinly stretched clinicians, such as setting up new digital databases or developing justifications for their facility's role within a new 'hospital district'; however, the funding remains centralized, and tied to top-down assessment of needs (Ministry of Health of Ukraine, 2023).

Since the beginning of the conflict, the government has issued urgent decrees to improve access to medication, including MOUD and antiretroviral therapy, by revising healthcare documentation, treatment dosages, and prescription requirements. Nevertheless,

the Ukrainian health system features universal coverage wherein money follows patients, underpinned by patient-clinician 12-month contracts (Romaniuk & Semigina, 2018), raising concerns about the sustainability of financially compensating healthcare providers based on pre-existing contractual agreements. According to our consultations, informal network channels for finding employment in healthcare remain the norm in Ukraine, with few formal job prospects accessible even as missiles strike and destroy clinics. We found that addiction treatment staff in Ukraine are not used to special attention; we were the only team (to the best of our knowledge) who asked clinicians about their own experiences during the war. The lack of attention to providers indicates that many providers operate clinics with little support and that regional coordination is limited. This siloing of providers and lack of network may exacerbate burnout and restrict the dissemination of effective adaptations during the crisis. Clinicians' difficulties and how they manage them are taken for granted, implying that different regions and facilities must find support – including among local authorities – to implement effective solutions during the crisis.

These observations lead us to the following recommendations. Contextually informed, tailored mental health programs that enable outpatient support via telemedicine techniques and inpatient psychosocial assistance during crises must be expanded. This will empower patients and clinicians to modify practices and eliminate the stigma of seeking help and treatment for substance misuse. Similarly, implementing methods to allow the electronic and paper-based transfer of medical records in an emergency would allow for data transfer, treatment continuity, and supporting treatment payments. Additionally, designing relevant job relocation strategies during crises, and facilitating specialized and non-specialized personnel transfer between clinics, based on patient and population needs can allow healthcare staff to follow patients' progress. Combining financial remuneration with psychosocial support can enable staff retention and meet treatment needs.

While the universal lessons of wartime healthcare systems are typically similar across the globe (Rubenstein, 2021), including prioritizing healthcare as a fundamental human right, building resilient healthcare systems, and coordinating efforts, the war in Ukraine highlights a prominent opportunity for learning. Specifically, how frontline addiction treatment clinicians have reimagined and reorganized services and resources within clinics poses a pertinent question to the applicability of top-down guidance during crises. For example, our consultants have described clinician-generated approaches to meet the increasing psychological burden among doctors, nurses and other key workers in addiction treatment clinics. However, a closer look at the context where such approaches emerged suggests these inventions were mothered by necessity in the dearth of resources that predated the war, with clinicians relying on local strategies and self-help to overcome hardship. This lesson can be applied to other conflicts by empowering bottom-up approaches to healthcare system adaptations and allowing regional clinics to receive adequate governmental support, including financial or medical resources.

War multiplies health risks and extends treatment needs but greatly diminishes resources available to healthcare, and in such conditions, addiction treatment, already a low priority, risks becoming completely overlooked. Therefore, it is essential that by proclaiming the goals of 'patient-centered care', healthcare reform doesn't exclude and overlook the

experiences and needs of healthcare workers, and that policymakers and system planners in the government regularly consult and take on board clinic managers' advice, that is crucial in enabling tailored strategies to accommodate an influx of patients during such unstable times.

Globally, accounting for regional health needs and learning from on-the-ground experiences can strengthen addiction treatment systems and boost their resilience and adaptability to crises. Addiction treatment systems should be supported to tailor services and account for any local changes in vulnerabilities. Such approaches can have protective effects on the mental well-being of nurses and junior medical doctors who reported having higher ill-mental health rates during the Covid-19 pandemic worldwide (Lasalvia et al., 2021; Spiers et al., 2021). They should have an active voice in shaping emergency responses, identifying areas of needs and opportunities for improvement, and potentially tackling the cognitive dissonance in healthcare system management.

Having weathered a fierce storm of the Covid-19 pandemic aftermath, the war, and healthcare reform, addiction treatment providers in Ukraine risk becoming victims of their own stoicism, where their heroic stretching of resources and working around the clock to meet unprecedented challenges may become 'the new normal' for business as usual going forward. Frontline healthcare providers, including those in addiction medicine, need more than applause. Along with monetary incentives (often non-existent), other strategies to prevent burnout, ensure sustainable capacity building, job relocation opportunities, and clinician-generated adaptations are imperative to protect their wellbeing and public health (Rahim et al., 2022). The war in Ukraine has shown that while pervasive underestimation of healthcare workers' needs is a long-standing issue, it can be successfully managed during a crisis.

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References

Altice FL, Bromberg DJ, Dvoriak S, Meteliuk A, Pykalo I, Islam Z, Azbel L, & Madden LM (2022). Extending a lifeline to people with HIV and opioid use disorder during the war in Ukraine. In The Lancet Public Health, 7(5):e482–e484. 10.1016/S2468-2667(22)00083-4 [PubMed: 35358424]

Altice FL, Bromberg DJ, Klepikov A, Barzilay EJ, Islam Z, Dvoriak S, Farnum SO, & Madden LM (2022). Collaborative learning and response to opioid misuse and HIV prevention in Ukraine during war. Lancet Psychiatry, 9(11), 852–854. 10.1016/S2215-0366(22)00318-2 [PubMed: 36244353]

Bojko MJ, Mazhnaya A, Marcus R, Makarenko I, Islam Z, Filippovych S, Dvoriak S, & Altice FL (2016). The Future of Opioid Agonist Therapies in Ukraine: A Qualitative Assessment of Multilevel Barriers and Ways Forward to Promote Retention in Treatment. Journal of Substance Abuse Treatment, 66. 10.1016/j.jsat.2016.03.003

Bromberg DJ, Madden LM, Meteliuk A, Ivasiy R, de Leon SJG, Klyucharyov K, & Altice FL (2022). Medications for opioid use disorder during war in Ukraine: Innovations in public and private clinic cooperation. The Lancet Regional Health – Europe, 20:100490. 10.1016/j.lanepe.2022.100490 [PubMed: 35991325]

Dumchev K, Dvoryak S, Chernova O, Morozova O, & Altice FL (2017). Retention in medication-assisted treatment programs in Ukraine—Identifying factors contributing to a continuing HIV epidemic. International Journal of Drug Policy, 48, 44–53. 10.1016/j.drugpo.2017.05.014 [PubMed: 28800420]

Global Mental Health Humanitarian Coalition (GMHHC). Solórzano de Souza R, Deac A, & Peycheva A (2022). The impact of war on mental health: lessons from Ukraine. Global Mental Health Humanitarian Coalition, May 24, 2022, London, United Kingdom https://www.lshtm.ac.uk/newsevents/events/impact-war-mental-health-lessons-ukraine

Goto R, Pinchuk I, Kolodezhny O, Pimenova N, & Skokauskas N (2022). Mental health services in Ukraine during the early phases of the 2022 Russian invasion. The British Journal of Psychiatry, 1–6. 10.1192/bjp.2022.170

Greene MC, Haddad S, Busse A, Ezard N, Ventevogel P, Demis L, Inoue S, Gumm JC, Campello G, Tol WA, & Kane JC (2021). Priorities for addressing substance use disorder in humanitarian settings. Conflict and Health, 15(1). 10.1186/s13031-021-00407-z

Guerrero EG, Harris L, Padwa H, Vega WA, & Palinkas L (2017). Expected Impact of Health Care Reform on the Organization and Service Delivery of Publicly Funded Addiction Health Services. Administration and Policy in Mental Health and Mental Health Services Research, 44(4). 10.1007/s10488-015-0662-9

International Centre for Policy Studies (ICPS). Obstacles to the treatment of drug addiction are pushing the spread of HIV/AIDS in Ukraine. (2005). http://www.icps.com.ua/eng/

Lasalvia A, Amaddeo F, Porru S, Carta A, Tardivo S, Bovo C, Ruggeri M, & Bonetto C (2021). Levels of burn-out among healthcare workers during the COVID-19 pandemic and their associated factors: A cross-sectional study in a tertiary hospital of a highly burdened area of north-east Italy. BMJ Open, 11(1). 10.1136/bmjopen-2020-045127

Madden L, Bojko MJ, Farnum S, Mazhnaya A, Fomenko T, Marcus R, Barry D, Ivanchuk I, Kolomiets V, Filippovych S, Dvoryak S, & Altice FL (2017). Using nominal group technique among clinical providers to identify barriers and prioritize solutions to scaling up opioid agonist therapies in Ukraine. International Journal of Drug Policy, 49, 48–53. 10.1016/j.drugpo.2017.07.025 [PubMed: 28957756]

Kazatchkine Michel. (2022). We cannot let war in Ukraine derail HIV, TB and Covid-19 treatment in eastern Europe. UNAIDS. https://www.unaids.org/en/resources/presscentre/featurestories/2022/march/20220309_michel-kazatchkine

Ministry of Health of Ukraine. (2023, February 28). The Ministry of Health begins the next stage of medical reform — the creation of a capable network of hospitals. https://en.moz.gov.ua/article/news/the-ministry-of-health-begins-the-next-stage-of-medical-reform---the-creation-of-a-capable-network-of-hospitals

Public Health Center of the Ministry of Health of Ukraine. (2022). National Response of HIV, TB, VH and SMT Programs to Full-Scale Russian Invasion. https://phc.org.ua/sites/default/files/users/user92/Report_eng_final_compressed_1.pdf

Public Health Center of the MoH of Ukraine. (2022). Situational reports on access to opioid substitution treatment in Ukraine (in Ukrainian). https://phc.org.ua/kontrol-zakhvoryuvan/zalezhnistvid-psikhoaktivnikh-rechovin/zamisna-pidtrimuvalna-terapiya-zpt/situaciyni-zviti-pid-chas-voennogo-stanu

Rahim HFA, Fendt-Newlin M, Al-Harahsheh ST, & Campbell J (2022). Our duty of care: A global call to action to protect the mental health of health and care workers. In World Innovation Summit for Health, 2022.

Roborgh S, Coutts AP, Chellew P, Novykov V, & Sullivan R (2022). Conflict in Ukraine undermines an already challenged health system. In The Lancet (Vol. 399, Issue 10333). 10.1016/S0140-6736(22)00485-8

Romaniuk P, & Semigina T (2018). Ukrainian health care system and its chances for successful transition from Soviet legacies 14 Economics 1402 Applied Economics. In Globalization and Health (Vol. 14, Issue 1). 10.1186/s12992-018-0439-5

Rozanova J, Rich KM, Altice FL, Shenoi SV, Zaviryukha I, Kiriazova T, Mamedova E, Shipunov O, Yariy V, Deac A, & Zeziulin O (2022). The Initial Response to COVID-19 Disruptions for Older People with HIV in Ukraine. Geriatrics, 7(6), 138. 10.3390/geriatrics7060138 [PubMed: 36547274]

Rozanova J, Shenoi S, Zaviryukha I, Zeziulin O, Kiriazova T, Rich K, Mamedova E, & Yariy V (2020). Social Support is Key to Retention in Care during Covid-19 Pandemic among Older People with HIV and Substance Use Disorders in Ukraine. In Substance Use and Misuse. 10.1080/10826084.2020.1791183

Rubenstein L (2021). Perilous medicine: The Struggle to Protect Health Care from the Violence of War. Columbia University Press.

Spiers J, Buszewicz M, Chew-Graham C, Dunning A, Taylor AK, Gopfert A, Van Hove M, Teoh KRH, Appleby L, Martin J, & Riley R (2021). What challenges did junior doctors face while working during the COVID-19 pandemic? A qualitative study. BMJ Open, 11(12). 10.1136/bmjopen-2021-056122

The Conversation. (2022). Ukraine's opiate users: Russian invasion has severely disrupted access to drug-treatment services. https://theconversation.com/ukraines-opiate-users-russian-invasion-has-severely-disrupted-access-to-drug-treatment-services-178624

UNHCR. (2022). Operational Data Portal: Ukraine Refugee Situation. Operational Data Portal : Ukraine Refugee Situation. https://data.unhcr.org/en/situations/ukraine