



Medications for opioid use disorder during war in Ukraine: Innovations in public and private clinic cooperation

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The Russian Federation bans methadone and prioritizes its discontinuation in occupied Ukrainian territories. Escalation of war in Ukraine has disrupted care for people with opioid use disorder (OUD). Here, we describe OUD care before February 24, 2022, outline current problems, provide examples where Ukraine's synergistic response by the public and private sectors innovatively responded to the ongoing invasion and suggest a way forward.

Ukraine has one of the worst HIV epidemics globally, driven by opioid injection using unsterile injecting equipment. Scaling up medications for opioid use disorder (MOUD) is a high national priority as this can effectively control Ukraine's HIV epidemic.¹ Before the war, MOUD in Ukraine was provided in governmental and private clinics, operated distinctly, often in opposition. Not so in Kharkiv, however, where the synergy between them flourished. By February 2022, MOUD in Kharkiv was provided to over 2500 patients in private clinics relative to 588 in governmental clinics.

Ukraine's rigid healthcare system contains numerous barriers to MOUD.^{2,3} Only governmental clinics could provide MOUD until legislation (Order 200) was changed in 2016. Private clinics now provide a differentiated care model that overcomes most barriers observed in governmental clinics, creating efficiencies in treatment delivery, and providing more MOUD options. This privatized model, however, requires patients to pay out-of-pocket using a fee-for-service strategy, based on data that suggested that over half of people with OUD were willing and could afford to pay for MOUD.⁴ Initially, to remain compliant with governmental policies,

private clinics provided "long-term detoxification" that met all legal criteria but required that medication be prescribed and then distributed by collaborating pharmacies, overcoming daily supervised dosing constraints. Emerging models were not, however, equal in quality and their governance was inconsistent and only those with the highest quality services consistently reported their data to Ukraine's Public Health Center (PHC). As a result, governmental doctors at times accused private clinics of being "drug dealers" and in many cases worked with police to shut them down. Order 200 was again amended in 2021, officially allowing private clinics to provide MOUD as maintenance treatment.

Prior to the inclusion of data from private clinics, MOUD coverage in Kharkiv region included 4.6% of the 12,730 estimated to need it. When accounting for both governmental (N=588) and private (N>2,500) clinic patients, MOUD coverage there exceeded 24%. Kharkiv is the first and only region in Ukraine to reach this goal – a target the country has been working toward for years.⁵

Kharkiv was the first city bombed during Russia's unprovoked invasion. Heavy shelling disrupted transportation lines and posed a threat to continued MOUD access. Ukraine's PHC maintains responsibility for MOUD, but only for patients registered in governmental programs; private clinics rely on pharmacies receiving MOUD from manufacturing plants in Kharkiv, which were initially shuttered, but have recently reopened.

In response to perceived concerns about MOUD distribution and danger to patients and clinic staff, the directors of Kharkiv's governmental and private clinics collaborated to sustain MOUD for all Kharkiv patients. The network of private clinics had 5-fold the number of patients of governmental clinics, and collectively, they consolidated care by transferring all governmental patients to receive treatment in private clinics. The clinical staff from governmental and private clinics worked in tandem to ensure MOUD continuity, and Ukraine's

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PHC provided payment for staff from both sectors working toward a common goal. The amount of MOUD in storage at pharmacies, however, remained limited and jeopardized continuity of MOUD for the private patients, placing over 2,500 MOUD patients at risk.

Despite adequate stores of MOUD nationally, PHC did not provide assurances that MOUD would be provided to governmental and private patients alike, leading the private clinics to adopt a MOUD preservation plan. Aside from ~200 patients who continued daily supervised treatment, all other patients were rapidly transitioned to receive a 30-day medication supply, unlike most of the rest of the country that provided maximally a 10-day supply.⁶ As PHC prioritized MOUD for governmental and not private clinic patients, private clinics capped methadone dosages at 100mg per day with a rapid taper to 80mg, followed by further reductions to 50mg. While conserving the medication supply, this tactic has placed undue psychological and physical distress as patients simultaneously deal with the stressors of war combined with that of opioid withdrawal symptoms.

Further strains on the MOUD clinics emerged as people from nearby occupied cities fled to Kharkiv to continue MOUD. Kharkiv's clinics streamlined procedures for treatment for incoming patients, including verbal confirmation from the neighboring region's physician. Internally displaced patients from Kharkiv, however, experience challenges as they transfer elsewhere, with variable responses throughout the country. Despite private clinics sharing information about MOUD and HIV treatment to governmental clinics in more secure areas, each region has flexibility in accepting new patients. At times, private patients are denied MOUD as governmental clinics focus on maintaining only their own patients. Elsewhere, they are treated as new patients and inducted on inordinately low dosages – well below the dosage they were previously prescribed and experience withdrawal symptoms.

In the absence of a unified response by the government to procure sufficient medication for all patients on MOUD, governmental and private, adverse consequences are anticipated as Russia escalates its war throughout Ukraine. Ensuring access to MOUD for all governmental and private patients is crucial to minimize

damage to public health as discontinuation or dosing reductions can lead to unpleasant side effects, suicide, overdose and outbreaks of HIV.⁷ The existing supply of MOUD for private patients, even at reduced dosages, will not last long, unless the Kharkiv factory quickly manufactures more medication. Ukraine's PHC holds the keys to treatment continuity either through its existing stock or through procurement of new medications.

Contributors

DJB wrote the initial manuscript with input from LMM, AM, and FLA. Data were collected by AM and KK. All authors, including SGDL and RI contributed to subsequent drafts and approved the final manuscript. FLA also conceptualized and guided all data collection and drafting.

Declaration of interests

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