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Living through war

Personal and institutional responses in Ukraine

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OKSANA CHERNYSH AND NATALIYA THELL (EDITORS)



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Editors

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Foreword

Six years ago, I had the good fortune to meet Oksana, one of the editors of this book, when she was a participant in a pedagogical course, *Open Networked Learning*, in which I was a supervisor. When the course finished, I introduced her as a co-supervisor on the course. We discussed many issues in teaching and learning in academia both within and outside of the course. It was very enjoyable, and I learnt a lot from Oksana, given what an ambitious, systematic and bold academic she is.

Then the full-scale war came. A first reaction on my part was to ask Oksana if there was anything I could do.

We have since exchanged ideas, developed education and research, and we have been able to meet in real life, in Ukraine in 2025. Awesome, except for the persistent threat of being hit by drones, missiles, or bombs – something I experienced for a week, but which our colleagues in Ukraine have faced every day for four years now.

By introducing Nataliya to Oksana, the editor pair for this collaborative project presented in this book came into being. The insights shared both through the stories told, the cases, and photographs, and the co-written texts by scholars and practitioners in Zhytomyr and Lund, are heart-warming proof of how much more we share with each other than we do not, and how much we have to learn through joint efforts.

Thank you to Nataliya, Oksana, and all authors for your work. To all who have shared their life experiences, a special thanks. And finally, to you, with this text in front of you ready to read, thank you for doing so.

Lars Harrysson

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To all authors and contributors: thank you for the knowledge, care, and commitment you brought to each chapter. We are also deeply grateful to those who shared their personal stories. Your willingness to talk about difficult experiences offers important insights into the personal dimensions of war and reminds us of the human realities behind this ongoing conflict.

To our colleagues in Sweden and Ukraine who expressed interest in this project at its various stages, thank you for your support and collaboration. Your intellectual and practical contributions have played a key role in bringing this book to life. We would also like to thank students, practitioners, and research teams at Zhytomyr Polytechnic State University for their dedication, curiosity, and willingness to engage with complex questions.

We extend our appreciation to everyone working in social services, healthcare, psychological support, and community leadership across Ukraine. Your daily efforts support people through hardship, restore dignity, and help build the foundations for recovery. This book acknowledges and honours your work.

Finally, we want to recognise the resilience of the Ukrainian people. Your strength and solidarity motivate the research and cooperation reflected in this volume. This work is dedicated to you, and to the hope for a future marked by peace, stability, and justice.

Oksana Chernysh and Nataliya Thell
Zhytomyr and Lund, February 2026

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Timeline of the Russian invasion of Ukraine

Annexation of Crimea

20–28 February 2014

Unmarked Russian troops (“little green men”) occupy Crimea, taking control of key installations; Russia later admits responsibility.

18 March 2014

Russia signs an annexation treaty to incorporate Crimea into the Russian Federation, a move widely condemned as illegal under international law.

War in Donbas

April 2014

Russia launches a hybrid operation in Donbas: covert personnel and cross-border fire support enable the takeover of parts of Donetsk and Luhansk regions, beginning eight years of fighting in eastern Ukraine.

Summer 2014

Ukraine regains some territory as large-scale combat continues.

September 2014 and February 2015

Minsk I and Minsk II agreements attempt to impose ceasefires, reducing but not stopping the fighting.

2015–2021

Static but deadly conflict with trench warfare, shelling, and skirmishes killing over ten thousand people, including more than three thousand civilians.

Full-scale invasion

Late 2021

Russia masses troops near Ukraine; intelligence assessments warn of an imminent invasion.

21 February 2022

Russia recognises the Donetsk and Luhansk regions (“DNR/LNR”) as independent, breaching the Minsk agreements and signalling escalation.

24 February 2022

Russia invades Ukraine from multiple directions, launching air and ground attacks from Russia, Belarus, and occupied Crimea.

February – April 2022

Battles for Kyiv, Kharkiv, Chernihiv. Ukrainian defence halts the assault, and Russia withdraws from northern Ukraine.

Spring – Summer 2022

Siege of Mariupol and intense fighting along the Donbas frontlines result in massive destruction and a humanitarian crisis.

Autumn 2022

Ukraine liberates the Kharkiv region and the city of Kherson.

2023

Russia intensifies missile and drone strikes across Ukraine, targeting energy infrastructure; Ukraine expands its drone-warfare capabilities.

2024

The war continues with high-intensity fighting in eastern Donetsk and Luhansk, and in the southern Zaporizhzhia and Kherson regions.

2025

Russian aerial attacks increase further, with record-breaking waves of missiles and drones striking cities across Ukraine.

October 2025 – January 2026

Russia intensifies its “energy terror” campaign, launching massive strikes on energy infrastructure that cause prolonged power cuts and critical shortages.

Introduction. Living through and beyond crisis

Oksana Chernysh
Nataliya Thell

As we write this text, “the big war” – as it is called in Ukraine (Ukrainian: *velyka vijna*) to distinguish it from the military actions of 2014–2022 – is approaching its fifth year since the Russian full-scale invasion began on 24 February 2022. On that day, the two authors of this chapter found themselves in different countries and in starkly contrasting realities: Oksana in Zhytomyr, in Ukraine, under immediate Russian aggression, while Nataliya was far away in safe and peaceful Sweden. Yet neither of us will ever forget that night: neither Oksana, who woke up to a shattering new world, nor Nataliya, who was sleepless, anxiously following the news and phoning her family in Kyiv as the bombing raged around them.

Since then, Ukrainians have been widely admired for their bravery and steadfastness in defending their homeland. In the early stages of the Russian invasion, Ukraine received strong international support. However, the prolonged duration of the war, together with the rising financial and political costs of assistance, is contributing to a growing risk of war fatigue – potentially weakening public support in countries providing military and humanitarian aid (Holesch & Martill, 2026). Media attention to the war has also been diminishing, with both the volume of war-related reporting declining over time and portrayals of the conflict shifting towards more routine and normalised frames (Ibrahim et al., 2025).

At the same time, conditions within Ukraine are more difficult than ever. Mounting military and civilian losses, injuries, and widespread destruction have made grief, trauma, and exhaustion pervasive aspects of daily life (Mezhenska et al., 2025). Regular night-time strikes have turned insecurity into an everyday reality, leaving people uncertain whether their homes – and their lives – will remain intact from one day to the next. Vulnerable groups emerging from the war, such as veterans and internally displaced persons, require increased social and psychological support. These pressures are further exacerbated by the shelling-related damage to essential infrastructure

and the need to allocate resources to defence, which make it challenging for central and local governments to fulfil even basic social needs (Gustafsson et al., 2025). At the time of writing, up to a million people are without electricity, water, and heating due to intensified Russian air strikes – during a period of exceptional winter cold. For many of those who remain connected to the grid, electricity is available only for a few scheduled hours each day, with these schedules frequently changed at short notice due to new strikes.

Laboratory of resilience

There is an expanding body of research focusing on Ukraine that examines the ongoing lived experiences of individuals enduring war, as well as the ways in which institutional structures and forms of civic engagement are being reconfigured in response to the military aggression (e.g., Kutsenko, 2025; Mezhenka et al., 2025; Stepanenko & Stewart, 2025). These studies show that war has reshaped people’s lives by shattering their sense of security and replacing it with a state of vulnerability in the face of war’s atrocities, by imposing continual mental tension and a constant state of alertness, and by disconnecting them from their previous selves. Life in the conditions of ongoing aggression is perceived as “living between two worlds” when people strive to achieve humanity, cohesion and dignity in the cruel and brutal reality of systematic malaise and disregarded human values (Mezhenka et al., 2025). At the same time, organisations and individuals demonstrate a range of adaptive responses: from relocating higher educational institutions from the occupied territories (Zayachuk, 2025) and mobilising civil society to counter disinformation (Reis, 2025) to using memes¹ in prompting consolidation (Bouchard & Antsybor, 2025) and distinguishing types of weapons and air alarms to adjust everyday routines to the constant threat of shelling (Mezhenka et al., 2025).

The case of Ukraine can be viewed as a resilience laboratory for social science research, where resilience is approached as an active and dynamic process of resisting external shocks, adapting to new conditions, and engaging in innovation and transformation to cope with the ongoing crisis (Kutsenko, 2025).

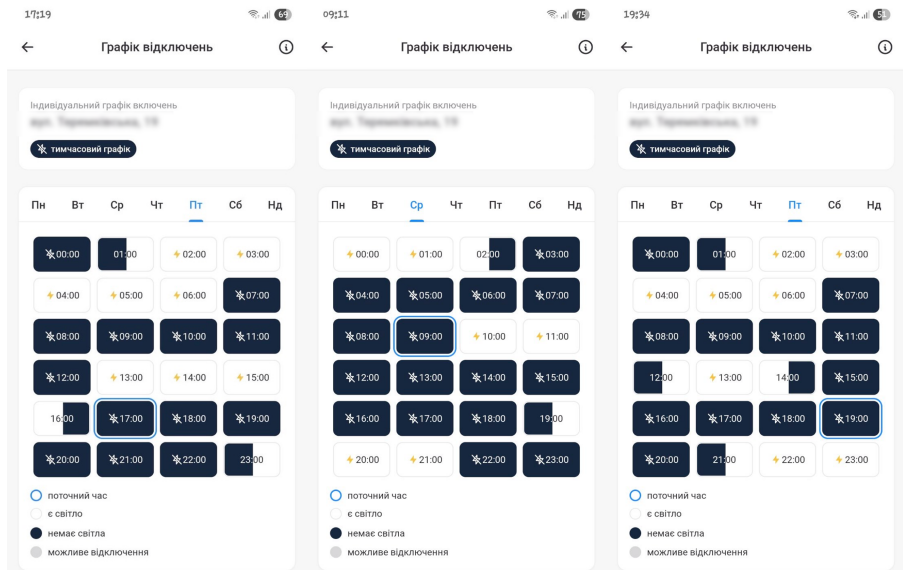
¹ Satirical digital image-text combinations that convey mockery or criticism.



A multi-storey residential building in Kyiv damaged by missile debris during the Russian night-time attack on 7 February 2024, which left four civilians dead and more than 40 injured. Photo by Anna Kondratiuk.



Smoke rising over a residential area of Kyiv during a night-time Russian air attack, 4 July 2025. Photo by Anna Kondratiuk.



“Power-cut schedules” – individually scheduled electricity-supply intervals (in white) for a multi-storey residential building in Kyiv. From left to right: 30 January, 4 February, and 6 February 2026. Screenshots from “Kyiv Digital”, Kyiv’s multifunctional smart-city app.

Research indicates, for example, that the war has brought about profound individual transformations, including personal maturation, strengthened values, and deepened human connections (Mezhenska et al., 2025). The outset of the Russian invasion, saw Ukrainian society rapidly galvanised into a robust social organism of military resistance, reshaping the nature of civic activism and expanding it into new spheres to address war-related challenges. Since then, civil society has continued to grow, focusing not only on humanitarian aid and informational support, but also on assistance to the Ukrainian army, including fundraising efforts. Civil activism networks have also become more informal and spontaneous, as in the case of neighbours in Kyiv housing blocks creating mutual-support networks, and restaurant owners providing free meals for local self-defence units and older residents (Stepanenko & Stewart, 2025).

A study of the digital platform Diia (short for the Ukrainian “Derzhava i Ya”, “State and Me”), launched by the Ukrainian government in 2020 as a “state in a smartphone” technology, illustrates how state institutions have adapted to meet citizens’ needs during wartime (Gustafsson et al., 2025). By providing digital services tailored for the general population (e.g., digital passports, ID cards, marriage registrations, residency certificates, and the “e-Baby” birth-registration service) as well as wartime-specific needs (e.g., “e-Enemy” and “Volunteer reserve”) and groups (e.g., “e-Veteran”, “Housing search for internally displaced persons”, and “Information exchange and support for families of the deceased”), Diia simplifies and enhances access to public services amid the destruction of essential infrastructure such as roads and utilities. The findings show how digital technologies can function as both enablers and embodiments of institutional change, emerging through ad hoc problem-solving, improvised emergency modes of service delivery, and close collaboration between central and local government bodies, civil society initiatives, and charity foundations. The digital service “e-Veteran”, for instance, consolidates a wide range of health, rehabilitation, and social-support programmes, provided by local administrations, civil society actors, and charities (Gustafsson et al., 2025).

Thus, across personal, societal, and institutional spheres, Ukraine emerges as a laboratory of resilience in which adaptive responses are continually forged in the face of ongoing aggression.

Volume overview

The present volume provides another glimpse into the lived experience of war in Ukraine and the institutional responses it has prompted. Most chapters are written collaboratively by authors from Zhytomyr Polytechnic State University, Ukraine, and Lund University, Sweden. The empirical data and real-life vignettes were collected by Ukrainian colleagues, while the Swedish co-authors contributed to the development of the analytical frameworks.

Bringing together a diverse set of voices and perspectives – from personal stories to empirical studies and institutional analyses – the volume offers a multifaceted portrait of how people in Ukraine live, work, adapt, and persist under the extreme conditions of the ongoing war, and how the systems meant to support them evolve in response. Together, the chapters reveal a society negotiating profound human costs alongside significant structural transformation and shed light on resilience as a dynamic interplay between social agency and institutional capacity rather than a fixed attribute of either domain (cf. Kutsenko 2025).

The volume is divided into two parts. The first part explores the emotional, relational, and experiential terrain of wartime life. It depicts the struggle to maintain dignity and coherence in daily life while routines, identities, and expectations are disrupted, and at the same time, highlights quiet forms of strength that emerge through practices of self-comfort, emotional regulation, and interpersonal connection.

The first chapter, *Real-life vignettes*, presents anonymised accounts based on real life stories that offer raw, immediate insights into the experiences of war, marked by fear, grief, uncertainty, and longing. At the same time, they reveal a capacity for unexpected resilience, creativity, and solidarity among those affected. In the chapter *The art of comforting oneself in times of crisis (reflections on the vignettes)*, Maria Söderberg proposes an interpretative framework for the real-life vignettes. She analyses the preceding chapter's narratives to show how individuals draw on both internal and external resources to navigate adversity. The chapter argues that techniques of self-comfort and everyday resilience practices are more than private responses: they form part of a broader cultural repertoire that supports survival.

The following two chapters illuminate specific challenges faced by two vulnerable groups: women living in long-term separations and university

youth. In the chapter *The psychological impact of long-term separations and long-distance relationships on women during wartime*, Olena Ievdokymova, Oksana Chernysh, and Julia Bahner examine the gendered dimensions of separation, loss, and emotional strain. Their study shows that women experiencing partner separation due to war report heightened anxiety, loneliness, and relationship-strain effects that often remain overlooked despite women's central role in sustaining family and community life during wartime. In their chapter *University students' mental well-being in times of war*, Natalia Kharitonova, Lyudmyla Bukhanevych, Nataliya Thell and Lotta Jägervi explore the experiences of young people whose developmental trajectories and daily functioning have been disrupted by ongoing conflict. They demonstrate that students' mental well-being serves as a broader indicator of societal resilience, revealing both significant vulnerabilities and notable adaptive capacities developed under prolonged wartime conditions.

The second part shifts the focus to structural and systemic responses to wartime challenges. It offers insights into the challenges and innovations that shape collective resilience, highlighting that warfare not only affects individuals but also fundamentally challenges the institutional frameworks designed to safeguard them. This part provides a forward-looking perspective on post-war recovery, underscoring the importance of policy innovation and resource management in rebuilding a nation.

In the chapter *Wartime social insurance in Ukraine: adapting to old and emerging risks*, Sara Hultquist, Serhii Nikolaenko, and Iryna Voinalovych analyse the evolution of wartime social insurance, showing the need for rapid institutional recalibration that balances continuity with innovation in order to address newly exposed forms of precarity. They highlight flexible eligibility, streamlined procedures, and better coordination between central and local providers to sustain coverage amid displacement and fiscal strain. In the following chapter, *eHealth – a tool for access to care in conflicts*, Iryna Zhallinska, Ulrika Sandén, and Lars Harrysson show how digital health solutions can sustain access to care when infrastructure is damaged, while also bringing to the fore profound ethical and equity dilemmas. They stress that wartime e-health must balance rapid roll-out with safeguards for interoperability, data protection, and inclusion, since fragmented services, legal ambiguities, and digital-literacy gaps risk widening the digital divide, especially for veterans and internally displaced persons.

The concluding chapter, *Transforming trauma into resilience: a model of adaptive social work grounded in altruism for post-war Ukraine*, by Oksana Chernysh and Ulrika Sandén outlines the professional competencies required for post-war reconstruction and portrays social work as a vital bridge between communities and the state. The chapter advances a participatory, cross-sector approach that combines trauma-informed care with community-driven innovation to scale recovery in low-resource, high-risk settings.

Together, the two parts of the volume present a multifaceted picture of a country under sustained pressure, showing how personal endurance and institutional adaptation unfold in parallel. Across the volume, individual resilience is shaped by available social protections and accessible care, while institutional reforms are guided by the needs of affected populations. The war makes this interdependence visible, exposing vulnerabilities but also enabling renewal through innovation and policy change.

Looking forward

This volume seeks to provide both a record of current developments and a framework for future directions. It demonstrates that resilience is not a fixed attribute but a multi-level process that operates across individuals, families, communities, and institutions, often in the presence of continuing vulnerability. Recovery is uneven and iterative: it advances through concrete practices – systematically naming and addressing trauma, restoring relational supports, and planning under uncertainty – rather than through a single turning point. Personal and collective narratives are part of this work, shaping how people interpret events and choose courses of action. In this respect, this collection contributes to a broader social narrative by documenting loss and courage alongside institutional shortcomings and creative adaptations.

Looking ahead, the path to recovery requires integrating lived experience into decision-making; supporting communities to rebuild social ties and local services; and developing institutions in sustainable ways so that core social protection functions continue even under disruption. Above all, the aim is a trauma-informed, not trauma-defined, future, one in which policy and practice learn from harm without allowing it to set the country's course, and advance reconstruction in the aftermath of the crisis.

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Part 1

Inner landscapes of war: psychological and personal realities



A woman walking along the memory wall honouring those who lost their lives in the defence of Ukraine. Zhytomyr, 2023. Photo by the Marketing Department of Zhytomyr Polytechnic State University.

Real-life vignettes²

Silent battles

A 36-year-old man, married and without children, served on the front lines from the first days of the full-scale invasion. He carried out combat missions and took part in direct hostilities. During one mission, he came under fire and suffered a severe shrapnel wound. He survived but required several surgeries and a long period of rehabilitation. Three months later, the Military Qualification Commission deemed him fit to return to the front. A year later, he sustained a second concussion with loss of consciousness. Further examination revealed shrapnel lodged near his heart – too close to remove, as surgery would have been incompatible with life. After repeated rehabilitation, he was declared unfit for military service and demobilised.

Returning to civilian life brought new challenges. He noticed uncontrolled aggression, frequent irritability, and numerous triggers. He also required regular medication. Coming from a rural area, he and his wife moved to the city, renting a small flat. Finding work proved difficult; many employers believed veterans were aggressive and dangerous. Eventually, he secured a job but ignored doctors' recommendations to limit himself to light physical labour. After his wife's insistence, he sought help for his mental health. In his city, there were too few specialists trained to work with such cases, and those available were already struggling with heavy workloads. Long-term treatment in another city or abroad was impossible because of his job.

Eventually, he received initial rehabilitation, learning to recognise emotions and impulses, identify triggers, and manage his reactions. The programme lasted three months with weekly sessions. However, due to financial constraints and work commitments, he had to discontinue treatment.

² The vignettes presented in this chapter are anonymised accounts based on real life stories.

Interrupted recovery

A man in his forties entered the consulting room with a broad smile and a neat grey beard. Without a word, he walked to the coffee station, brewed himself a cup of aromatic coffee, stirred it slowly, and sat down opposite the psychotherapist. A few years earlier, he could not have imagined that a man from a rural area like him would one day talk to a psychologist about his pain.

He became a veteran in 2016. At that time, he had three daughters. When he returned to civilian life, he chose isolation as his way of coping, living in a dugout for six months. Skilled in hunting and fishing, he only visited home occasionally for fresh water and clean clothes. Eventually, he returned to his family, resumed life, and began working as a mechanic in the village brigade while his daughters grew up. At his wife's request, he underwent physical rehabilitation. He believed his mental struggles were behind him and saw no need for further help. The children knew the rules: never scream or run if their father was dozing off.

One evening, those rules were forgotten. The girls ran into the room, laughing and talking about their day, unaware that their father had fallen asleep near the TV. His reaction shocked everyone. He jumped up, grabbed one daughter by the throat, lifted her off the floor – and froze. He came to his senses only after hearing his daughters' screams and feeling his wife's slaps.

That moment changed everything. He sought help and began a long process of recovery. The treatment lasted eighteen months. Later, aggression and intrusive memories returned, and he joined a group programme with other veterans. During this period, life brought challenges and changes. One daughter had a disability requiring specialised schooling. Another was finishing secondary school and preparing to leave home for university. Later, a long-awaited son was born.

Then came the full-scale invasion. The family lived near the border. Days after the invasion began, Russian tanks appeared just ten kilometres from their village. He evacuated his family abroad and returned to defend his country. His mental state deteriorated, but further rehabilitation was impossible – he was almost constantly in the war zone.

On the edge

The events of 2014 in eastern Ukraine shattered the lives of many young men. One of them, proud to fulfil his duty as a citizen, volunteered to defend his country. Once active and full of energy, he was quickly turned into an exhausted and withdrawn man by the war. Still, he held on to the hope of returning to civilian life, getting married, and building his own home.

One day, a message appeared on his social media: a farewell note saying there was no point in living anymore. Alarmed, a small group including a psychologist rushed to his home. On the way, they learned he was holding a grenade and threatening to end his life. He lived in a crowded dormitory with children and families nearby – any wrong move could have led to tragedy. When they entered the room, his mother stood crying. He paced from wall to wall, convinced life had no meaning, that there was no one left to live for, and that his health offered no future. The room was filled with reminders of his service: his uniform, beret, awards, chevrons, and photos with comrades. Nothing seemed to bring him back from the edge. His siblings were exhausted, and his mother was in despair.

For four tense hours, he refused to release the grenade. Everyone was gripped by fear and uncertainty. Finally, the psychologist tried a different approach: agreeing that he could end his life, but first asking him to choose a burial place, tell his mother where to find money for the funeral, and select photos for the monument. After a pause, he asked why this was necessary. His mother replied quietly: “It will make the burial easier for me.” His hand loosened, comrades seized the grenade, and he collapsed onto the bed, sobbing. Later, calmer, he shared his story. After returning from service, his eyesight began to fail. Tests revealed a brain tumour pressing on the optic nerve, causing vision loss. He had no money for surgery. This hopelessness had driven him to the brink.

After this incident, he agreed to proceed with treatment. He received a medical consultation and began looking for sponsors to cover the cost of the operation. Today, he is alive and working as a driver. However, he still refuses psychological rehabilitation, saying he does not trust local specialists.



Damage in a residential building in Kyiv caused by a Russian missile strike, 31 July 2025.
Photo by Anna Kondratiuk.

Chained with fear

A 20-year-old serviceman was receiving hospital treatment after being injured during a combat mission under heavy shelling. He sought help to cope with the overwhelming fear he felt during air alerts and nearby explosions: “It’s terrifying to sit and wait, wondering when and where it will hit. My body feels chained. Please help me do something about it.” He attended sessions after completing his main hospital procedures, requesting permission from the doctor to leave the ward. The first meeting surprised him – he had never been taught how to manage his reactions and emotions, and there had been no one in his unit to explain psychological first aid to him or his comrades. At first, contact was difficult; tension was palpable, and mistrust of “others” ran deep.

It took time to learn exercises and self-help techniques. Regaining a sense of his body, its boundaries, and recognising his mental condition was challenging. While working on the “chained” body sensation, intrusive memories surfaced, triggering protective mechanisms. By the sixth session, sensation in his body began to return. Progress continued through gradual sensory and emotional regulation work. Gradually, things became easier. He decided that in the future, during air alerts, he would use the techniques he had learned to help stabilise his comrades.

Immersed in grief

Years of the full-scale invasion have brought unimaginable sorrow to the families of fallen defenders. Among them was a married couple, still youthful in appearance, the woman's black scarf, silently signalling the death of their son. They resisted psychological support at every turn, dismissing its value and underestimating professional expertise – a reluctance rooted in stigma surrounding mental healthcare. It was their eldest son who convinced them to seek help. When they finally agreed, the first sessions were marked by distrust, minimal engagement, and a sense of overwhelming pain. Less than a month had passed since their loss, and they were still in the acute stage of grief making every step forward difficult.

After several sessions – around three to four weeks in – the woman shared that attending therapy had helped her start eating again without guilt. She had believed she had no right to eat, imagining her child in the next world, hungry and without access to food. Her husband held on tightly to his pain, incapable of accepting the loss or beginning to adapt to life without his son. One day, the man cried for the first time – a vital step in processing grief.

The family's church and spiritual mentor also became important sources of strength, complementing the support they received. This combination of resources helped the couple begin to find a way forward.

The woman's physical decline was particularly noticeable, so gentle body-oriented exercises were introduced. Their eldest son encouraged them to complete these at home. Three weeks later, the couple began practising together, creating a shared activity that gave them a sense of purpose beyond their grief. After six weeks, they were able to cook their younger son's favourite dish. During family gatherings, they placed a separate chair and plate for him – a symbolic gesture of remembrance.

Resilient journey

A burly man with striking tattoos arrived for rehabilitation. Though his expression carried sadness, there was a glimmer of hope in his eyes. He had retired from the Ukrainian Armed Forces three months earlier and agreed to begin a two-month programme to support his recovery.

He had defended the country's borders with honour and pride. In the first days of the full-scale invasion, he and his comrades were tasked with securing an airfield – a mission expected to last three days. But after completing the task, the unit was surrounded, cut off from communication and assistance. At one point, even his wife was told that her husband had been heroically killed. For ten long days, the defenders fought to survive, travelling hundreds of kilometres through harsh winter conditions. They slept on frozen ground and ate what they could find, including wild animals. The gruelling march left him with severe injuries to his feet. Eventually, his health forced him to leave the Armed Forces – a decision that was deeply painful and traumatic.

Determined to recover and return to service, he sought every possible opportunity for rehabilitation. However, his progress was interrupted when surgery became necessary. Throughout this ordeal, his wife and beloved young daughter stood by his side. The surgery was successful, and after a long recovery, he regained full mobility.

Together with his wife, he now runs a small business producing dried-meat snacks, some of which he sends to the front line, knowing how much defenders lack high-quality food, especially protein.



Destroyed Russian tanks on public display in Kyiv, 19 August 2023. Photo by Nataliya Thell.

A life cut short

A 46-year-old veteran, a participant in the Anti-Terrorist Operation,³ spent more than 40 days in captivity. After his release, he underwent physical rehabilitation and returned to his unit as an instructor. Later, his partner urged him to seek help for his growing aggression, which was straining their relationship. As a medical worker, she understood the psychological toll of war and tried to convince him that support was necessary.

He was reserved, sceptical, and not very talkative. One of the reasons for seeking rehabilitation was his struggle with alcohol and drug use. His particular habit reflected his longing for comradeship – something he could no longer find. In moments of intoxication, he would go to the cemetery and sleep among the graves of fallen comrades.

He faced additional challenges, including the need for addiction treatment, but opportunities for long-term rehabilitation were scarce. There were almost no facilities for extended rehabilitation, as Ukraine lacked state centres for such care. The sessions were short-lived, interrupted by the outbreak of the full-scale war.

He was killed during a combat mission in 2023. The specialist who had worked with him could not attend the funeral – professional ethics forbid psychologists from taking part in ceremonies for their clients. Many who work with the military struggle to cope with the deaths of those they support, yet there are still too few grief counselling resources for professionals.

³ The Anti-Terrorist Operation (ATO) in Ukraine, launched in 2014, was a military and security campaign aimed at countering Russian-backed armed groups and regular Russian forces operating in the eastern regions of Donetsk and Luhansk.

Unseen wounds

A 22-year-old conscript serving in Ukraine's border troops faced his first battle against Russian forces while on duty. The fight lasted for more than three hours, and although the entire unit survived, the experience left deep marks. During a rotation, he sought help after struggling with insomnia and episodes of uncontrolled aggression, which he often directed at objects, walls, and furniture. It was his partner who encouraged him to reach out for support. Counselling revealed a difficult childhood. He had been raised by grandparents because his parents drank heavily. Later, he was obliged to give part of his salary to his parents, who did not work and relied on him for basic living expenses.

For two years, he managed to attend counselling every six months – more frequent visits were impossible as he was often deployed to the combat zone. In those sessions, he learned ICOVER⁴ techniques to manage acute stress. Over time, his aggression eased, and his relationship with his partner improved. However, during one of the sessions, his behaviour raised concern. His eyes darted, his speech was rapid, and he jumped from topic to topic. He admitted his mental state was deteriorating. Cannabis use was widespread among soldiers in his unit, and he found it hard to resist joining them. Almost every day, he went on combat missions with the others and sought belonging among his comrades. When asked about life at home, he revealed that he and his partner celebrated his return by taking amphetamines.

He was referred to a drug rehabilitation centre but never sought help. The fragile bond between client and counsellor broke, and the sessions ended.

⁴ ICOVER is a structured, six-step method designed to help soldiers manage acute stress reactions in themselves or their teammates during combat or other high-stress situations. It was originally developed by the Israel Defence Forces and later adapted by the Walter Reed Army Institute of Research for U.S. military use.

Farewell letter

As a child she dreamed of becoming a pastry chef, an ophthalmologist, and later a police officer. But everything changed dramatically in 2014. Her father left to defend the country when she was twelve. At that age, she understood little about war, but during conversations with him, she learned that the military needed help. Initially, she thought this meant medical care, but over time she realised what help was required. Curious and determined, she began reading literature on “spiritual wounds”. Gradually, her aspirations evolved into a clear purpose: she wanted to help others as a psychologist.

In September 2021, she enrolled at university to study psychology. Her first internship was at a veterans’ home, working with children of ATO⁵ veterans. The COVID-19 pandemic interrupted her progress, forcing her to put practical experience aside. The second semester of her first year brought an even greater shock. On 24 February 2022, her mother woke her at 5 a.m. with the words: “A full-scale war has started. Kyiv is being bombed.” At that time, her father was at a training centre, instructing soldiers in combat skills and coming home only occasionally. On 21 March, her mother observed, “It’s strange – your father hasn’t called yet.” They tried to reach him, but the phone only returned “Out of service”. Her mother then called one of his comrades, and the worst news came: “He’s dead.” In that moment, the ground seemed to vanish beneath her feet. She remembers little of that day. Questions filled her mind, but no answers came. Time passed slowly.

Six months after his death, a new academic year began. The war continued, and people needed help. She worked for six months as a psychologist’s assistant in a school and enrolled in a course on coping with loss and grief.

Grief never fully left her. During his training under NATO standards, her father had been taught to write a Farewell Letter. He wrote one, marking it “To be opened on the wedding day.” That day has not yet come. She carries the letter in her handbag every day. Will the time for saying goodbye arrive? As someone now working with loss and grief, she has one plea for those who design programmes for the military: farewell letters should not be dated for distant occasions. Families need the chance to say goodbye – not to carry the weight of grief for decades.

⁵ ATO refers to the Anti-Terrorist Operation, which began in 2014.



Maidan Nezalezhnosti (Independence Square), Kyiv, 19 August 2023. Each flag honours a fallen Ukrainian soldier. Photo by Nataliya Thell.

Enduring silence

A quiet male voice came through on the phone, requesting counselling for himself and his family. They had been displaced and living in a new settlement for three weeks – weeks that proved among the most challenging of their married life.

The family had lived under Russian occupation for nine months. Realising the senselessness and cruelty of the occupiers, they decided to move to government-controlled Ukraine. For the man, this decision came at a cost: his entire family – parents and siblings – remained in the occupied territory and supported the occupiers' authorities. He was forced to sever all ties with them.

The journey lasted thirty days. They reached a checkpoint but were unable to cross. A local resident took in the woman and children at her home near the checkpoint. Crossing the border required compliance with the occupiers' demands and waiting in a long line of people. Then, one evening, the husband did not return. His car was found abandoned by the roadside. Contact was lost. The wife was desperate; no one could tell her where he was. Two days later, he returned. His body was covered in bruises, his hands trembled, and tears filled his eyes. He had spent two days in the occupiers' commandant's office, tortured and extorted for money in exchange for his release. The man had endured a harrowing experience and could not bring himself to tell his wife what had happened during those two days. Shortly afterwards, the family managed to cross the checkpoint.

During counselling, the wife expressed her desire to support her husband and share his grief. She asked him to tell her what he had gone through. The counsellor asked the man: "Are you sure your wife can bear to hear it, emotionally?" He replied: "No." His wife was distressed. It was hard for her to accept that her husband did not want to share his suffering with her. However, after several sessions, she learned to respect her husband's decision not to share his pain and to bear it alone.

Weight of loss

A 27-year-old woman whose husband was killed in combat near Bakhmut⁶ sought help after receiving the devastating news about his death. When she heard the news, she lost consciousness and could only recall fragments of what happened afterwards, including a long phone call from her husband's parents: "I vaguely remember the call, the burial, and everything that happened later..."

At first, she refused any help. Her family and friends grew increasingly concerned as her condition worsened. She slept no more than two or three hours a night. During the day, she sat motionless for hours, barely eating, staring into space as if frozen. When she finally agreed to seek help, the weight of grief was overwhelming. For weeks, she had been unable to cry or speak about her feelings. It took time before tears came, two months after her husband's death, marking the first moment she could release some of the pain. Tears, though painful, were a sign that she was beginning to live through her loss. Gradually, small steps helped her recognise emotions that words could not express. Art therapy offered space for feelings too heavy to share, and body-oriented therapy helped her cope with the freezing sensations that embodied her grief.

Six months later, with the support of her parents, relatives, and close friends, she began to regain strength. Another source of resilience came from those who had served alongside her husband and from volunteer work, which gave her a sense of purpose.

The process was long. She attended fifteen sessions and continued receiving support for another ten months. Her journey was not about forgetting but about finding ways to live with the loss – slowly, painfully, and with the help of those who stood by her.

⁶ The Battle of Bakhmut lasted from mid-2022 to May 2023 and was one of the bloodiest and longest battles since the beginning of the Russian full-scale invasion. Russian forces, including Wagner Group mercenaries, launched repeated assaults to capture the city, while Ukrainian troops mounted a determined defence. The fighting turned into intense trench and urban warfare, with both sides suffering extremely high losses.

The art of comforting oneself in times of crisis (reflections on the vignettes)

Maria Söderberg

Introduction

In times of crisis, one crisis tends to generate other crises, especially during war. Due to physical injuries and psychological trauma, there is often an extensive need for immediate and follow-up measures, and long-term rehabilitation programmes. However, support systems may be insufficient; new injuries may occur, and the need for rehabilitation increases. Thus, in addition to personal suffering, war zones are often characterised by infrastructural deficiencies, a heavy workload on emergency staff, a lack of healthcare and medicines, and a shortage of psychologists specialising in the treatment of traumatised people. Competence in the field of psychological rehabilitation may be lacking in certain areas and, in areas where such skills are available, access may be limited by financial constraints (*Silent battles*) or due to duties in the war zone (*Interrupted recovery*, *Unseen wounds*).⁷ Yet another possible hindrance is a potential lack of trust in local psychologists. Suspicion often belongs to war zones and this uncertainty about who can be trusted can also extend to professionals in public welfare services, if there are any. In such circumstances, it is not uncommon for citizens to develop their own ways to deal with their difficult experiences in the present and over time. Proceeding from a set of personal experiences among military veterans and civilians suffering from the Russian invasion of Ukraine, this chapter focuses on the challenges of trying to cope with everyday life despite the war.

People's preparedness to deal with adversity has repeatedly been highlighted in previous research. In his classic work, Antonovsky (1987) approached the challenge of unravelling the mystery of health and how people manage stress, and maybe even the experience of meaningfulness. More specifically, he drew attention to the importance of maintaining a sense of

⁷ This chapter is based on an analysis of the real-life vignettes presented in the previous chapter. The italicised text in brackets refers to the titles of the vignettes.

coherence and to the importance of finding ways to cope with life stressors. In line with this research interest, other researchers devote their studies to methods and thought patterns used to deal with problems and emotional stress in life, frequently referring to the theoretical concept of coping strategies (Lazarus & Folkman, 1984). Similarly, there are studies devoted to resilience. However, over the years, there has been a lack of consensus regarding the definition of resilience, namely, to what extent it involves personality traits or skills (e.g., Leys et al., 2020) or whether it simply refers to a dynamic process that enables positive adaptation in a context of significant adversity (Luthar et al., 2000). In short, what is usually meant by the concept of resilience is the idea of a good match between the initiative to seek help, the support available and the timing of the help seeking. Change can develop in an unexpected way in a constant interaction between perceptions of who you are, who you think you are, and who you think others think you are. What has not been studied before is how soldiers in war zones and veterans develop ways to try to hold themselves together on their own in a context where there are shortcomings in welfare services due to the war and in the support network available. The aim of this chapter is to reveal how people handle their experiences from the war zone when they are reliant on their own ability to manage their everyday lives. To pursue this aim, and drawing on the eleven real-life vignettes (see previous chapter), five strategies have been identified. The strategies have been called:

- Transforming the meaning of meaningfulness
- Adapting to make family life as normal as possible
- Shifting the focus from self to others
- Finding ways to combat feelings of false guilt
- Guarding one's zone of integrity for as long as it takes

In its most condensed form, the concept of “strategy” can be defined as self-developed ways of living one's life after traumatic experiences in war zones, as in the example of a veteran.

Transforming the meaning of meaningfulness

In many European countries, there is an ideal of independence and self-determination, and thereby explicit expectations on citizens to be capable, active, and not a burden to society. For citizens, such an ideal often implies lifelong values regardless of unexpected injuries caused by an external party. Being in a war zone may be one such unexpected event. Even in such circumstances, it is common to apply the strategy sometimes referred to as “not lifting the lid” and to deny the need for personal help, especially when the injuries are of a psychological nature and not necessarily visible to outsiders. Facing prejudices in civilian life about the characteristics of veterans, including elements of unpredictability, tends to create additional challenges.

One possible way of dealing with the situation is to actively choose, among other options, to return to their previous everyday life in the trenches. In wartime, it can be the context where you experience the strongest cohesion and, furthermore, where you are close to people who are able to understand specific experiences that no one else can. In other words, it is a way of dealing with emotions too hard to confront and process – that is, something that is even more difficult to confront than to maintain everyday life in battle. In such extreme circumstances, it is ultimately a matter of being in a context perceived as meaningful in relation to other contexts at the time. Could it even be that the interpersonal interactions that take place between the soldiers in combat work as a form of enforced co-production of mental support, since there is frequently no other source of support? Would this mental support then not be acknowledged and made visible at least as complementary co-production to a deficient public support system in times of war?

Thus, almost regardless of potential injuries, it is not unusual for people who have served in combat missions to be convinced that they must return to the battle zone. This belief may help them remain active, to maintain the feeling of having a task, and perhaps not least to cope with anxiety, although there is also a risk of mental deterioration. In this context, the way of comforting oneself in times of crisis is determined by the sense of cohesion and loyalty to those with whom one has shared life-defining moments – moments in which the boundary between life and death is not taken for granted, but where a sense of shared context prevails over everything else (*Interrupted recovery, Unseen wounds*). At its extreme, dealing with such experiences

may take the form of the habit of sleeping among the graves of comrades at the cemetery (*A life cut short*). In this way, and to some extent, the boundaries between expressions of denial and a sense of meaningfulness may blur.

Adapting to make family life as normal as possible

When other parts of the psychosocial support system are lacking, family members take on a great deal of responsibility for the well-being of the veterans. Perhaps this has simply become the case in the absence of known options. Another possibility is that, for various reasons, it is a conscious choice to refrain from treatment. Further possibility is that it is an expression of hope that the veteran's traumatic experience will abate on its own over time. After everything that has happened, there is a longing to return to the routines of everyday life.

An expression of efforts to normalise an abnormal situation may be reflected in certain expectations placed on family members to adapt to a veteran's heightened sensitivity to unexpected sounds and noises. However, this willingness is not always consistent with all the circumstances of everyday family life. Unpredictable events such as sounds from the sudden arrival of the children may trigger emotional outbursts. It is impossible for everyone in a family to always know what state the veteran is in and what traumatic experiences they may involuntarily reactivate. This means, for instance, that a veteran's sudden awakening from a nap due to sudden noises in the house may result in the most unpredictable reactions. Such an outburst can have serious consequences for confidence in a partner and parent that may be hard to re-establish (*Interrupted recovery*).

At the heart of such an event is the question of who is ultimately responsible for making family life a viable option, especially when access to professional help in the local area is limited. Additionally, there may be feelings of shame (*Immersed in grief*). Veterans have their own difficult experiences of the horrors of war, while at the same time, they do not want to burden their families and personal network with their worries. Thus, there tend to be a strong reluctance to burden others and not wanting to cause harm to significant others. Simultaneously, there are uncertainties of one's sense of self, one's self-presentation, and the self in relation to others.

Shifting the focus from oneself to others

It may appear to be a contradictory statement, but in times of deep despair it can be beneficial to try to take the perspective of others and perhaps even develop the ability to live in the moment. What an individual is capable of enduring is of course very personal and depends on the circumstances. However, there are indications that multiple and simultaneous life crises can compound each other to the point that life appears unbearable. It may involve unprocessed war injuries that have remained untreated. It can also be about experiencing new war injuries while simultaneously dealing with a severe illness. When the situation is far beyond being manageable, complete despair sets in.

In times of compounded grief, irrational thoughts and actions can arise. Obviously, there is no magic solution to all such situations, but at times when irrational thoughts concern significant others, the scenario may change. This change of perspective can even occur in a confronting way. For example, a wounded veteran suffering from a severe illness may consider alternatives to suicide when confronted with practical issues that his mother would have to address in the event of his funeral. Such a turning point can pave the way for elements of constructive initiative to change the situation (*On the edge*).

In a more general sense, initiatives to support others in a similar situation to one's own, drawing on gained experience and skills, seem to be crucial in the recovery process. This may involve teaching combatants the techniques of psychological first aid and how to regain control of the body when it feels "as if chained" in fearful moments (*Chained with fear*). Another example is the initiative of a former soldier to send meat snacks to the front line, knowing how much the combatants lacked protein (*Resilient journey*). Another example is the daughter of a fallen defender with "spiritual wounds" studying to become a psychologist (*Farewell letter*). In this practical and concrete way, individuals may find ways to deal with their war wounds as a kind of a "substitute for hope" for themselves and others.

Finding ways to combat feelings of false guilt

War tends to pave the way for existential thoughts such as why some people die while others do not. Survivors may even experience irrational feelings of guilt for having survived dangerous situations and local attacks. People in this situation may feel that they no longer have the right to experience joy. Perhaps they also ask themselves with what right they live on in a process where grief is mixed with feelings of self-loathing. In such circumstances, the intervention of an external party is often required to interrupt this destructive process.

The process of treatment is largely a matter of revealing the difference between real experiences and feelings of false guilt. It makes no sense, for instance, to choose not to eat just because a deceased loved one cannot eat. Such a reaction can be perceived as a sign of exhaustion, but also as a desperate way of trying to cope with a stressful life event. One of several other possible suggestions might be to embrace the situation rather than simply reject the behaviour. This means that there may be intermediate steps to guide the process forward. In this context, a constructive way to process the event would be, for example, to find ways to symbolise the presence of a loved deceased person at meals by setting the table with an extra plate (*Immersed in grief*). Thus, by symbolising the presence of the deceased loved one, the prerequisites of acceptance may be strengthened. It takes time to understand what you already know.

Guarding one's zone of integrity for as long as it takes

Denial and apathy are common elements in the acute stage of grief, and it may take some time to be able to express grief in words, emotions, and actions. Simultaneously, processes of grief and shock are highly personal and influenced by factors such as the event itself, how it was perceived, the degree of personal involvement, possible feelings of guilt, previous experiences, and personality traits. Also of crucial importance are significant others and available social networks. Tears and sadness can be essential components of the process of resilience and the release of tension in body and mind.

However, having significant others around does not mean that they will automatically be informed of difficult war experiences. On the contrary, it

may be that soldiers and veterans feel the need to keep their families far from any insight into such experiences. It could be an expression of concern for family members and that there are certain things they should be protected from. Another contributing reason for a combatant to withhold such experiences may be for the sake of their own dignity and the need to maintain some kind of zone of integrity. In such circumstances, the right not to share painful moments must be respected (*Enduring silence*). This approach could be interpreted as the need to guard a space where you are something other than just your own pain. Another powerful resource in the process of grieving is the possibility to receive the support of those who had served alongside the deceased and engage in volunteer work (*Weight of loss*).

Concluding reflections

The strategies presented above express a pattern commonly seen in people who have experienced trauma. Greatly simplified, it can be summed up as a tendency to stay in a context where “you are capable of doing something”, rather than being in a context where “you are defined solely by your trauma”. Based on the strategies identified, it is natural to return to the battlefield, to return to family life, to support other combatants, to honour the deceased, and to put a temporary lid on things for the sake of resilience. It is important to be aware that these strategies may partly coexist and that their application may vary over time. In this way, these self-developed strategies work as part of a dynamic process that allows for adaptation, possibly in combination with professional support.

Resilience is rarely something that you can plan, neither its components nor the factors that contribute to moments of relief. It is likely to consist of many measures and efforts at different levels of society and arise from close interactions between individual, group, and societal levels, all shaped by wider global forces. Although this text is based on descriptions of the life situation of individuals in wartime, it also sheds light on general human reaction patterns, albeit under the extreme conditions of war.

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The psychological impact of long-term separations and long-distance relationships on women during wartime

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Introduction

Armed conflict incurs substantial disruptions that extend far beyond immediate threats to physical safety and national security. These disruptions significantly impact intimate relationships, family systems, and psychological well-being (Clark et al., 2018). Contemporary warfare increasingly transforms private life through prolonged uncertainty, forced mobility, and enduring relational separation. Within this context, women disproportionately bear the burden of relational and emotional distress, particularly when separation is a consequence of military deployment, forced displacement, or the structural evolution of partnership roles during wartime (Rizkalla & Segal, 2019).

The conflict in Ukraine provides a critical, empirically significant context for analysing these dynamics. Since the escalation of hostilities in February 2022, more than 6.5 million Ukrainians have been internally displaced, while over 6 million have sought refuge in other countries, with the majority being women and children (International Organization for Migration [IOM], 2023; United Nations High Commissioner for Refugees [UNHCR], 2024). Concurrently, hundreds of thousands of men have been mobilised or remain in Ukraine due to military obligations or legal restrictions, leading to large-scale, prolonged separations within intimate partnerships. According to the World Health Organization (WHO, 2025), approximately one in three Ukrainians currently experiences symptoms of anxiety, depression, or severe psychological distress, with women reporting higher prevalence rates, particularly in relation to family separation and the burden of caregiving.

Wartime separations are not uniform and should be analytically distinguished to effectively capture their unique psychological and relational outcomes. One significant category encompasses women whose partners have

been deployed to active combat zones. These women endure separations characterised by chronic uncertainty, anticipatory grief, and a persistent perception of threat, often accompanied by disrupted or irregular communication. A second category includes women who have been compelled to leave Ukraine, frequently accompanied by children, while their partners remain behind due to military obligations or employment constraints. For these individuals, separation is further complicated by forced migration, cultural dislocation, role overload, and the erosion of social support networks. A third category consists of women who experienced changes in the quality of relationships during wartime, including alterations in emotional intimacy, sexual relations, power dynamics, or even relationship dissolution as a result of prolonged stress and distance.

Previous research has consistently demonstrated that armed conflict disproportionately impacts women in relational roles, particularly those who are spouses or intimate partners of military personnel (Dekel & Monson, 2010). Investigations into military families reveal significantly elevated levels of anxiety, depressive symptoms, and emotional exhaustion during prolonged deployments, especially when the duration is uncertain or subject to repeated extensions (Joas, 2022; Renshaw et al., 2011). At the same time, studies on forced displacement highlight that separation from intimate partners, coupled with migration-related stressors, considerably heightens vulnerability to loneliness, depression, and identity fragmentation (Miller & Rasmussen, 2010). These stressors are cumulative rather than merely additive, as they interact across emotional, relational, and contextual dimensions.

Long-distance relationships under wartime conditions pose challenges that differ significantly from those encountered in voluntary or civilian long-distance arrangements. Wartime separations are often involuntary, unpredictable, and situated within a broader context of existential threat. Communication channels may be severely constrained by infrastructural instability, security concerns, and psychological strain, which limit opportunities for emotional regulation and relational maintenance. Empirical research indicates that prolonged physical absence, especially in the face of danger and uncertainty, adversely affects relationship satisfaction, emotional intimacy, and sexual connection (Knobloch et al., 2018), especially when the frequency of communication is perceived as insufficient (Joas, 2022). In the context of Ukraine, these effects are exacerbated by stress related to displacement, dis-

crepancies in time zones, and the moral and emotional disparities experienced by individuals on the front lines compared to those in civilian life.

Research has identified several psychological factors that are closely linked to prolonged separation. Anxiety emerges as one of the most significant responses, stemming from uncertainty, a perceived lack of control, and ongoing threat assessment. Smith et al. (2020) demonstrate that persistent ambiguity regarding a partner's safety acts as a chronic stressor, which markedly increases anxiety levels over time. Loneliness also represents a crucial aspect, highlighting not only physical absence but also the decline of shared daily experiences and emotional connection. Johnson (2019), supported by data from the UCLA Loneliness Scale, illustrates a strong correlation between relational separation and perceived social isolation, even in the presence of digital communication options.

Sexual dissatisfaction constitutes a significant yet relatively underexplored dimension of long-distance relationships during wartime. According to Brown and Lee (2021), protracted physical separation often leads to a reduction in sexual satisfaction, which can aggravate emotional estrangement, compromise relational stability, and heighten psychological distress. These repercussions are particularly pronounced in scenarios characterised by indefinite and involuntary separation, as frequently observed during armed conflicts.

Resilience has been identified as a crucial protective factor that moderates the psychological effects of separation. Research by Zhao and Chen (2022) indicates that individuals with higher levels of resilience demonstrate more effective emotion regulation, employ adaptive coping strategies, and maintain a sense of relational connection despite prolonged physical distance. In populations affected by armed conflict, resilience is frequently shaped by factors such as social support, personal values, and access to psychological resources, underscoring the need for context-sensitive interventions.

The existing body of research underscores the complex and multifaceted psychological challenges faced by women who experience conflict-related separations. Despite the growing emphasis on mental health within populations affected by war, empirical studies frequently lack the necessary differentiation between various types of separations and do not systematically explore the interrelationships among anxiety, depression, loneliness, and sexual satisfaction across diverse relational contexts. To address this significant

gap, the current study investigates the psychological repercussions of prolonged separations and long-distance relationships on women during wartime, with a specific focus on the Ukrainian context. By using validated psychometric measures and distinguishing among relational trajectories, this study aims to enhance understanding of women's psychological experiences and to inform the development of targeted, evidence-based psychosocial support strategies.

Methodology

Study design

The present study utilised a cross-sectional, quantitative descriptive design to investigate the psychological effects of wartime separations and disruptions in relationships among women, in the context of the ongoing armed conflict in Ukraine. This design was chosen to identify patterns of psychological distress and relational outcomes across age groups and separation experiences, rather than evaluate causal relationships.

Participants

The study employed a purposive sample of 30 Ukrainian women who had encountered prolonged separation or disruption in intimate relationships due to war-related circumstances. Participants were categorised into three distinct age groups: 18–30 years, 30–50 years, and 50 years and older. This stratification was both theoretically and empirically motivated by considerations related to developmental stages, relational dynamics, and psychosocial factors:

- 18–30 years: Characterised as early adulthood, this phase is marked by identity formation, the establishment of relationships, and future-oriented life planning. Disruptions occurring during this stage may significantly impact emerging attachment bonds and career or reproductive trajectories.
- 30–50 years: This phase represents mid-adulthood, typically characterised by long-term partnerships, parenting obligations, and economic sta-

bility. Wartime separations during this period often compound stress from caregiving burdens, role overload, and asymmetrical responsibilities.

- 50 years and older: In later adulthood, intimate relationships frequently provide essential emotional support. Separation during this stage may exacerbate feelings of loneliness, existential insecurity, and concerns related to ageing and loss.

This classification enabled a comparative analysis of vulnerability and resilience patterns across various age groups, while ensuring that the sampling approach remained appropriate for an exploratory sample.

Separation-type groups

Participants in the study were systematically classified into three distinct relational contexts, which represented qualitatively different forms of wartime separation:

1. *Long-term separation without contact* (n = 10)
This group consisted of women whose partners were deployed near or at the front line with no reliable means of communication, missing in action or detained, or otherwise unreachable due to security, infrastructural, or operational challenges.
These separations were characterised by prolonged uncertainty and a lack of information, rather than by voluntary distance.
2. *Long-term separation with remote digital communication* (n = 10)
This group included women who maintained intermittent or regular digital communication (such as messaging, voice calls, or video calls) with partners who were deployed in non-front-line military positions, internally displaced, or geographically separated due to forced migration.
Despite ongoing communication, these relationships continued to experience significant physical disruption and emotional stress.
3. *Relationship dissolution due to war-related stressors* (n = 10)
This group comprised women whose intimate relationships ended during the wartime period, with separations attributed to prolonged physical distance, psychological strain, divergence of values under

crisis conditions, or the inability to maintain emotional or sexual intimacy amid the challenges of war.

Participants were evenly distributed across the three relational categories (10 per group). Within each relational category, the sample included women from all three age groups, thereby facilitating cross-contextual comparisons. However, inferential statistical testing was not conducted due to limitations related to sample size.

Recruitment

Participants were recruited through targeted outreach efforts in online support groups and social media communities that focus on military families, displaced individuals, and women impacted by the war. This approach facilitated voluntary participation, ensured geographical diversity by including individuals residing both in Ukraine and abroad, and maintained participant anonymity. Data were collected via an anonymous Google Forms survey enhancing accessibility and upholding confidentiality standards.

Measures

To evaluate psychological well-being and relational functioning, the study utilised three validated psychometric instruments, chosen for their robustness and relevance to populations affected by conflict.

The Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983) comprises 14 items divided into subscales for anxiety and depression. Its emphasis on psychological rather than somatic symptoms makes it particularly suitable for individuals experiencing trauma and chronic stress. The scale has demonstrated strong validity in populations affected by war and displacement (Bjelland et al., 2002).

The UCLA Loneliness Scale (Russell, 1996) is a 20-item instrument that assesses subjective experiences of loneliness and perceived social isolation. It has demonstrated high internal consistency and construct validity and is widely used in research on displacement, separation, and emotional distress (Hawkey & Cacioppo, 2010).

The Index of Sexual Satisfaction (ISS; Hudson et al., 1981) is a 25-item scale used to assess dissatisfaction within sexual relationships. It is particularly sensitive to relational distress arising from external stressors, including military deployment and forced migration (Snyder et al., 2006).

All instruments underwent linguistic and cultural adaptation to accurately reflect wartime realities, including military deployment, displacement, and prolonged uncertainty. This adaptation prioritised contextual relevance while preserving the integrity of the scale structure.

Procedure

Participants completed a self-administered online questionnaire distributed via Google Forms. Prior to participation, informed consent was obtained digitally. The questionnaire comprised demographic items, questions regarding relationship status, and three psychometric scales: the Hospital Anxiety and Depression Scale (HADS), the UCLA Loneliness Scale, and the Index of Sexual Satisfaction (ISS). The choice of an anonymous online format was intentional, aimed at minimising response inhibition and fostering psychological safety for participants who have experienced trauma.

Data analysis

Given the exploratory nature of the study and the constraints imposed by the limited sample size, the analysis employed descriptive statistics, including means, standard deviations, and score distributions, to summarise psychological outcomes across various age groups and types of separation. Comparative patterns were interpreted using qualitative and descriptive methods, without applying inferential statistical testing.

Ethical considerations

The research complied with established ethical standards for studies involving human participants. Participation was entirely voluntary, with individuals retaining the right to withdraw at any point during the study. Stringent measures were implemented to ensure confidentiality and anonymity. Digital anonymisation techniques were used to safeguard sensitive information, in

accordance with ethical guidelines for psychological research conducted with populations affected by conflict.

Results

The results of this study indicate that wartime disruptions in intimate relationships are associated with significant fluctuations in psychological well-being and relational satisfaction among women, with notable differences by type of separation and age group.

Psychological outcomes by relationship category

Women whose relationships ended as a direct consequence of wartime stressors exhibited the most adverse psychological profiles. This cohort demonstrated significantly elevated levels of anxiety ($M = 13.8$, $SD = 2.8$), which corresponds to the upper range of the Hospital Anxiety and Depression Scale (HADS) for anxiety, alongside heightened feelings of loneliness ($M = 52.7$, $SD = 5.3$), indicating a high degree of perceived social isolation. Furthermore, these individuals reported the lowest levels of sexual satisfaction, as evidenced by comparatively higher scores on the Index of Sexual Satisfaction (ISS).

In contrast, women who maintained long-distance relationships with ongoing digital communication presented the lowest levels of anxiety ($M = 7.2$, $SD = 1.9$), falling within the mild range on the HADS scale. However, despite experiencing reduced anxiety, this group continued to report moderate depressive symptoms and relational dissatisfaction, indicating that communication alone may not sufficiently mitigate emotional and intimacy-related challenges.

Women enduring long-term separation without any form of contact demonstrated moderately elevated anxiety ($M = 10.5$, $SD = 2.1$) and high loneliness scores ($M = 48.3$, $SD = 4.2$). These outcomes were particularly pronounced among younger participants, reflecting the psychological burden associated with uncertainty, ambiguous loss, and emotional dependency.

Table 1. Psychological indicators by relationship category⁸

Relationship Category	Anxiety (0–21) Mean ± SD	Loneliness (20–80) Mean ± SD	Sexual Satisfaction (ISS)
<i>Long-term separation (no contact)</i>	10.5 ± 2.1	48.3 ± 4.2	Low
<i>Remote digital contact</i>	7.2 ± 1.9	44.6 ± 4.0	Moderate
<i>Relationship breakup</i>	13.8 ± 2.8	52.7 ± 5.3	Lowest

Age-related psychological patterns

Age has been identified as a significant contextual variable influencing psychological responses to wartime separation. Women within the age bracket of 18 to 30 years reported experiencing elevated levels of anxiety and loneliness, in addition to moderate sexual dissatisfaction. Although resilience was not explicitly assessed as a psychometric construct, this demographic exhibited diminished adaptive coping, as evidenced by increased emotional reactivity, identity-related vulnerability, and difficulty enduring prolonged uncertainty.

Participants aged 30–50 years displayed moderate levels of anxiety and loneliness, while simultaneously reporting elevated levels of sexual dissatisfaction. This trend appears to be linked to role overload, as many women in this demographic face the dual demands of caregiving responsibilities, economic pressures, and the emotional labour required to maintain strained relationships.

Women aged 50 years and older exhibited lower scores for anxiety and loneliness, alongside moderate dissatisfaction with their sexual experiences. This demographic appears to exhibit enhanced psychological resilience, as

⁸ The maximum attainable scores for the psychometric instruments were as follows: 21 per scale (anxiety and depression) on the Hospital Anxiety and Depression Scale (HADS); 80 on the UCLA Loneliness Scale (where higher scores denote greater perceived loneliness); and 175 on the Index of Sexual Satisfaction (ISS; with higher scores indicating greater sexual dissatisfaction).

indicated by more stable emotional regulation, a range of coping strategies, and reduced reliance on relational proximity. Nevertheless, qualitative feedback revealed ongoing experiences of grief and relational fatigue, particularly in relation to alterations in long-standing relational roles.

Table 2. Psychological trends by age group

	Age	18-30	33-50	50+
Trends				
<i>Anxiety</i>		High	Moderate	Low
<i>Loneliness</i>		High	Moderate	Low
<i>Sexual Dissatisfaction</i>		Moderate	High	Moderate
<i>Adaptive Coping Profile</i>		Low	Moderate	High
<i>Notable Characteristics</i>		Emotional vulnerability, identity strain	Role strain, relationship burnout	Emotion regulation, grief, fatigue

Women who experience relationship dissolution as a consequence of war display the most significant levels of psychological distress. Remote communication serves as a partial protective factor against anxiety; however, it does not alleviate symptoms of depression or sexual dissatisfaction. Younger women exhibit a heightened vulnerability to emotional distress, whereas middle-aged women encounter compounded stress arising from relational and caregiving responsibilities. In contrast, older women experience greater adaptive stability, although they are not immune to grief or relational exhaustion.

Implications for practice

The findings presented align with existing research on stress, attachment disruption, and relational strain among military and displaced populations (Allen et al., 2011), thereby extending this knowledge to the context of the Ukrainian wartime experience. These results highlight the necessity for age-sensitive

and trauma-informed psychosocial interventions that address not only anxiety and loneliness but also considerations of intimacy, role strain, and long-term relational transformation.

The psychological effects of wartime disruptions on intimate relationships among women present a multifaceted interplay of anxiety, loneliness, identity transformation, and relational dissatisfaction. These consequences vary considerably across different age groups and relational contexts. This underscores the importance of implementing multi-level, trauma-informed interventions that extend beyond individual therapy to include community-based and structural responses.

Individual- and relationship-level interventions

Women undergoing prolonged separations with no communication reported moderate levels of anxiety ($M = 10.5$, $SD = 2.1$) and heightened feelings of loneliness ($M = 48.3$, $SD = 4.2$). These findings indicate a state of extended uncertainty that may be characterised as relational liminality. This condition, marked by an emotional suspension between loss and hope, exacerbates stress responses in conflict settings (Buchanan et al., 2011).

Emotion-focused therapy (EFT) is particularly advantageous for individuals in this group, as it enhances emotion regulation, addresses attachment insecurity, and facilitates meaningful sense-making in the context of relational ambiguity (Johnson et al., 2013). Furthermore, psychoeducational interventions that acknowledge disrupted intimacy, ambiguous loss, and variable communication patterns can effectively mitigate self-blame and emotional dysregulation.

Women whose relationships ended because of wartime stressors demonstrate elevated levels of anxiety and loneliness, coupled with diminished sexual satisfaction. For this group, trauma-informed grief counselling, narrative reconstruction, and identity-focused interventions are imperative. Narrative-based methodologies facilitate the integration of traumatic relational loss into a coherent life story, thereby alleviating symptoms associated with complicated grief and restoring a sense of agency (Kealy & Ogrodniczuk, 2014; Neimeyer, 2012). Furthermore, targeted interventions that address sexual self-concept, relationship-related shame, and reduced self-worth are essential for achieving long-term psychological recovery.

Women in midlife, specifically those aged 30–50, often encounter a range of compounded stressors, including caregiving responsibilities, occupational pressures, and interpersonal relationship dissatisfaction. Integrative approaches that encompass assertiveness training, couples' communication workshops, and stress-management interventions may facilitate the adaptive renegotiation of relationship roles (Lachman, 2015).

Women aged 50 years and older typically exhibit enhanced emotional stability and effective coping strategies. Nevertheless, they continue to experience significant challenges, including prolonged grief, relational fatigue, and transitions in their life roles. For this group, interventions that focus on meaning-making, life-review therapy, and peer mentorship can promote psychological well-being and strengthen social connections (Ryff & Singer, 2008; Westerhof et al., 2010).

Community-based interventions

While individual therapy is undoubtedly important, the findings underscore the vital role of community-level interventions in alleviating the psychological effects of wartime separation. Factors such as displacement, the disruption of social networks, and diminished access to informal support systems intensify feelings of loneliness and emotional distress, particularly among younger women.

Community-based support initiatives, including peer support groups, women's circles, and facilitated community dialogues, can serve as significant protective factors by enhancing social connectedness and fostering collective resilience (Ozbay et al., 2007). These environments create opportunities for shared meaning-making, normalisation of emotional responses, and reciprocal support, which are especially beneficial in contexts where access to formal mental health services is restricted (Kees & Rosenblum, 2015).

Digital community platforms, overseen by trained mental health professionals, have the potential to significantly expand their reach to displaced women and women residing abroad. These platforms can provide structured group interventions, psychoeducational resources, and facilitated peer interactions, all while ensuring accessibility and continuity of care (Rea et al., 2015).

Structural and policy-level implications

At the structural level, the findings underscore the critical importance of integrating relational and mental health support within national and humanitarian response frameworks. The challenges associated with prolonged separation and disruptions in relationships extend beyond individual psychological concerns; they are intricately linked to broader social conditions, including displacement policies, military deployment practices, and disparities in access to mental health services.

Policy-level interventions should give priority to the following measures:

1. The expansion of accessible mental health services, encompassing telepsychology and cross-border care for displaced populations.
2. The incorporation of family- and relationship-focused support systems within both veteran and civilian assistance programmes.
3. The training of front-line providers, such as social workers, educators, and community leaders, in trauma-informed and gender-sensitive methodologies.
4. The provision of long-term funding dedicated to community-based mental health infrastructure, particularly in regions facing significant levels of displacement.

Furthermore, international organisations and national governments should consider supporting relationship preservation and facilitating family reunification as essential protective factors in post-conflict recovery, acknowledging their vital role in fostering social cohesion and enhancing psychological resilience.

Integrated practice perspective

A trauma-informed framework is essential across all levels of intervention. As articulated by the Substance Abuse and Mental Health Services Administration (SAMHSA, 2014), this approach emphasises key principles, including safety, trustworthiness, collaboration, empowerment, and cultural sensitivity. Effective practice must integrate the psychological, relational, and

social dimensions of well-being, recognising that the recovery process following wartime separation is both an individual and collective endeavour.

Conclusion

Wartime separations and the disruptions of intimate relationships represent a significant, yet frequently overlooked, aspect of conflict-related psychological harm impacting women. This study illustrates that the ramifications of such relational disruptions have a prolonged and multifaceted influence on women's mental health, extending well beyond the immediate timeframe of active conflict. Key outcomes identified within the sample include heightened levels of anxiety, ongoing feelings of loneliness, disturbances in emotional and sexual intimacy, as well as transformations in identity. Notably, these effects are neither uniform nor fleeting; rather, they vary consistently with relational context, age, and the specific nature of the separation. This variation underscores the need for differentiated nuanced responses to address the unique needs of affected individuals.

The collective findings highlight the inadequacy of uniform approaches to mental healthcare for women experiencing wartime separation. Effective interventions must be sensitive to age, relationship-specific, and grounded in context, addressing not only individual symptoms but also relational significance, identity reconstruction, and social connectedness. Trauma-informed counselling, emotion-focused therapy, narrative-based approaches, and psychoeducational programmes aimed at enhancing relational and sexual well-being are particularly relevant modalities. Additionally, community-based interventions, including peer support groups and facilitated collective spaces, play a crucial role in alleviating isolation and restoring social bonds disrupted by displacement and conflict.

The study extends well beyond the clinical realm, carrying considerable policy and humanitarian ramifications. The psychological effects of relational disruption during wartime are profoundly intertwined with broader structural factors, such as forced migration, prolonged military deployments, fragmented social networks, and unequal access to mental health services. Consequently, mental healthcare should be incorporated into comprehensive frameworks for post-conflict recovery and reintegration. This includes expanding access to culturally sensitive, trauma-informed services, integrating

relationship- and family-focused support within both veteran and civilian assistance programmes, and enhancing community-level mental health infrastructure, particularly for displaced populations.

The findings underscore the critical importance of maintaining continuity of care during the transition from conflict to post-conflict environments. Psychological distress associated with separation does not automatically diminish with the end of hostilities; rather, it may exacerbate as individuals face protracted relational changes, unresolved grief, and shifts in identity. Therefore, coordinated collaboration among mental health professionals, policymakers, humanitarian organisations, and community institutions is essential to provide sustainable support and to prevent the chronification of psychological distress.

From a theoretical standpoint, this study enhances the existing literature on war-related trauma by emphasising relational disruption as a pivotal pathway to psychological distress, particularly among women. It builds upon contemporary models of trauma and stress by incorporating relational, developmental, and gender-sensitive dimensions, thereby providing a more nuanced understanding of how conflict alters intimate relationships and emotional well-being. Notably, the concept of relational liminality serves as an effective analytical framework for examining prolonged uncertainty and ambiguous loss in conflict-affected environments.

Several limitations warrant acknowledgment in this analysis. Although the sample size is suitable for exploratory purposes, it constrains the statistical generalizability of the findings. Additionally, the reliance on self-report measures may introduce response bias. Future research should prioritise the use of larger, longitudinal samples and employ mixed-method designs. Furthermore, the inclusion of additional protective factors, such as social support, meaning making, and resilience resources, would enhance the understanding of adaptive trajectories over time. Conducting comparative studies across various conflict-affected regions could also improve the external validity of the results.

In conclusion, addressing the psychological consequences of wartime separation and relational disruption requires a multidisciplinary, multilevel approach that recognises the interplay among emotional resilience, relational intimacy, and social context. The implementation of targeted, evidence-based interventions, integrated within supportive community and policy frame-

works, has the potential to alleviate immediate distress and promote long-term resilience, relational stability, and psychological recovery. Therefore, assisting women in managing the intimate repercussions of war is essential not only for individual well-being but also as a vital component of post-conflict societal healing and reconstruction.

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University students' mental well-being in times of war

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Introduction

The mental well-being of college and university students is a worldwide concern in modern society. In peacetime, this population has been shown to have a higher prevalence of mental health conditions due to several risk factors, such as pressure to achieve academic excellence, separation from their family (of origin), and a change of environment (Limone & Toto, 2022). Since hostilities began in 2014, culminating in the full-scale Russian invasion in 2022, Ukrainian universities have continued to operate, despite destruction of educational infrastructure and relocation from occupied and front-line territories. For Ukrainian students, academic challenges are intensified during wartime conditions when academic stressors combine with war-related disruptions such as air-raid alerts, power outages, and emotional strain (Błaszczuk et al., 2025). The war brings instability and financial hardship as well as uncertainty and a fear for the future, causing deep psychological distress. Furthermore, many students have experienced the loss of loved ones, evacuation from active war zones, forced displacement, and intense bombing.

A growing body of research examines teaching and learning in higher education during the war in Ukraine (e.g., Lugovyi et al., 2023; Pinchuk et al., 2025; Zayachuk, 2024). This research analyses the challenges faced by the higher education system during Russia's full-scale invasion, including ensuring the quality of educational services, dealing with the destruction of educational infrastructure, the loss of human resources due to mobilisation, migration and casualties, reduced student enrolment, and impaired academic performance due to student mental health problems. Researchers emphasise the need for effective educational policies and innovative approaches to organising the educational process in times of war.

This chapter focuses on the impact of the war on the mental well-being of university students. Research has shown a significant deterioration in the mental and emotional well-being of students and staff at four Ukrainian universities after the first three months of the full-scale invasion, with symptoms including depression, exhaustion, loneliness, anxiety, and anger (Kurapov et al., 2022). Likewise, a study carried out in October 2023 with students from 17 Ukrainian universities revealed high levels of anxiety, depression, post-traumatic stress disorder (PTSD), and insomnia (Pinchuk et al., 2025; Polyvianaia et al., 2025). Even students in the western regions of the country, Ternopil and Lviv, that have been less affected by the war, exhibit high levels of trauma exposure and nightmares (Pavlova & Rogowska, 2023). They have experienced hiding in bomb shelters, as well as the mobilisation of family members or friends for military service, and the hospitalisation and death of relatives due to the war.

In what follows, we will first provide a brief overview of the “generation of war” – comprising the majority of the current university students – and the mental health issues that war can cause. Next, we will present the results of a student well-being survey conducted at Zhytomyr Polytechnic State University in 2022, 2023 and 2025. Finally, we will outline some methods for providing support to students during wartime.

The generation of war

In Ukraine, being a university student is generally associated with a specific stage of life. Students typically enter university directly after graduating from secondary school, at the age of 17 or 18. Since 2022, the demographic profile of Ukrainian university students has changed somewhat, with an increase in the number of male students over the age of 25 (the conscription age). Nevertheless, many of today’s university students grew up during the period 2014–2025 – a particularly challenging period in Ukraine’s history. The annexation of Crimea in 2014, the subsequent military operations in the Donetsk and Luhansk regions, and the large-scale invasion beginning in 2022 have all had a profound impact on the development of the new generation. These students have developed and formed their identities amid constant stress, insecurity and instability.

This new generation – *the generation of war* – displays distinct psychological and social characteristics that differentiate it from previous cohorts. Based on the observations of the first two authors of this chapter, who reside in Ukraine and work closely with Ukrainian students, young people growing up during wartime have become accustomed to constant change and uncertainty, learning to adapt quickly. They demonstrate a high degree of psychological flexibility and an ability to function under unstable conditions. Many have developed a strong sense of civic consciousness and responsibility toward their country. Students actively engage in volunteer activities, supporting the military and internally displaced persons. There is a growing interest in fields such as psychology, medicine, social work, military professions, information technology (IT), and engineering. These observations are supported by research indicating that traditional career-oriented motivations are increasingly being replaced by patriotic ones: students are keen to acquire knowledge that will contribute to the rebuilding of the country after the war (Błaszczuk et al., 2025). At the same time, prolonged exposure to war has led to emotional exhaustion and heightened anxiety about the future. Symptoms of PTSD, depression, burnout and emotional instability are common among young people (Kurapov et al., 2023; Pavlova & Rogowska, 2023; Pinchuk et al., 2025; Polyvianaia et al., 2025).

Mental well-being in times of war

The World Health Organization, WHO, (2022) defines mental health as “a state of mental well-being that enables people to cope with the stresses of life, realise their abilities, learn well and work well, and contribute to their community”. Mental health is recognised as an integral component of overall health and a fundamental human right. It is essential to our ability to think clearly, interact with others, experience emotions, and enjoy life. Accordingly, mental health is vital for functioning effectively both individually and within society.

War is arguably one of the most significant negative influences on an individual’s psyche, as it poses a direct threat to life and safety and involves various forms of violence. The mental health of Ukrainian civilians has been affected in different ways depending on their level of exposure to military action and violence, and on their living conditions (Kurapov et al., 2023).

One study found that, after six months of war, Ukrainian civilians generally reported relatively low levels of anxiety and depression, and moderate levels of severe mental health conditions such as PTSD (Kurapov et al., 2023). However, these findings did not include civilians who had been directly exposed to traumatic events such as military attacks, physical violence, or severe suffering.

War involves excessive stress that can overwhelm an individual's psychological defence mechanisms, resulting in an acute stress reaction. In the ICD-10 Classification of Mental and Behavioural Disorders (WHO, 1992), this condition was defined as a temporary disorder that develops in response to exceptional physical or mental stress. It typically affects individuals without prior manifestations of mental illness and usually subsides within hours or days. The DSM-5, developed by the American Psychological Association (APA), offers a similar definition. However, acute stress reactions have been reclassified in the most recent edition of the WHO's classification system, ICD-11 (2022), under the section "Factors influencing health status" and are now considered an environmental factor rather than a psychiatric disorder (for further discussion, see Maercker & Eberle, 2022).

The timing and intensity of acute stress reactions depend on the severity of the circumstances and the individual's capacity to cope, shaped by prior experiences and levels of personal resilience. Individuals with previous exposure to similar situations may recover more quickly, while others may be more vulnerable to distress, potentially leading to PTSD, generalised anxiety disorder, chronic fatigue, or depression. In Ukraine, acute stress responses are common among the civilian population facing the threat or occurrence of drone and missile attacks. These reactions have also been documented among Ukrainian war refugees in 2022. A cross-sectional study by Kordel et al. (2024) found a high prevalence of acute stress disorder (ASD) among displaced individuals, particularly those exposed to direct violence, forced displacement, and loss.

Living under wartime conditions entails prolonged psychological distress. When excessive stress accumulates, the body lacks the opportunity to replenish its resources, leading to a stress reaction that exceeds an individual's threshold of tolerance. This can lead to the development of post-traumatic stress disorder (PTSD). WHO (2022) defines PTSD as a delayed or prolonged reaction to extremely threatening or catastrophic events or situations. PTSD,

along with anxiety and depression, is among the most prevalent mental health issues in populations affected by war (e.g., Mesa-Vieira et al., 2022). In Ukraine, elevated levels of trauma-related symptoms have been observed among civilians directly exposed to military action, physical violence, or severe suffering (Kurapov et al., 2023). A recent national study found that 68% of university students had been exposed to war-related traumatic events, and nearly half met the criteria for PTSD twenty months after the full-scale invasion began (Polyvianaia et al., 2025).

Zhytomyr Polytechnic survey

Zhytomyr Polytechnic State University, founded in 1920, is a non-profit public higher education institution with an enrolment of approximately 8,000 students. It offers bachelor's, master's, and doctoral programmes. The university is located in the city of Zhytomyr, which has a population of around half a million and lies in northern Ukraine, near the Belarusian border and about 140 km west of Kyiv. During the early months of the war in 2022, as Russian troops advanced toward Kyiv, Zhytomyr was situated in a pre-front-line zone. Since then, the city has experienced repeated heavy missile and drone attacks.

The Centre for Social and Psychological Support (PsyLab) is an organisational unit of Zhytomyr Polytechnic State University dedicated to providing psychological support to students. Its core activities include the prevention of psychological disorders, psychoeducation, crisis counselling and the development of stress resistance. The PsyLab employs three psychologists who offer psychological and corrective support, along with two specialists trained in first aid and crisis intervention.

The PsyLab has conducted a repeated cross-sectional study examining student well-being during the war. Students were invited to participate at three time points: at the onset of the full-scale war (April – May 2022), one year later (February – March 2023), and three years into the war (April – May 2025). The sample included students from all faculties of the university, with 214, 365 and 247 respondents respectively, aged between 16 and 37. Most respondents were female (around 70%), reflecting the university's overall gender distribution. The survey was conducted online and included multiple-choice self-assessment questions.

The first question asked students to recall their emotional reaction upon learning that the full-scale war had begun and to select the option that best described their feelings at that moment. The five most frequently reported emotions were anxiety, confusion, fear, shock, and bewilderment. Figure 1 below illustrates the percentage distribution of these reactions as recalled by students in April – May 2022 and April – May 2025.

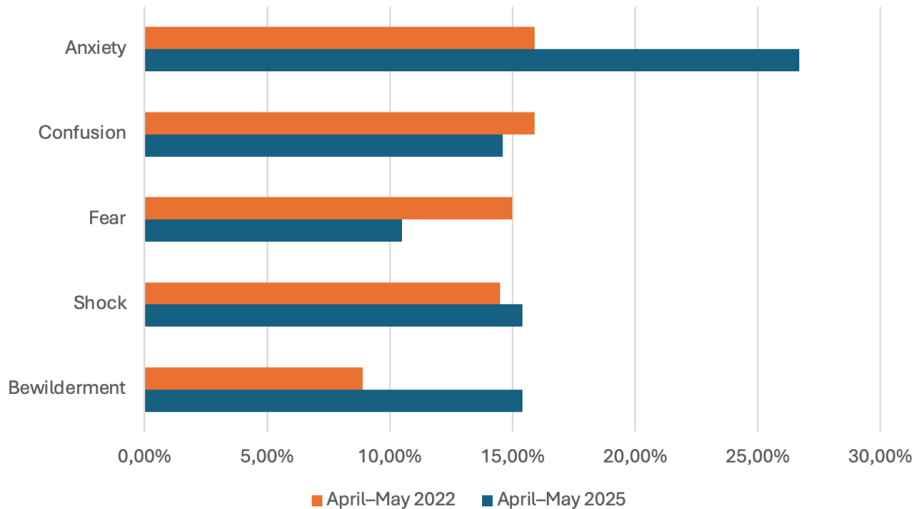


Figure 1. Percentage distribution of responses to the question “What was your reaction when you first heard about the war?”

In the early hours of 24 February 2022, the first day of the full-scale Russian invasion, an air base in the suburbs of Zhytomyr was shelled. Some students were likely awoken by the sound of the explosions and sought information to understand what had occurred. Their emotional response to the news of the war may therefore have been intertwined with their immediate reaction to the frightening sounds of the shelling. As a result, students’ initial reactions may have varied depending on their location within the city and their proximity to the attack. The differences in survey responses between 2022 and 2025 may reflect changes in the composition of the student samples across the years. However, they may also be influenced by the passage of time, which can influence how individuals recall and interpret their emotional experiences.

Subsequent questions in the survey explored changes in students' psychological and emotional state, physical health, and sleep since the onset of the full-scale invasion. In 2022 and 2025, 41% and 47% of respondents respectively reported a deterioration in their overall mental state. For 36.4% (2022) and 27% (2025), their psychological condition remained unchanged, while only 22.9% (2022) and 26% (2025) reported an improvement. Interestingly, the 2023 survey revealed a different trend: 58% of respondents indicated an improvement in their general condition, 27% reported no change and only 15% experienced a decline in their overall condition (Figure 2).

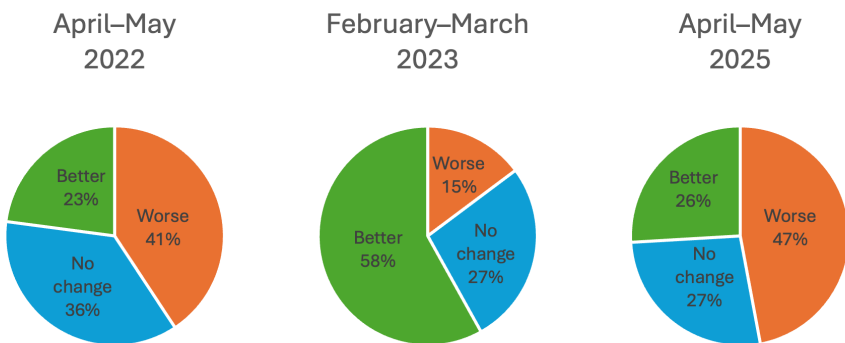


Figure 2. Percentage distribution of responses to the question “How has your psychological and emotional state changed since the start of the war?” (better/worse/no change).

The notably lower percentage of students reporting a deterioration in their mental well-being in 2023 (15%) compared to 2022 (41%) aligns with the findings from other studies, which indicated milder levels of anxiety and PTSD symptoms among university students in 2023 (Polyvianaia et al., 2025). This trend may be attributed to students' adaptation to war-related stressors and the development of resilience strategies over time. However, this does not explain the subsequent increase in negative self-assessments in 2025, when 47% of students reported a deterioration in their psychological and emotional state. The reversal of the trend suggests that prolonged exposure to war conditions may have cumulative psychological effects, potentially overwhelming earlier coping mechanisms. It may also reflect new stressors, such as economic hardship, academic disruption, or personal loss, which intensified over time.

Another possible explanation for the difference in results observed in early 2023 compared to both 2022 and 2025 is a rise in public optimism following Ukraine’s successful military counter-offensives in 2022. By the end of that year, the Ukrainian army had regained control of approximately one-third of the territory initially occupied by Russian forces. This survey question was broadly worded and did not target specific mental functions, which may have led respondents to interpret it as an invitation to assess their overall mood in relation to the war. The high percentage of students reporting improvements in their psychological and emotional state in 2023 may therefore reflect a renewed sense of hope and growing confidence in Ukraine’s eventual victory.

A similar, though less pronounced, trend of temporary improvement was observed in relation to students’ physical health. In the initial survey conducted in 2022, 45% of respondents reported no change in their physical health since the beginning of the war, while another 45% indicated deterioration and 10% noted improvement. A comparable set of figures were recorded in 2025: 47% indicated no change, 43% deterioration, and 10% improvement. However, the 2023 survey revealed a somewhat more favourable self-assessment: 55% of students reported no change in their physical health, 32% indicated deterioration, and 13% noted improvement (Figure 3).

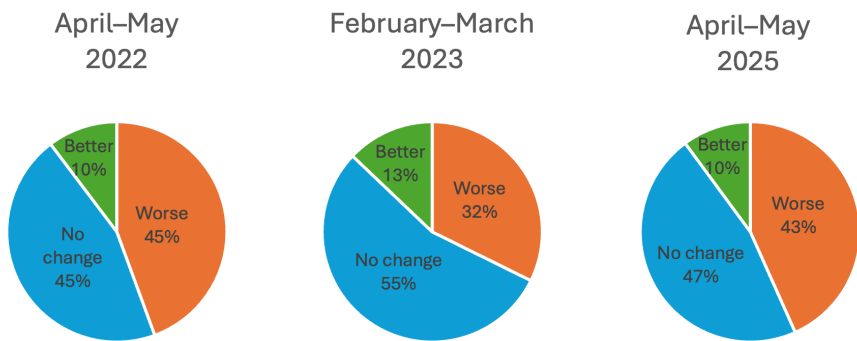


Figure 3. Percentage distribution of responses to the question “How has your physical health changed since the start of the war?” (better/worse/no change).

Research shows that armed conflicts adversely affect population health through disruptions in healthcare provision, increased injuries, and elevated morbidity rates (Lafta & Al-Nuaimi, 2019). The survey results suggest that a

significant proportion of students experienced negative impacts on their physical health due to the war. These effects appear to remain relatively stable over time, with only a slight improvement trend observed in 2023.

The temporary improvement in students' physical health in 2023 may be partly attributed to the psychological uplift following Ukraine's successful counter-offensives in late 2022. A heightened sense of national morale and optimism likely boosted emotional well-being, which in turn may have positively impacted physical health. Reduced stress and increased hope can enhance immune function and support healthier behaviours (Seiler et al., 2020). Additionally, 2023 may have marked a period of relative stabilisation, with fewer immediate threats and a return to routine, allowing the better management of existing health conditions before the cumulative strain of prolonged conflict intensified again by 2025.

Although detailed data on the specific health issues faced by students is lacking, it is plausible that the nature of war-related health problems evolves over time. A literature review by Garry and Checchi (2020) highlights that health effects of armed conflict vary according to the duration of exposure. In the initial 1–3 months, populations face heightened risks of respiratory infections due to overcrowding and worsened outcomes for chronic conditions like type 1 diabetes due to treatment disruptions. Over prolonged periods, the cumulative effects of insecurity, displacement, and limited access to care contribute to the development or exacerbation of chronic diseases such as cardiovascular conditions, hypertension, and diabetes.

The initial survey conducted in 2022 revealed that 74% of respondents experienced a deterioration in sleep quality due to the war. Subsequent surveys in 2023 and 2025 indicated some improvement: the proportion of students reporting war-related sleep disturbances declined to 53% and 59%, respectively (Figure 4). Despite this modest decrease, the percentage of respondents whose sleep was affected remained notably high across all three years.

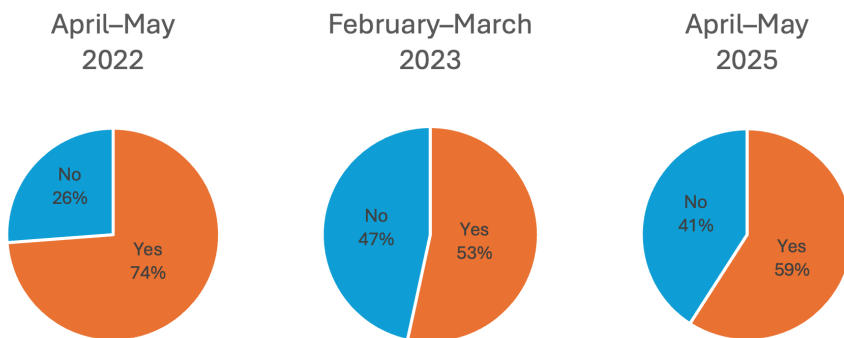


Figure 4. Percentage distribution of responses to the question “Do you experience any effects of the war on your sleep (e.g., difficulty falling asleep, repeated awakenings, nightmares, short anxiety-filled sleep)?” (yes/no).

The issue of sleep disturbances during armed conflicts has received limited scholarly attention, particularly concerning civilian populations. Yet poor sleep quality can be an additional stressor, increasing the risk of neurological disorders (Shkodina et al., 2022). Studies of war veterans have shown that the severity of sleep difficulties is closely linked to PTSD, especially symptoms such as persistent worry and fear of losing vigilance or alertness (Pietrzak et al., 2010). The modest improvement in sleep reported in 2023 and 2025, compared with 2022, may reflect the development of effective coping strategies among some students. As Kundii et al. (2024) suggest, students who learn to manage war-related stress are better equipped to regulate the psychological impact of distress. Such adaptation may have helped to mitigate the negative effects of prolonged conflict on sleep quality.

Support to students at PsyLab

Since the onset of Russia’s full-scale invasion, educators and psychologists at Zhytomyr Polytechnic State University have prioritised student mental health. They observed that students in a stable psychological state are better equipped to handle stress, which highlights the importance of developing coping strategies for both personal and professional growth. This observation aligns with research, emphasising the high need for psychological and psy-

chosocial support among university students, particularly those with low stress tolerance (Kundii et al., 2024).

While studies from other countries report a lack of interest in seeking professional help as a risk factor for worsening mental health among young adults during wartime (Razjouyan et al., 2022; Salih et al., 2025), this trend does not appear to apply to Ukraine. Polyvianaia et al. (2025) found that Ukrainian university students actively seek support. However, those who did so both before and during the war showed increased depressive symptoms, possibly due to unmet needs among individuals with pre-existing conditions. The authors underscore the importance of accessible, tailored mental health services for students.

Since 2022, the PsyLab has been providing both individual consultations and group training sessions aimed at helping students develop personal coping strategies and replenish psychological resources. A range of therapeutic methods is used to support students experiencing long-term distress and to deliver targeted interventions when needed. Table 1 below compares the therapeutic methods and formats used at the PsyLab, based on the staff's evaluations. While all methods are considered beneficial during wartime, each has its own strengths and limitations.

The PsyLab also applies an eclectic approach that combines multiple therapeutic methods. One example is the psychological support group sessions called "Intimate Environment". During these meetings, psychologists and specialists from the PsyLab create a space of trust, safety, and warmth. Participants are encouraged to explore difficult topics and engage in storytelling using metaphorical association cards and the board game *Rory's Story Cubes: Classic*. These tools facilitate the integration of cognitive behavioural therapy, logotherapy, narrative psychology, and exposure therapy techniques.

Table 1. Therapeutic methods and formats for supporting students during wartime

Therapeutic method / format	Description	Strengths	Limitations
<i>Cognitive-behavioural therapy (CBT)</i>	Changes harmful thoughts and behaviours	Reduces anxiety, depression, PTSD	Requires trained therapist
<i>Trauma-focused therapy (TF-CBT)</i>	Supports processing of traumatic experiences	Effective for PTSD and chronic stress	Not suitable for acute trauma
<i>Group therapy</i>	Peer interaction and mutual support	Encourages socialisation; cost-effective	Some may be reluctant to share personal issues
<i>Art therapy</i>	Uses creative expression (e.g., drawing, music)	Safe way to express traumatic experiences	Less effective without psychological support
<i>Body-oriented therapy</i>	Uses movement, breathing, and relaxation techniques	Enhances body awareness; reduces tension	May require space or equipment
<i>Psychoeducation</i>	Provides information on stress and coping strategies	Increases awareness and self-regulation	Limited impact without practical application
<i>Online counselling</i>	Remote sessions via video	Accessible during displacement	Technical issues; lower emotional engagement
<i>Mindfulness practices</i>	Focuses on present-moment awareness to reduce anxiety	Easy to learn; usable independently	Needs regular practice for lasting benefit
<i>Logo- and narrative therapy</i>	Uses storytelling to explore personal experiences	Boosts self-awareness and identity	Requires readiness to confront trauma

Concluding remarks

Since the onset of the full-scale invasion, Ukrainian universities have made concerted efforts to support students' mental health, including the establishment of centres specialising in psychological resilience. However, research indicates a potential gap between the availability of formal support services and their actual utilisation, particularly when students are unaware of these resources or unsure how to access them (Błaszczuk et al., 2025). In addition

to maintaining formal support services, universities must implement practical measures that facilitate easy and informed access to support.

Furthermore, caution is advised when selecting support and treatment approaches during wartime (Miller & Rasmussen, 2017). In the context of ongoing adversity, distinguishing between normal stress responses and clinical disorders can be challenging. Therefore, it is essential not to overestimate the need for professional intervention, nor underestimate individuals' inherent capacity for resilience and recovery.

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Part 2

Rebuilding systems: social structures and institutional adaptation



Fire in a residential area of Kyiv caused by a Russian missile strike, 31 July 2025. Photo by Anna Kondratiuk.

Wartime social insurance in Ukraine: adapting to old and emerging risks

Sara Hultqvist
Serhii Nickolaenko
Iryna Voinalovych

Introduction

War invariably leads to the restructuring of societal frameworks, particularly within systems of social protection. Social insurance serves not only as a financial instrument but also as a dynamic social institution that embodies the evolving needs and values of society (Esping-Andersen, 1990). In fact, a so-called bellicist paradigm has emphasised a war-centric approach to state formation, statecraft, and social change. Sociologist Charles Tilly (1982) famously summarised this relationship: “War made the state and the state made war.” As an extension, the question “How is war related to the welfare state?” has been posed. Studies have explored the connection between warfare and welfare (Obinger, 2018), mainly in the Western world but also globally (Nullmeier et al., 2022). The rise of welfare states as we know them was, to a large extent, a national project with implementation of welfare legislation in a given territory. However, this is only one side of the story. Nineteenth-century policymakers did not act in isolation but were influenced by inter- and transnational events. In the beginning of the last century, military rivalries and power ambitions of nation states made politicians worry about low birth rates and the physical fitness of soldiers became a concern (Nullmeier et al., 2022). The Bolshevik Revolution in Russia and the Great Depression as a worldwide economic downturn sent shock waves around the globe and affected social policy in various ways. International Labour Organization (ILO) and the World Health Organization (WHO) were established and, particularly after the Second World War, gave rise to intergovernmental social policy cooperation and provided the basis for global shifts in social policy but also demonstrated the limits of international support or steering of an expansion of social policy (Seekings, 2019).

This chapter gives a snapshot of the social insurance system in Ukraine during wartime in the 2020s. The bellicist paradigm mentioned above mainly concerns historical studies on the welfare-warfare nexus. World War Two in particular, has been seen as a precondition for the development of the welfare state (Obinger, 2018). However, without denying the dehumanising and deteriorating consequences for people and for the environment war always brings, this chapter uses a war-centric approach that stresses contemporary changes in the Ukrainian social insurance system prompted by the war.

The ongoing armed aggression has prompted a series of legislative modifications to Ukraine's social insurance system, designed to address the vulnerabilities of newly at-risk populations. These populations include individuals deprived of personal liberty, internally displaced persons (IDPs), war veterans, individuals with disabilities, and the families of those missing under special circumstances (Law of Ukraine, 2022a, 2024c). Furthermore, the legislative reforms have tackled contentious categories, such as collaborators, by establishing exclusion criteria consistent with national security considerations.

The wartime social insurance framework exemplifies a flexible and responsive strategy that effectively balances legal integrity with humanitarian imperatives. It illustrates how contemporary conflicts are redefining criteria for eligibility, entitlement, and access to social protection. Furthermore, it reaffirms the state's vital role in securing collective welfare amid existential threats (Fitzpatrick, 2011). The situation in Ukraine highlights the necessity for continuous adaptation of welfare systems to address both historically entrenched and emerging social risks, including those associated with climate change, displacement, and military occupation of territories.

Social insurance as a social construct

Social insurance systems are frequently misconceived as solely technical or fiscal mechanisms. However, when examined through a sociological and policy analysis lens, these systems emerge as deeply ingrained social constructs, frameworks that embody the collective values, institutional priorities, and perceived vulnerabilities of a society at a specific historical moment (Esping-Andersen, 1990; Pierson, 2004). From this perspective, social insurance transcends its role as a redistributive instrument. It serves as a moral and po-

litical institution that reflects societal consensus on principles of solidarity, justice, and human dignity.

Warfare and welfare are ostensibly antithetical concepts. Through war, nations undertake a conscious effort to harm or kill other human beings or to damage and destroy their institutions and livelihoods in order to impose their will on the enemy. Welfare generally refers to the task of ensuring the well-being of citizens in modern society through a variety of programmes that seek to mitigate, at least to some degree, the negative implications of a market-based economy. Warfare and welfare then work in diametrically opposite directions: while the first seeks to destroy and undermine the living standards of individuals, the second seeks to enhance their living standards and to improve their lives. Yet, history has shown that welfare and warfare are not necessarily diametrically opposed concepts. Though the ways and means of executing warfare and welfare clearly differ, their goals can be seen as complementary (Gal, 2013).

War, while historically regarded as an “old risk” within social policy discourse, now engenders distinctly contemporary forms of social vulnerability. These modern manifestations include widespread displacement, loss of personal identification and other documents for civilians, exposure to combat-related psychological trauma, and emergence of new gender-specific vulnerabilities (Fitzpatrick, 2011). In Ukraine, the ongoing hostilities have necessitated an urgent reconfiguration of eligibility criteria, benefit structures, and legal definitions within the social insurance framework. Legislative amendments, for example, have incorporated provisions for displaced individuals, civilian hostages, and those adversely affected by temporary occupation (Law of Ukraine, 2024b).

Furthermore, vulnerabilities arising from conflict intersect with emerging global challenges such as climate change and transnational humanitarian crises, necessitating multidisciplinary policy responses (Fitzpatrick, 2011). The evolving framework in Ukraine under martial law serves as a notable example of welfare recalibration, transitioning from a static institutional approach to adaptive governance. This situation underscores the importance of redefining social insurance as a dynamic mechanism of social response rather than a rigid system.

This theoretical framework posits that the success of social insurance reform, particularly during periods of crisis, hinges not only on administrative

efficiency but also on the state's ethical obligation to uphold social justice, promote inclusion, and foster resilience.

Juridical and financial dimensions

The evolution of Ukraine's social insurance system amid wartime conditions has been marked by both legal reform and financial adjustments. These two elements reflect the government's commitment to maintaining institutional continuity while addressing the novel challenges posed by armed conflict. Legally, a range of new legislative measures has expanded the social protection framework to explicitly include vulnerable groups such as IDPs, civilians in captivity, and individuals residing in temporarily occupied territories. This development signifies a noteworthy transformation in legal philosophy, shifting from broadly defined, codified norms to context-specific rights firmly rooted in the principles of humanitarian protection (Cabinet of Ministers of Ukraine, 2023; Verkhovna Rada, 2024). The tendency to expand generosity during hard times is also noteworthy as austerity and restriction have characterised many Western welfare states over the last 30 years (Farnsworth, 2021).

A significant advancement in legal policy is the recognition that periods of enforced inactivity, such as displacement, captivity, or occupation, are valid for pension accrual and for maintaining continuity of insurance coverage. Furthermore, the state has revised the definitions of "insured persons" and "workplace injury" to incorporate civilian experiences related to warfare, thereby expanding the traditional scope of legal entitlements (Law of Ukraine, 2024a). These amendments reflect a transformative approach to interpreting risk and eligibility in response to social upheavals.

The recent reforms in the financial sector necessitate a significant reallocation of state budgetary resources. Current governmental reports indicate that increased expenditure is being directed not only towards military compensation but also towards addressing an expanded range of civilian claims. These claims encompass psychological rehabilitation, housing subsidies, and disability pensions for war-related injuries or trauma (Ministry of Finance of Ukraine, 2024). Such commitments raise critical questions about fiscal sustainability, especially in the context of sustained conflict and reduced economic output.

The effectiveness of these modifications is contingent not only upon their legal formalisation and financial allocation but also upon their operational feasibility. Key factors such as administrative accessibility, the level of legal literacy among affected populations, and the resilience of institutions in fragmented or occupied territories are critical to the successful implementation of these modifications (World Bank, 2023). Thus, while the legal and financial dimensions provide essential foundations, the true measure of success lies in the operational capacity of social insurance to foster social stability.

Categorisation by target groups

The transformation of Ukraine's social insurance system during wartime can be systematically analysed by categorising the affected population groups, each of which is associated with distinct legal and financial provisions.

Older persons and pensioners. The ongoing conflict has necessitated a recalibration of pension eligibility criteria. Amendments to Article 11 and Article 25 of the Law on Compulsory State Pension Insurance now recognise periods of captivity and wartime deprivation of liberty as equivalent to contributory periods. Consequently, the state will assume responsibility for insurance payments (Law of Ukraine, 2022a). Furthermore, pension payments for senior citizens temporarily residing abroad remain protected, contingent upon recipients completing annual identification procedures (Law of Ukraine, 2024b). These modifications reflect a strategic shift towards more inclusive pension systems in response to forced migration.

Persons with disabilities. Wartime conditions have significantly disrupted the routine re-examinations that are necessary for maintaining disability status. In response, legislation in Ukraine has suspended mandatory re-evaluations during martial law, thereby ensuring the continuity of pension and support payments (Law of Ukraine, 2024c). This development reflects a transition from procedural to need-based criteria, aligning with contemporary inclusive welfare processes.

Internally displaced persons (IDPs). IDPs, who represent one of the most socially vulnerable populations, encounter distinct legal and logistical challenges. Recent reforms to transitional provisions in pension and unemployment legislation have introduced flexible mechanisms for accessing benefits remotely. These mechanisms include centralised registries, electronic sub-

mission processes, and streamlined identification requirements (International Organization for Migration, 2022; Law of Ukraine, 2024d). Such initiatives exemplify a progressive social contract that emphasises accessibility and responsiveness to the needs of IDPs.

War veterans and families of the fallen. According to the Law on the Status of War Veterans, combatants are entitled to a range of benefits, including early retirement rights, healthcare services, rehabilitation programmes, and survivor pensions for the families of deceased veterans. Furthermore, the legal framework now extends survivor pension schemes to individuals reported missing under special wartime conditions, thereby enhancing the recognition of the psychosocial and demographic impacts of warfare (Law of Ukraine, 2022b, 2022c).

Unemployed persons. In recognition of the challenges posed by wartime dislocation to formal documentation, Ukraine has amended its unemployment insurance regulations to facilitate payments in regions affected by occupation and hostilities. These payments are based on pre-war tax and employment records, as established in the Law of Ukraine (2022c). This proactive policy aims to ensure fundamental economic security amid systemic disruptions.

Persons deprived of personal liberty. Since the commencement of the full-scale invasion, tens of thousands of civilians have been subjected to arbitrary detention. Recent legislative amendments have reclassified individuals deprived of liberty during wartime as insured persons under pension law. This revision stipulates that the state will cover the contributions for these individuals and will include the duration of captivity in their insurance tenure (Law of Ukraine, 2022a). This provision not only acknowledges the experiences of detainees but also emphasises the importance of social insurance in addressing injustices arising during wartime (Interfax, 2024).

Persons missing under special circumstances. An increasing number of disappearances, projected to reach 63,000 by 2025, have prompted the implementation of legal frameworks that grant families access to survivor pensions upon formal confirmation of missing status (TSN, 2025). This development underscores the state's moral obligation to support families enduring uncertainty and loss.

Persons in occupied territories. One of the most contentious reforms is articulated in Article 24-1 of the national pension legislation, which stipulates

that service periods of individuals who collaborated with occupation authorities or aligned with the enemy forces shall not be included in their Ukrainian insurance record (Law of Ukraine, 2024c). This provision introduces a dual framework of protection and accountability, prompting deeper ethical inquiries regarding the limits of social solidarity in times of war (Drozdowski & Wenzel, 2022).

To sum up, since the commencement of the full-scale invasion in 2022, Ukraine has undertaken a series of legislative amendments to address the evolving needs of its populace. The legal reforms, such as the expanded definitions of military service, modifications to survivor benefits, and expedited procedures for IDPs, have facilitated broader support for individuals affected by combat, occupation, and displacement. Notably, new provisions in the Law on Compulsory State Pension Insurance, including Article 24-1, have introduced war-related exemptions, encompassing retroactive contributions for service members and civilians impacted by the war. These reforms represent a significant advancement: insurance is transformed into a mechanism of both solidarity and social acknowledgment in wartime.

At the financial level, Ukraine's system has implemented adaptive mechanisms to ensure liquidity and the continuity of payments, despite experiencing economic contraction and regional service disruptions. This strategy encompasses the digitisation of services, coordination with international donors such as the International Organization for Migration (IOM), the United Nations High Commissioner for Refugees (UNHCR), and the World Bank, as well as the provision of targeted benefits for vulnerable populations, including war widows, amputees, and orphans. Local governments and non-governmental organisations (NGOs) have assumed critical roles in addressing these issues, effectively providing "micro-insurance" in areas that remain inaccessible to central administration. These developments illustrate an ecosystem approach to welfare that transcends traditional centralised models and where solidarity extends over national borders.

Discussion: a wartime ethics of deservingness

Ukraine's social insurance system during wartime exhibits a significant level of contextual responsiveness. It encompasses both traditional risk groups, such as pensioners and individuals with disabilities, as well as newly vulnerable categories, including IDPs, detainees, and missing individuals. Through legal clarity and adaptive administrative mechanisms, the system embodies a broader reconfiguration of national welfare amid an existential crisis. The classification of beneficiaries not only facilitates legal protection but also enhances the understanding of citizenship and national belonging during periods of adversity.

The criteria for inclusion within Ukraine's social insurance framework during wartime illuminate the complex issues of national identity and loyalty. In the early 21st century, globalisation was often viewed as diminishing the nation-state's dominance while promoting universal access to rights through transnational frameworks. During the ongoing war, we have seen distinct expressions of solidarity from other nations and from intergovernmental organisations, such as the United Nations and the European Union, towards Ukraine. However, conflict, especially one centred on national survival, has re-established the pivotal role of the state in delineating the moral and legal parameters of solidarity.

The delineation between “defenders” and “collaborators” is one of the most contested aspects of wartime legislation. These words have strong value-laden connotations; a defender is someone who should be honoured, while a collaborator is someone who should be condemned. Article 24-1 of the Law on Compulsory State Pension Insurance specifies that individuals who served in enemy forces or held positions within occupying administrations are excluded from accruing social insurance benefits for the duration of that service. While this exclusion is contentious, it reflects a fundamental moral rationale: social solidarity is granted to those who support the collective, rather than to those who undermine it. Although this principle may be perceived as stringent, it aligns with the understanding that welfare systems are not ideologically neutral; instead, they serve as instruments of national cohesion, reward, and identity.

The ongoing conflict has illuminated the ethical underpinnings of welfare systems. Key questions regarding entitlement to support and the definition of

the national “we” have emerged. In Ukraine, legislative actions have been compelled to address these inquiries in real time, often amid profound uncertainties and institutional pressures. While the scope of inclusion has expanded for numerous previously marginalised groups, such as IDPs, families of veterans, and individuals in captivity, there has also been a notable exclusion of individuals identified as collaborators. This trend indicates a re-examination of social rights that is informed by existential considerations. It encapsulates a wartime ethics of deservingness, which, although subject to debate, is intricately woven into the fabric of statehood and national solidarity.

Conclusion: social insurance as a reflection of a nation’s definition of citizenship

The wartime experience of Ukraine serves as a compelling case study illustrating how social insurance systems must – and can – adapt in response to acute and prolonged national crises. Furthermore, lessons can be learned from the Ukrainian example, where the social protection framework has adapted to new risks, being flexible enough to protect citizens in new vulnerable situations. Rather than remaining a static safety net, the country’s social protection framework has shown that, when faced with an existential threat, insurance transforms into a dynamic amalgamation of legal reforms, financial adjustments, and human-centred decision-making. In this context, social insurance transcends its role as an economic tool; it becomes a reflection of a nation’s definitions of citizenship, loyalty, and belonging. However, military expenditure during war places considerable demands on societal and environmental resources. It is not only the impact of war upon its direct victims but also the longer-term economic and environmental costs to societies of war that have negative implications for welfare. In reference to the bellicist paradigm, financing a war means putting public spending “on guns rather than on butter”. The traditional meaning of this expression comes with environmental costs, increasingly well known. These costs cannot be stopped at national frontiers but have a global impact.

The human dimension of social insurance underscores the complex ethical landscape concerning inclusion and exclusion. As Ukraine has redefined eligibility through legal terminology and administrative criteria, new distinctions have surfaced among “defenders”, “veterans”, “internally displaced per-

sons”, and those designated as “collaborators”. Although these classifications are legally required, they raise fundamental questions about national unity during wartime. Who qualifies for protection, and who is marginalised? What are the implications when identification documents are lost, homes are destroyed, or archives are rendered inaccessible? The wartime social insurance system has been compelled to confront these challenges on an unprecedented scale.

The future development of Ukraine’s social insurance system must address the complexities arising from additional compound crises. The environmental devastation resulting from shelling and dam sabotage, persistent demographic decline, and widespread psychological trauma highlights emerging challenges where conventional insurance models may fall short. For example, war-related post-traumatic stress disorder may necessitate life-long mental health support, while ecological displacement could create new categories of climate refugees within national boundaries.

Consequently, a principal challenge lies in achieving a nuanced balance: legality must be harmonised with empathy; structured systems must retain flexibility; and national coherence must steer clear of rigid nationalism. The architecture of social insurance in Ukraine should not only demonstrate resilience but also embody transformative qualities. By doing so, it can serve as a model for other nations facing the adversity of conflict, crisis, and recovery.

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eHealth – a tool for access to care in conflicts⁹

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Introduction

Digitalisation within healthcare has gone hand in hand with the development of tools for digital handling of information over the last 30 years (Heinsch et al., 2021). With evolving opportunities of using information technology, ranging from mere administrative journal keeping to personal meetings in video counselling, the healthcare sector has opened itself to productivity enhancement through, for example, telemedicine solutions, swift sending of prescriptions to pharmacies, one-point entry to many services, global support in x-ray interpretation, and much more (Bakker et al., 2020; Ohannessian et al., 2016; Putra & Hidayanto, 2022; Tossaint-Schoenmakers et al., 2021). The two most obvious gains can be seen in increased access to professional health advice and to a more transparent process through open journals (Kim et al., 2022; Whealin et al., 2015). At the same time, these gains produce adverse effects in conjunction with other welfare development trajectories such as marketisation and a move from a need- to a profit-based model of care (Gentili et al., 2022; Karamagi et al., 2022; Wilson et al., 2021).

This chapter outlines the efforts in Ukraine to maintain healthcare services and to introduce digital systems in the sector. Further, we discuss the role played by digitalisation and the effects it has had on the possibilities of providing people with care and support in periods of crisis. One way of doing the latter has been to conduct focus group interviews with veterans and students in and around Zhytomyr. Finally, we discuss what challenges might lie ahead in the future development of these services – that is, lessons learnt.

⁹ Our sincere thanks to Kateryna Chmut, bachelor student in journalism, for transcribing two focus group interviews used in this chapter.

Healthcare challenges in Ukraine – embracing old and new

Ukraine's healthcare system is in transformation, driven by the need to overcome post-Soviet challenges, aligning with global healthcare standards and adapting to digitalisation. The impact of the Russian full-scale invasion has emerged as an unforeseen and extremely urgent challenge for the system.

Nevertheless, the basis for access to healthcare remains solid. Free primary healthcare serves to ensure that everyone has access to medical services at public healthcare facilities (WikiLegalAid, 2025) by signing an electronic declaration with a family doctor, whom patients are free to choose or change. Specialised care is primarily available via e-referral from a family doctor (MHU, 2025).

Still, the modern healthcare system is in its infancy. The major transformation of the system started in 2016. The system's main problem was high household expenditures on healthcare services (Acting for Health, 2023). The idea of the reform of 2016 was to establish a new financing system. Steps were taken to introduce a state-guaranteed package of medical services, a budget pooling for financing state guarantees, and the establishment of the National Health Service of Ukraine (NHSU). In 2018, a primary healthcare financing model was introduced based on the principle of "money follows the patient". Medical institutions and private practitioners sign contracts with the NHSU, receiving payments per registered patient. By 2020, the Medical Guarantee Programme covered all medical care types, ensuring free access to services. In 2025, the programme included 44 healthcare packages, covering both primary and specialised levels of healthcare (NHSU, 2025). The reform involved the autonomation of healthcare providers, with most of them being non-commercial medical enterprises, and the implementation of the electronic healthcare system (eHealth). Structural reforms were also continued to ensure regional access to quality medical and rehabilitation care, including the introduction of hospital districts with a division into hospital clusters (Cabinet of Ministers of Ukraine, 2025).

According to Razumkov Centre (2023), the private sector covers a wide range of specialties, though high patient fees limit accessibility. Nonetheless, private healthcare continues to grow, offering an alternative to the public healthcare system. It is possible to register with a private family doctor, but

this option is still very limited (6%). In 2023, 82 private hospitals and 11 independent doctors signed contracts with the NHSU for specialised medical care, as the tariffs offered were financially unsustainable for private institutions. The public perception of private healthcare is generally positive. In a 2023 survey, 61.5% of respondents supported co-funding healthcare services by government and patients, highlighting demand for high-quality medical care (Razumkov Centre, 2023).

Recent regulatory efforts have focused on the pharmaceutical market. Ukraine has implemented a drug reimbursement programme, Affordable Medicines, launched in 2017 and expanded in 2025, which has slightly alleviated the financial burden on the population. The reimbursement mechanisms are based on the eHealth system.

Based on available data, demand for medical care is increasing and access to it is gradually improving. This indicates progress in the healthcare system, although financial issues remain significant. Additional studies, such as *Health Index. Ukraine* (HIU, 2024), confirm this problem. In 2020, 19% of Ukrainians reported that they could not seek medical care due to a lack of funds, a significant improvement compared to 40% in 2016. The data also highlights regional and service-based disparities in public perception of healthcare reform.

Introducing the eHealth system – EHS

The institutionalised eHealth system (EHS) introduces layers of principals, funding, and provision. In 2016, a reform decision was made to officially integrate eHealth in the existing health system starting from 2017. Efforts to develop the eHealth system in Ukraine cover institutional, legislative, technical (technological), methodological, and other areas, and are carried out across all levels of the healthcare system. The institutional support for the implementation of the EHS is a complex multilayered system that includes government and business structures. It consists of four main bodies (Table 1).

Table 1. Institutional support structures for the EHS

<i>Ministry of Health of Ukraine (MHU)</i>	Principal body of executive power and policy making regarding healthcare.
<i>National Health Service of Ukraine (NHSU)</i>	Principal body and owner of the central health database. It analyses data to forecast medical service needs, develops the medical guarantee programme, and manages service payments.
<i>eZdorovya¹⁰</i>	State-owned enterprise administering the central database of the National Health Service (NHSU) and monitors the development of eHealth.
<i>Communication providers</i>	Business entities that provide services for customers and run electronic medical information systems (MIS). In Ukraine, the primary function of these systems is to make it possible to automate the work of medical facilities in communications with a central database.

In short, the government authorities establish the rules and standards of eHealth, guarantee the safety of the system, while market actors are responsible for providing services to users, patients, doctors, pharmacists, and managers of healthcare institutions.

Setting the stage for the eHealth system (EHS)

The EHS aims to enhance financial transparency, eliminate paper-based processes, support the transition to electronic records, foster a business environment for digital services, enable medical digital innovation, and promote the growth of the medical IT sector. Before the EHS was introduced, there were significant developments in public and private systems in Ukraine to digitalise various aspects of healthcare. For example, in 2008, one of the largest laboratory information systems in Ukraine was launched. In 2011–2012, the first medical information systems (MIS) appeared. Substantial efforts were also made to create healthcare registries.

¹⁰ Ukrainian for “eHealth”.

At the initial stages, the EHS tracked the primary healthcare level and its services. Later, it was expanded to include specialised healthcare services and the reimbursement programme. In 2020, the EHS functioned primarily as a service accounting tool, serving financial rather than clinical purposes. Patient data were mainly used to verify service delivery for reimbursement under the Medical Guarantees Programme. Later, new clinical features, such as electronic birth and sick-leave certificates, e-prescriptions, medical records, and treatment plans, were introduced, gradually enhancing the EHS' capacity to support clinical decision-making.

The EHS is based on centralised data storage. It means that data from peripheral MIS are transferred to a single central database. The system is based on the HL7 FHIR standard, which structures data around real-world objects called "resources" (e.g., doctor, institution, diagnosis, observation) rather than documents. This model enables flexible data management by allowing the selection and expansion of resource attributes as needed for automation and local needs.

At the level of medical facilities, there are one or more MIS implemented, depending on their needs and the feasibility of automating processes. Currently, healthcare providers have access to a list of more than 35 MIS that help automate their processes. There are three main categories of active users of the EHS, and in June 2024 it covered 35 million patients, 430,000 healthcare staff members and 19,000 municipal and private facilities (eHealth Knowledge Base, 2024).

To meet the needs of the overall healthcare reform, some separate systems and services are in place. They can be regarded as components of the eHealth ecosystem and interact with other components to transmit and validate data (Table 2).

Before 2022 and the full-scale war, users transmitted data from about three million electronic health records to the EHS daily. During the first months of the war, this figure decreased but has since then constantly been growing and currently amounts to about four million records daily. The EHS facilitates the development of public-private partnerships and national-regional-local shared involvement in healthcare, for instance, automated exchange of information between central and peripheral components. The EHS also facilitates evidence-based decision-making and governance for the benefit of overall health promotion and according to patients' needs.

Table 2. Medical information systems (MIS) integrating with the EHS

System	Function
<i>“Central 103”</i>	Information and analytical system aimed at meeting the needs of emergency medical care processes.
<i>eBlood</i>	System for managing and tracking blood donation processes.
<i>e-Stock</i>	Platform for monitoring and accounting for medical supplies and pharmaceuticals.
<i>MedData</i>	System for analysing procurement and distribution of medical supplies.
<i>CPD System</i>	Electronic tool for managing healthcare workers’ continuous professional development.
<i>Unified Transplant System (EDIST)</i>	System coordinating organ transplantation and donor matching.
<i>eSurveillance</i>	System for disease monitoring, including data collection and response.
<i>Monitoring System for Socially Significant Diseases</i>	System managing registration, treatment, and tracking of major public health conditions.
<i>Private projects on the verge</i>	Medical IT products for ambulatory and hospital care, ERP systems, medical image storage services, telemedicine services, etc. are actively developing.

The EHS faces wartime related technological, infrastructural, and management challenges that slow its development, including a lack of compatibility (interoperability) of information and communication systems, insufficient resource provision of the system, and concerns about security and protection of information and personal data by various threats.

Wartime and healthcare challenges

While international attention to the crisis has waned somewhat, attempts to undermine public health and the healthcare system in Ukraine have increased both due to enemy attacks on facilities and in respect of the difficulty of running facilities in war zones. The government has neither reduced its

healthcare ambitions nor cut funding. Still, needs have increased dramatically due, for example, to the rising number of veterans, internally displaced persons and other vulnerable groups (WHO, 2025). To assess the war-related damage and losses in the healthcare system, as well as the recovery needs, we rely on Rapid Damage and Needs Assessment (RDNA4, 2025). Our analysis covers the period from 24 February 2022 to 31 December 2024. (HeRAMS, 2025)

Since February 2022, the health sector in Ukraine has suffered extensive damage. 1,603 out of 9,925 pre-war public healthcare facilities (16.2%) have been partially or fully damaged. The most affected facility types include specialist hospitals (35.8%), general hospitals (18.8%), and outpatient clinics (15.7%). 912 pharmacies and 624 ambulances have been damaged or destroyed. The most heavily impacted regions are Donetsk (37.8% of total damage costs), Kharkiv (12.6%), Luhansk (12.5%), and Kherson (7.3%), also experiencing the most intense fighting (HeRAMS, 2025). Financial losses are estimated at \$19.6 billion, including costs of debris removal and demolition of destroyed facilities, financial losses from damaged facilities, additional health losses due to forgone care, and increased public health risks.

Health losses were measured using Disability-Adjusted Life Years (DALYs), focusing on war-related health conditions, increased rates of communicable diseases, neonatal and maternal mortality, and mental health disorders. In 2024, DALY-related losses increased by 23.2% compared to assessments of 2023 (RDNA4, 2025). Among the influencing factors were reduced access to sexual and reproductive health services, affecting maternal and perinatal health outcomes, and shortages of healthcare personnel, particularly in war-affected regions. Specific challenges can be categorised as follows (HeRAMS, 2025):

- *Internally displaced patients*

Due to the massive internal displacement of persons (~ 6.5 million), and external migration (~ 4 million), the demand for healthcare services initially dropped significantly. At the same time, many free medical platforms, chatbots, and other services emerged, where doctors provided free consultations together with a public contact centre for free medical consultations. The demand for medical services has recovered as people strive to resume normal lives.

Rural areas are particularly affected and struggle with limited healthcare accessibility for displaced populations. Mobile medical teams and telehealth services are being scaled up to bridge these gaps.

- *Staffing issues*

Healthcare workers have relocated either to other regions or abroad due to the war, affecting the overall functioning of the healthcare system. 16% of healthcare facilities report a lack of personnel. Urgent staffing challenges are shortage of doctors in front-line regions, aging workforce, lack of young professionals entering the field, and severe shortage of primary care doctors in rural areas. The outflow of skilled specialists means brain drain. Burnout and psychological strain among medical personnel remain serious issues, as doctors work in high-risk environments with limited resources.

To address this crisis, the government has launched the Medical Battalion Programme, where military doctors are deployed to hospitals near the front line on a rotational basis and the Shoulder-to-Shoulder Initiative, which dispatches doctors from rear regions to front-line hospitals. New primary care centres have opened in partnership with universities to involve medical students in patient care.

- *Disrupted logistics and pharmaceutical challenges*

From the onset of the war, the destruction of medical infrastructure and logistics disruptions have led to severe shortages of medicines and equipment. According to a WHO survey (WHO, 2022) 22% of patients were unable to purchase essential medications. In temporarily occupied and front-line areas, this figure rose to one in three patients.

Ukraine has managed to partially resolve this issue with support from international partners and domestic businesses. eHealth capabilities have helped track medical facility workloads due to internal relocation, enabling more efficient resource redistribution.

Long-term sustainability of supply chains remains a concern as humanitarian aid is not a permanent solution. Increased reliance on imports for critical medications and medical equipment has raised costs and slowed procurement processes. Access to medications for non-communicable diseases (NCDs) has been particularly challenging, especially for conditions such as diabetes, cardiovascular diseases, and cancer.

- *Lack of full-scale bomb shelters in medical facilities*

At the beginning of the war, doctors were forced to operate in makeshift conditions, replacing sterile operating rooms with basements and bomb shelters. While many hospitals in non-combat zones have since been equipped with underground shelters, these facilities are still not fully adequate for comprehensive medical care. In regions under frequent air raids, emergency and surgical care is severely compromised, increasing the risk of complications and mortality. Mobile medical units have become an alternative in high-risk areas, but they lack the capacity of permanent medical facilities. Radiation and chemical exposure preparedness remains a concern.

- *Adapting healthcare facilities to changing needs*

The war has reshaped Ukraine's medical services, demanding urgent changes. Patient routing remains difficult – specialised centres are underused, and spinal injury care is inconsistent. Rehabilitation sessions have risen from 2,500 to 12,000 daily, yet 30% of cluster hospitals still lack rehab departments. Training and new centres are being developed.

Mental health needs have surged due to trauma and stress, with 15 million Ukrainians expected to need support and up to 4 million requiring medication. There's a shortage of specialists, especially in rural and front-line areas, and stigma remains a barrier. In response, Ukraine launched the National Mental Health Programme, expanded WHO's MHGAP training for doctors, and is building new mental health centres. Special programmes for military personnel have also been developed.

Digital platforms like Mindly and Resilience Hub offer psychological support. Meanwhile, cyberattacks on healthcare systems highlight the need for stronger cybersecurity. Despite the war, healthcare reforms continue, demonstrating the system's resilience and ongoing transformation.

eHealth mitigating war

During martial law, the EHS in Ukraine is exposed to several risks, including potential damage to data storage facilities, partial or complete data loss, and disruptions to the system's infrastructure. These risks may result in the temporary unavailability of registers for both data input and access. There is also a heightened threat of unauthorised access, which could lead to data breaches, alterations, or deletions. Additionally, users may be physically unable to access their workplaces to update registry information.

To mitigate these risks, the government has issued several recommendations. These include transferring public electronic registers and state information resources to cloud services or data centres located outside Ukraine. Regular backup copies should be created to ensure data integrity, confidentiality, and availability, enabling rapid recovery in case of damage or loss. In territories affected by active combat or temporary occupation, systems may be partially or fully suspended as a precaution. If there is a threat of unauthorised access – such as due to occupation – administrators must immediately block access and notify the relevant authorities within two days. These measures are applied at both the central EHS database level and the individual MIS level.

Telemedicine as an example

Telemedicine, a key component of Ukraine's eHealth system, has seen the most significant transformation. The 2022 full-scale invasion triggered an urgent shift to telemedicine to maintain access to care. According to findings presented in the LHSS USAID report, *Telemedicine in Ukraine – situational analysis*, as of March 2023, healthcare professionals in Ukraine provided consultations using the following means (Tele-video consultations, 2024):

- Audio communication – between 59% and 79%, depending on the ownership type of the medical facility.
- Text messaging – between 68% and 100%.
- Video communication – mentioned by 25% of public healthcare workers, 47% of those in private facilities, 54% in municipal healthcare institutions, and 78% of private practitioners.

The figures reflect the actual situation in Ukraine and demonstrate both acceptance and readiness to use various forms of digital communication, not least video. At the same time, in line with global trends and technological advancements, an increase in the use of video for teleconferencing is expected, as it provides the highest quality of telemedical care. According to a 2019 survey of primary care physicians across five regions, the most acceptable forms of teleconsultation were:

- Receiving an electronic report after referring a patient to a specialist (54%).
- Real-time teleconsultation in the presence of the patient (38%).
- Receiving expert advice upon request in a delayed mode (28%).

Poberezhets et al. (2022) demonstrate how telemedicine became not only a stopgap solution but a vital component in ensuring healthcare delivery during wartime, illustrating an acceleration in telemedicine usage. Their nationwide questionnaire-based study showed that 99.2% of Ukrainian doctors continued using telemedicine during the war, with over half (56.8%) reporting an increase in usage. Most consultations were conducted via instant messaging apps (Viber, WhatsApp, Telegram), followed by phone calls, while official telemedicine platforms remained underutilised (only 8%). Koehlmoos et al. (2024) have studied usage patterns and demographic differences. In this study, doctors with more than ten years of experience showed greater utilisation of email, SMS, and remote patient monitoring tools (e.g., pulse oximeters, glucose monitors). Smartphones were the dominant device (used by 93.6% of respondents), and many teleconsultations replaced as much as 30% of in-house clinical patient flows.

Systemic implementation

The TeleHelp Ukraine Initiative (THU) provided a decentralised international response, demonstrating how non-profit telemedicine networks can effectively manage clinical workloads across regions (Myers, 2023; telehelpukraine.com). This initiative emphasised decentralised governance, which allowed for flexible distribution of workloads, and fostered culturally diverse collaboration that enriched clinical communication. It also integrated

distributed networks to enhance knowledge sharing and capacity building. Narayan et al. (2024) describe TeleHelp Ukraine as a volunteer-driven international telemedicine initiative, addressing healthcare gaps for displaced populations. With over 200 providers in psychiatry, cardiology, and neurology, THU conducted more than 1,200 virtual consultations in its first year, mostly for mental health. Services were delivered via a secure platform with interpreters and case managers, achieving high patient satisfaction. Outreach used Telegram, Facebook, and national media. Despite challenges like power outages and legal complexities, operational strategies such as reminders and follow-ups improved engagement. THU showed that decentralised digital care can effectively support vulnerable communities in conflict zones.

These structural elements contributed to an agile and scalable model of telemedicine, particularly well-suited to the needs of a population under siege. During the war, telemedicine became essential not only for ensuring equal access to care but also for addressing policy challenges and reforming existing healthcare infrastructure. It played a critical role in continuing the management of chronic diseases, offering mental health support, and bridging both geographical and security-related constraints.

Despite these advancements, significant barriers remain. These include uneven internet coverage, limited adoption of standardised platforms, legal ambiguities, a lack of regulation, and digital literacy gaps among both healthcare providers and patients.

User experiences of eHealth in times of war

Given the previous overview of Ukraine's eHealth system, policy efforts have primarily focused on deploying provider-side infrastructure, and existing digital services have been primarily oriented toward the needs of medical professionals and administrators. However, during the full-scale invasion, when the healthcare system experienced severe strain, the relevance of using digital tools increased among individuals seeking medical assistance, although the patient-facing side remains fragmented and only partially integrated into the national system. Most interaction with EHS occurs through family doctors, who handle data entry, referrals, prescriptions, and visit records.

Table 3. Currently implemented telemedicine projects in Ukraine for remote medical services and consultations.

Project	Contents
<i>Teladoc Teleconsultation</i>	A multifunctional platform provided to Ukraine as aid. It includes assistance for patients with explosive injuries, burn care consultations, and the creation of virtual doctor-patient presence systems.
<i>Rehabilitation Gaming System</i>	A platform for neurorehabilitation of patients with brain injuries and musculoskeletal disorders, using computers, gadgets, and augmented reality tools.
<i>Epiqar</i>	A virtual operating room platform for real-time interactive surgical teleconsultations. It enables secure video broadcasting and commentary during operations and serves as an educational tool for medical students and interns.
<i>HomeDoctor</i>	A medical robot installed in patients' homes, hospitals, or shelters. It monitors vital signs in real-time, allowing doctors to assess the patient's condition remotely and make timely diagnosis.
<i>System Carebits</i>	A software-hardware system for remote monitoring of pregnant women using portable "Sigmafon" cardiotocographs integrated with a telemedicine platform. Ukraine received 300 devices and unlimited user licenses as aid.
<i>BrainScan</i>	A startup developing AI-based solutions for CT scan analysis and automatic detection of brain lesions. It reduces diagnosis time, supports less experienced medical personnel, and improves the quality of diagnostics.

Source: Tele-video consultations (2024)

Patients have limited access via affiliated services, with no national platform allowing them to view their medical records fully, communicate directly with doctors, or to manage personal accounts. The main access point, Helsi.me, supports appointment booking and viewing prescriptions, but lacks full medical history access. Private platforms like Doc.ua and Likar Online offer consultations but are not integrated with the national database or covered by the NHSU. As a result, while the digital foundation exists, patient access and integration remain underdeveloped.

As part of the work with this chapter, focus groups were conducted to collect data about the use of digital health services in Ukraine before and during the full-scale war. The focus groups covered three target groups: university students (3 participants), internally displaced persons, including youth and adults (3 participants), and a veteran of the ongoing war. Students represented a high level of digital literacy, familiarity with mobile access, trust in online services, and rapid adaptation to digital tools. The IDPs described experiences of forced displacement, the loss of access to regular physicians, and the need for re-registration in new healthcare facilities – factors that created specific challenges for digital engagement. The veteran reported a unique set of needs requiring structured and sustained medical support, indicating important gaps in access to care.

Students

Participants sought healthcare primarily on an ad hoc basis, often in response to acute respiratory illnesses or for mandatory pre-university medical checks. Psychological support was also a common reason for seeking care, particularly due to war-related distress. When looking for care, individuals typically relied on recommendations from parents or acquaintances, or turned to social media for information. The most convenient methods for accessing services were direct phone calls or using online platforms that allowed remote booking. A range of services was utilised, including both online options – such as teleconsultations, chats with psychologists, and electronic medicine guides – and offline options like clinic visits, dental care, and referrals. Online services were especially popular for mental health and primary care, although in-person visits were preferred for more direct interaction. All participants had some experience with eHealth, at least through signing declarations. Com-

monly mentioned services included Mindly, e-referrals, and access to lab results. Some individuals avoided digital services due to a lack of need or habit, and concerns were raised about the effectiveness of online care, the attentiveness of doctors, and data security. While some participants did not use apps at all, others navigated simple platforms intuitively – for example, selecting a psychologist, booking appointments, or reading medication instructions. SMS referrals and phone communication were considered convenient, and there was a clear desire for expanded communication options, such as chat access to clinics or doctors.

Internally displaced persons

Young internally displaced persons (IDPs) primarily sought healthcare for psychological support, often related to stress and challenges with adaptation. In contrast, adults exhibited more structured healthcare-seeking behaviour, typically accessing medical services twice a year or as needed, mainly for preventive check-ups and physical health concerns. Both youth and adults relied heavily on informal sources of information, such as recommendations from acquaintances and relatives, while digital channels like social media or chatbots were rarely used. Younger IDPs showed limited but generally positive experiences with online platforms, particularly for mental health support, and were able to navigate these systems independently. Adults, however, tended to avoid digital tools altogether, showing low levels of digital awareness and refraining from using mobile apps or telemedicine services.

Veterans

The participant sought healthcare for regular check-ups, diagnostics, and referrals, and reported a disability resulting from the war. Information about healthcare providers and facilities was obtained online, and a private clinic was selected due to its comprehensive range of services. Most care was delivered offline, with digital tools used only to access test results via the Helsi app. The participant was familiar with the basic functionality of Helsi but unaware of other telehealth platforms. A lack of integration between healthcare facilities and the absence of automated notifications for follow-up

visits was noted. Communication with doctors occurred through messaging apps, while appointments were scheduled by phone. No specialised digital services for veterans were known to the participant, who recommended developing digital tools to inform veterans about rehabilitation options, specialised care, and prioritisation mechanisms for accessing services.

In summary

Overall, the findings indicate that the degree of engagement with digital tools largely depends on age, digital literacy, and medical needs. Younger respondents demonstrated a high level of awareness and willingness to use digital tools, especially in the context of psychological support. However, some preferred in-person consultations, citing the convenience of face-to-face contact or a lack of detailed information about online services. Among young IDPs, limited but positive use of digital tools was observed. In contrast, adult IDPs mostly did not use electronic services due to technical, psychological, or age-related barriers. The veteran reported partial experience with digital services, such as viewing test results via the Helsi app, but rarely used teleconsultations. He was generally unaware of specialised digital services tailored to veterans' needs. When dealing with more complex health issues, the veteran turned to private clinics for accessing more integrated care, a wider range of specialists, and better use of medical information systems.

Across all groups, the most common method of choosing a doctor or facility was through informal channels – recommendations from family or acquaintances. Nevertheless, respondents were generally well-informed about existing digital platforms and could name specific tools and their key functions. All respondents acknowledged the convenience of digital services for booking appointments. However, attitudes toward other forms of telemedicine, such as online consultations or remote treatment, were more cautious. This suggests that digital health engagement habits remain underdeveloped.

Shared barriers across all groups included complicated interfaces, distrust in the quality of online care, limited access to digital devices, and a lack of initiative from health professionals to guide patients in using digital tools. Participants emphasised the need to develop a unified digital medical record with a full patient history, to simplify user interfaces and provide clear guidance; expand communication channels (messaging, chatbots); and introduce

tailored digital solutions for vulnerable populations, especially veterans and IDPs.

Conclusion

In the 21st century, healthcare systems face growing challenges such as demographic changes, pandemics, and technological shifts. The COVID-19 pandemic accelerated global digitalisation, pushing countries to adopt eHealth solutions. Although eHealth was recognised internationally before the pandemic, its implementation was slow due to scepticism.

In Ukraine, eHealth development was driven by both global trends and internal pressures, including financial strain on households. Reforms began with healthcare financing and evolved into digital service integration. Ukraine's eHealth system now includes a centralised database, over 35 medical information systems, and tools like telemedicine, aiding in crisis response and decision-making. However, the following challenges remain: data interoperability, cybersecurity, infrastructure gaps, and limited access for vulnerable groups. Usage varies by age and digital literacy, with younger users more engaged than older adults or veterans.

The healthcare system is shifting from a Soviet-era resource-heavy model to a flexible, evidence-based, and patient-centred approach. eHealth supports this by enhancing transparency, efficiency, and personalised care. The war with Russia has tested the system, but eHealth has helped maintain services through telemedicine and digital tools. Still, equitable access is a major issue, requiring better infrastructure, training, and user-friendly interfaces.

Strategically, Ukraine's eHealth system could become a model for crisis-driven healthcare reform, combining centralised governance with private-sector innovation. Despite ongoing challenges, it shows resilience and a strong focus on patient needs.

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Transforming trauma into resilience: a model of adaptive social work grounded in altruism for post-war Ukraine

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Innovation arena

The conflict in Ukraine has caused significant humanitarian, social, and psychological destruction, displacing millions of people and straining the health and social services. The psychological impact is especially severe among veterans, internally displaced persons, and civilians facing violence and loss. Traditional models of social service delivery are insufficient to address these complex needs, underscoring the need for innovative approaches. In war-affected Ukraine, there are increased needs for both product and service innovations.

In the context of war, two increasingly influential models, user innovation and open collaborative innovation, have reshaped the innovation landscape. Quantitative studies demonstrate that some of the most novel and impactful products and processes across industries originate with individual users or user-firms, often developed for internal use before commercialisation (Baldwin & von Hippel, 2011). The Financial Times Lexicon (Financial Times, 2017) refers to user-driven innovation as “perhaps the most important change in the innovation process since the Industrial Revolution”. The strength of user innovation lies in the fit between the innovator’s needs and the user-based solutions. The barriers lie in diffusion and implementation, underscoring the need for innovative environments that can facilitate effective implementation. Another challenge lies in scaling these innovations beyond their initial contexts. In Ukraine, constraints posed by limited institutional pathways for commercialisation and intellectual property protection amid wartime have inhibited the potential for growth of specific innovations. Nevertheless, the open sharing of designs, such as 3D-printable components for medical and military applications, demonstrates that open-collaborative

innovation can continue to flourish under decentralised and high-trust conditions (Open Source Medical Supplies, 2022).

In summary, wartime Ukraine has emerged as a crucial platform for user-driven innovation, with significant implications for post-war reconstruction, defence technology advancements, and humanitarian efforts. As Baldwin and von Hippel (2011) observe, this transformation signifies a fundamental paradigm shift, placing end users not only at the core of the design process but also at the forefront of entrepreneurial initiatives.

Development of military application innovations

Ukraine presents a compelling illustration of user-driven innovation. Since the full-scale Russian invasion began in 2022, numerous technological and tactical solutions have emerged from the efforts of soldiers, volunteers, and members of civil society. A notable example is the Army of Drones Programme, orchestrated by Ukraine's Ministry of Digital Transformation. It has incorporated battlefield feedback into the iterative development of unmanned aerial vehicles for reconnaissance and combat purposes (Ministry of Digital Transformation of Ukraine, 2023). Another example is the extensive utilisation and modification of commercial technologies for military applications, exemplified by consumer-grade DJI drones.

Many of these systems were initially designed or modified by engineers or volunteers with combat experience, exemplifying the concept of user-led innovation described by Baldwin and von Hippel (2011), in which solutions emerge directly from practical experience and necessity. Such grassroots innovations exemplify what Schiavone (2020) refers to as the user-specialised understanding of unmet needs, coupled with the initiative to devise solutions not offered by existing commercial or institutional avenues.

Ukrainian volunteer networks, such as Aerorozvidka coordinating civilian and technical support for defence and humanitarian efforts, have emerged as a significant source of support for user-innovators during armed conflict. Initially conceived as a civilian initiative, Aerorozvidka has transformed into a military drone unit, leveraging battlefield experiences and demonstrating agile technical development. This situation exemplifies the potential for user entrepreneurship to emerge during wartime conditions.

Development of civilian resistance innovations

In addition to its military applications, user innovation has played a crucial role in enhancing civilian resilience. For instance, information technology specialists in Ukraine have developed and scaled secure communication tools, such as Diia, a state-supported application that provides digital identification and e-governance services. This platform has been adapted to function effectively amid shelling, power outages, and occupation (USAID, 2023). Although this innovation is state supported, it was co-developed with civic technology communities and informed by real-time user feedback.

Theoretical foundations

In response to wartime challenges, Zhytomyr Polytechnic State University has launched the 3R (Reintegration, Recreation, Rehabilitation) Programme, which focuses on holistic recovery through person-centred and community-driven initiatives. The conceptual framework of the 3R Programme is closely aligned with international trends in social innovation and community resilience. Current research highlights the crucial role of active engagement and self-directed involvement in diagnostic and treatment processes, which significantly enhance knowledge acquisition, comprehension, and empowerment (Alden, 2014; deBronkart, 2011; Kane, 2014; McDonald et al., 2013; Sandén, 2021; Schmidt, 2015).

Post-traumatic growth. The 3R Programme is anchored in the concept of post-traumatic growth, which asserts that individuals may undergo substantial positive psychological transformation following trauma. This transformation can occur through mechanisms such as enhanced personal strength, improved interpersonal relationships, and a renewed appreciation for life (Tedeschi & Calhoun, 2004). The 3R Programme strategically incorporates the principles of post-traumatic growth by facilitating opportunities for participants to derive meaning from their experiences, acquire new skills, and engage in prosocial activities that promote growth beyond the challenges posed by trauma.

Design thinking. To foster sustainable innovation, particularly in war-affected contexts, interdisciplinary, iterative, and human-centred approaches

are essential (Brown, 2009; Liedtka, 2018). The 3R Programme rests on design thinking and participatory design methodologies (Figure 1).

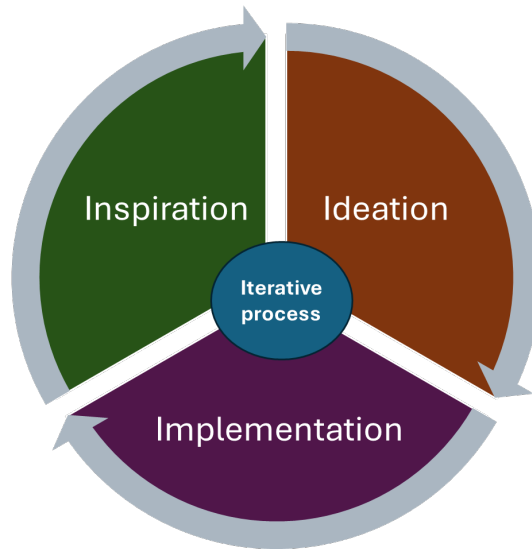


Figure 1. Inspiration develops from user needs; through prototypes the designer moves between abstract and concrete; and in the implementation phase the product is introduced to the market and its users. The phases are overlapping and iterative. The image is inspired by Brown (2009).

Design methodologies promote empowerment and long-term sustainability through their collaborative problem-solving and the establishment of shared ownership among stakeholders. Involving people is essential when rebuilding war-affected Ukraine. There are not enough professionals to meet the enormous needs. At the same time, a tendency to shorten the pass from idea to implementation has emerged. The concept of Universal Design, as articulated by Steinfeld and Tauke (2002), extends beyond the mere removal of physical barriers. It endeavours to eradicate systemic discrimination and facilitate comprehensive social participation. This vision underpins the 3R Programme's implementation of information and communication technologies, which aim to democratise access to educational and social engagement opportunities across various levels.

Participation and altruism. Scholarly discourse advocates redefining social work as a critical and participatory practice that addresses both individual

and collective well-being (Banks, 2020; Healy, 2014). One auspicious approach is based on the principles of altruism, which emphasises voluntary and pro-social behaviours that promote mutual aid, solidarity, and inclusion (Batson, 2011; Post, 2005). Although individual gain is not the primary purpose of altruistic behaviour, it has been demonstrated to yield benefits for both givers and recipients (Batson, 2011; Post, 2005). A model centred on altruistic engagement has the potential to empower individuals not solely as recipients of assistance but also as active participants in societal recovery (Sandén, 2021). Moreover, participatory social work and design methodologies emphasise the collaborative creation of solutions with community members, rather than imposing solutions on them. These approaches empower beneficiaries to act as active participants in their recovery and development processes, thereby enhancing both ownership and sustainability (Cornwall & Jewkes, 1995; Schuurman & Steyaert, 2014). The World Health Organization (2021) conceptualises rehabilitation through the lenses of participation, functional optimisation, and mitigation of disability experiences, which aligns with the holistic approach of the 3R Programme.

Implementation strategy and structural components of the 3R Programme

The number of military veterans is increasing and was estimated at over one million in 2025. There is a lack of trust in state authorities' social guarantees, which increases the need for new treatment approaches, for improving state programmes for veteran integration, and for strengthening traditional support measures through policies that increase veterans' active participation in the economy (Samoliuk et al., 2025).

The 3R Programme is founded upon three interdependent pillars: Reintegration, Recreation, and Rehabilitation. This framework is designed to address the complex needs of both veterans and civilians who are recovering from the impacts of conflict. Each component is essential to establishing a comprehensive and sustainable model of adaptive social work, founded on the principles of altruism, active participation, and resilience. Programmes such as the Boulder Crest "Peer-to-Peer" initiative, wherein participants receive training to become peer mentors supporting individuals with comparable experiences, illustrate how peer engagement can enhance both individual

recovery and community resilience (Boulder Crest Foundation, 2020). When combined with local volunteer networks and other structured interventions, these initiatives foster a multilayered approach that empowers participants, strengthens social connections, and promotes adaptive coping strategies across diverse contexts.

Reintegration focuses on restoring individuals' social roles through comprehensive career counselling, vocational training, peer mentorship, and opportunities for civic engagement. This framework underscores the importance of providing support to veterans and internally displaced persons in their pursuit of education, employment, and social networks. By doing so, it aims to foster empowerment and facilitate the reconstruction of identity (Palgi et al., 2019).

Recreation utilises the therapeutic benefits of structured physical and leisure activities, including adaptive sports, art therapy, mindfulness training, and nature-based interventions. Such methodologies effectively reduce anxiety, bolster self-confidence, and promote positive social interactions. This aligns with research indicating that engagement in recreational activities enhances psychological resilience and post-traumatic growth (Tedeschi & Calhoun, 2004).

Rehabilitation aims to address the physical and psychological consequences of trauma through a multidisciplinary approach. This approach encompasses services such as speech and occupational therapy, trauma-informed psychological counselling, and somatic therapies, all of which help foster comprehensive recovery and enhance overall well-being.

The cross-sectoral implementation strategy of the 3R Programme integrates academic resources, local governance, and civil society to establish a coordinated and adaptable support system. The programme is dynamic, and participants are encouraged to contribute to the evolution of its various components. By empowering participants to become active agents in their recovery, this model fosters social inclusion, community cohesion, and long-term healing. Documented success stories within the programme indicate significant improvements in mental health, social functioning, and post-traumatic growth indicators among both veterans and civilians (Kharitonova et al., 2024). This evidence-based and participatory approach positions the 3R Programme as a replicable model for other post-conflict environments.

Reintegration

Reintegration within the 3R Programme prioritises restoring individuals' societal roles through comprehensive career counselling, vocational training, peer mentorship, and civic engagement. This support is especially crucial for veterans and internally displaced persons, who often face disruptions in personal identity and social functioning due to war-related trauma (Palgi et al., 2019). By facilitating access to education, employment, and meaningful community connections, the programme fosters empowerment, resilience, and identity reconstruction. The model draws on the theory of post-traumatic growth, emphasising personal development following adversity (Tedeschi & Calhoun, 2004). Reintegration is not merely about social reintegration but about cultivating agency, belonging, and hope. The approach reflects evidence that structured social and vocational reintegration efforts reduce long-term psychosocial distress and promote successful adaptation (Dekel & Nuttman-Shwartz, 2009). The 3R Programme provides a replicable, evidence-based model that merges trauma-informed care with proactive social inclusion strategies. It plays a critical role in assisting individuals affected by war, particularly veterans and internally displaced persons, in reclaiming their social and economic roles within post-war Ukrainian society. This process encompasses not only the restoration of employment opportunities but also the consideration of psychological and relational factors that influence community reintegration.

A fundamental component of this initiative is the establishment of Career Conversion Programmes and Professional Conversion Programmes. These programmes offer specialised vocational training, certification opportunities, and tailored mentorship to support the reintegration of individuals into the civilian workforce. Research suggests that successful reintegration through employment may lead to reduced long-term dependency, improved mental health, and a strengthened sense of social identity (Czarniawska & Mazur, 2021; ILO, 2022). These initiatives align the skills of veterans and internally displaced persons with the demands of the regional labour market, thereby promoting their economic reintegration (ILO, 2022). Moreover, the programme integrates technology and creativity in reintegration. For example, former military drone specialists have been retrained to use drone technology for peaceful applications such as healthcare logistics and environmental monitoring. This not only supports sustainable recovery but also reframes for-

merly traumatic skill sets into assets for civil society, contributing to the re-definition of identity and purpose – a hallmark of post-traumatic growth (Calhoun & Tedeschi, 2006).

Additionally, these services are enhanced through peer mentorship systems, in which veterans who have successfully transitioned post-service provide guidance and emotional support to new participants, drawing on evidence that peer-led approaches increase self-efficacy and mitigate social isolation (Palgi et al., 2019). In addition, the 3R Programme actively collaborates with local employers and educational institutions to ensure that the training provided is both demand-driven and inclusive.

In collaboration with the Boulder Crest Institute in the United States, Zhytomyr Polytechnic State University has implemented the concept of “expert companionship” (Calhoun & Tedeschi, 2006), in which individuals with lived experiences offer support during the reintegration process, deriving value from their own experiences. Such initiatives foster a renewed sense of meaning, agency, and belonging, which are essential dimensions of post-traumatic growth (Herman, 2015; Tedeschi & Calhoun, 2004). Veterans and civilians who engage in narrative sharing frequently report enhanced psychological resilience, decreased stigma, and improved intergroup understanding – results that are both therapeutic and socially transformative (Ukrainian Veterans Foundation, 2023).

Moreover, to foster economic resilience, the 3R Programme offers Business Development Training for prospective entrepreneurs. This initiative equips participants with essential skills in financial literacy, business planning, and access to microgrants. Entrepreneurship not only generates income but also empowers individuals to actively participate in community recovery, thereby promoting a sense of dignity and agency (World Bank, 2022).

Importantly, the reintegration approach fosters post-traumatic growth by promoting civic engagement and community service. Participants are encouraged to volunteer, tell stories, and participate in community dialogue circles. One of the most innovative aspects of the 3R Programme is its emphasis on cross-sectoral partnerships and international cooperation. This aligns with global best practices in recovery programming and emphasises the value of survivor leadership in psychosocial healing.

Recreation

In the 3R Programme, recreation is understood not merely as leisure or entertainment but also as a significant therapeutic intervention that aids in the psychosocial recovery and emotional resilience of individuals affected by war. For veterans, internally displaced persons, and trauma survivors, engaging in recreational activities can alleviate symptoms of anxiety, enhance mood, foster social engagement, and promote overall well-being.

A fundamental component of the 3R Programme's recreational element is animal-assisted therapy, specifically equine-assisted and dog-assisted therapy. These therapeutic interventions are extensively supported by research and have demonstrated effectiveness in enhancing emotional regulation, alleviating symptoms of depression, and improving motor coordination in individuals who have experienced psychological and physical trauma (Granados & Agís, 2011). The inclusion of animals in therapeutic environments facilitates the development of trust, non-verbal communication, and a sense of security, factors that are essential for individuals living with post-traumatic stress disorder or those who experience social withdrawal.

Additionally, the 3R Programme incorporates a variety of mindfulness and nature-based activities, such as forest walks, guided meditation sessions, riverboat tours, and nature-based therapy. These initiatives are particularly advantageous for individuals experiencing post-traumatic stress disorder, chronic stress, and adjustment difficulties. Research within clinical psychology and veteran rehabilitation demonstrates that exposure to natural environments significantly reduces cortisol levels, lowers blood pressure, and enhances cognitive clarity and emotional equilibrium (Anderson et al., 2016; Berman et al., 2012). Such interventions are not only cost-effective and non-invasive but also readily scalable.

These recreational activities are strategically designed to promote inclusivity and foster group-based experiences that facilitate peer bonding and collective resilience. Participants frequently express a sense of "reconnection" to both nature and the broader community, which is instrumental in the restoration of identity, self-confidence, and optimism following extended periods of isolation or institutional care.

Furthermore, the aim is to explore the integration of innovative digital technologies such as augmented and virtual reality. The strategy will be to begin with a broad perspective, ultimately enabling end users to determine

which elements to incorporate into the final concept. Specific examples include environments for mental respite, whether for distraction, relaxation, amusement, or to simulate and prepare for medical procedures. Research has been conducted, for instance, on the use of such technologies for relaxation among older people (Lundstedt et al., 2023) and coping with frustration among cancer patients (Persson et al., 2021). It suggests that augmented and virtual reality may facilitate recreational participation among individuals with diverse functional abilities.

Rehabilitation

The Rehabilitation pillar of the 3R Programme offers a comprehensive and multidisciplinary framework aimed at restoring physical, cognitive, and psychological functioning for individuals affected by war-related trauma. The rehabilitation strategy implemented by the programme is fundamentally centred on services that encompass speech, occupational, and cognitive therapy. These interventions are designed to address deficits resulting from traumatic brain injuries, neurological disorders, and prolonged exposure to stress. Speech therapy is particularly beneficial for individuals experiencing communication disorders that arise from injuries or speech disruptions due to trauma. Occupational therapy facilitates the process of regaining independence in daily activities, thereby enhancing both physical coordination and essential life skills. Furthermore, cognitive therapy, based on principles of neuropsychological rehabilitation, supports individuals in restoring memory, attention, and executive functioning, essential capabilities for successful social reintegration (Mateer et al., 2005; WHO, 2023).

In parallel, the programme offers structured psychological and psychiatric care with a focus on post-traumatic growth. Depression, anxiety, and identity loss are prevalent among war survivors, and require different treatment approaches such as trauma-informed counselling, group therapy, and individualised psychiatric treatment. Evidence-based models, such as Cognitive Behavioural Therapy (CBT) and Narrative Exposure Therapy (NET), are utilised. Through these interventions, the programme intends to help individuals reframe traumatic memories and rebuild a coherent personal identity (Brewin, 2010; Schauer et al., 2011).

It is essential to ensure that these services are delivered by a coordinated team of rehabilitation specialists, including therapists, clinical psychologists, psychiatrists, legal advisors, educators, and trained student volunteers. The intention is to involve war survivors when it is in their best interests. This collaborative framework creates a learning ecosystem that effectively merges academic research with practical implementation. Students enrolled in social work, psychology, and medical programmes are fully integrated into service teams under professional supervision, contributing to both service delivery and advancing knowledge in their respective disciplines. This multidisciplinary approach will actively involve individuals with lived experiences. While they may not be experts in therapeutic interventions, they possess invaluable insights into the realities of front-line challenges. A commitment to learning and attentive listening defines their therapeutic role. Expert companions understand that post-traumatic growth often necessitates an extended process of comprehension and adaptation in response to a specific loss (Calhoun & Tedeschi, 2006).

This interdisciplinary model, which integrates academic and practical applications, facilitates ongoing enhancements in care quality while developing a pipeline of skilled professionals prepared to address the persistent mental health and rehabilitation challenges in post-war Ukraine. Such methodology is not only therapeutically effective but also socially sustainable, as it simultaneously strengthens institutional capacity and fosters community-based recovery efforts.

Altruism and participatory possibilities

There is a pressing need to explore new and innovative approaches to rehabilitation. Several programmes, such as “expert companionships”, aim at letting participants to help other participants. In altruistic work, where helpfulness is at the centre, every instance of assistance may contribute to greater satisfaction for the helper and increased safety for the recipient, provided that such actions are undertaken voluntarily and remain manageable for the individual involved. Engaging in altruism within a group context not only promotes mutual support but may also transform the act of helping into a collective social activity (Sandén, 2021). Altruistic behaviour is one approach that has been shown to enhance both physical and psychological well-being, pro-

vided that individuals do not become overwhelmed (Post, 2005). Incorporating altruism into rehabilitation requires a paradigm shift, viewing the patient as an active participant rather than a passive recipient of care.

In collaboration with Lund University, Zhytomyr Polytechnic State University has initiated several participatory, reflective courses grounded in the problem-based learning methodology, which enable students to engage with trauma-informed scenarios, address challenges related to veteran reintegration, and to explore community interventions within a secure virtual environment. The courses are grounded in ethical dialogue, collaborative problem-solving, and social responsibility. Through the utilisation and creation of vignettes, reflective journals, and group discussions, students engage in critical analyses of the complexity of being human in a war situation, whether this involves moral dilemmas, power dynamics, or culturally sensitive approaches to care. The primary objective is to develop new knowledge through sharing and reflecting upon experiences. These courses can be further developed as a basis for peer support programmes. The utilisation of virtual reality technology enhances cognitive empathy and decision-making capabilities, rendering it an optimal platform for equipping students to operate effectively in highstress, post-conflict contexts (Diegmann et al., 2015; Lindgren & Johnson-Glenberg, 2013).

These courses represent not only the development of a curriculum but also the cultivation of a culture centred on altruism and civic engagement within the university. As the roles of social workers, therapists, and leaders in the public sector evolve due to the war, education must adapt accordingly. Graduating students in Ukraine need to be equipped not only with essential technical skills but also with the ethical and emotional preparedness necessary to serve as facilitators of community resilience. They may also contribute to expanding knowledge and developing programmes through their work.

This educational model reflects significant global trends in higher education, aiming to promote socially responsible scholarship, foster civic engagement, and encourage interdisciplinary collaboration (Boyte, 2011; Hart & Northmore, 2011). By integrating the 3R model into its pedagogical framework, Zhytomyr Polytechnic State University establishes itself as a preeminent institution for post-war recovery education, dedicated not only to reconstructing physical infrastructures but also to cultivating the values and competencies essential for the development of democratic and inclusive societies.

Scientific contribution and policy implications

The 3R Programme at Zhytomyr Polytechnic State University offers a new approach to social work, shifting from top-down service delivery to a community-centred methodology that encourages individuals to participate in their own recovery and rehabilitation, as well as that of their peers. The programme focuses on innovative recovery methods, including “expert companionship”, animal-assisted therapy, and trauma-informed care, while also training a new generation of professionals through participatory and immersive educational techniques.

The 3R model fundamentally serves as a dynamic laboratory for applied research across three critical domains: trauma recovery, community resilience, and social reintegration. Through its multidisciplinary initiatives, the programme systematically gathers empirical data on the psychological, economic, and social dynamics of post-war recovery. This encompasses longitudinal evaluations of therapeutic outcomes, reintegration success rates, and the effectiveness of community-based interventions. The programme will thus not only employ evidence-based methods but also contribute to the development of new ones. The programme’s distinctive integration of animal-assisted therapy, mindfulness-based interventions, and vocational rehabilitation fosters a comprehensive environment conducive to research on holistic, non-pharmacological approaches to trauma. These studies make a significant contribution to the global discourse on mental healthcare, particularly in low-resource or conflict-affected settings (Silove et al., 2017; Tol et al., 2011). Furthermore, they provide validated, context-specific strategies for integrating mental health services into broader recovery initiatives.

The 3R Programme, in addition to its academic significance, yields actionable policy insights relevant to both national and international stakeholders. The need for everyone to contribute to Ukraine’s rebuilding underscores the importance of innovation. It is thus based on a dynamic approach, supporting new ideas and approaches to health. Students, teachers, professionals, and veterans themselves will participate in creating the 3R model. The programme functions as a prototype for community-driven social innovation, founded upon participatory principles and cross-sector collaboration. Its decentralised and inclusive approach challenges the conventional top-down delivery of social services, instead prioritising co-creation, mutual aid, and civic

engagement. Models of this nature align with global recommendations from organisations such as the World Health Organization and the United Nations Development Programme. For policymakers in Ukraine, the 3R Programme serves as a tangible, field-tested example of how adaptive, interdisciplinary programmes can effectively contribute to the reconstruction of social infrastructure, while facilitating psychological recovery and promoting economic reintegration.

One of the programme's strengths lies in its replicability. The 3R framework is designed to be modular and adaptable, rendering it suitable for implementation in other regions of Ukraine. The close connection to the university enables the dynamic incorporation of new research and ongoing evaluation. Its integration of community-based resources, cross-sector academic partnerships, and a hybrid therapeutic approach enhances its potential applicability across diverse post-conflict or disaster-affected settings, while allowing for contextual adaptation to local cultural, institutional, and psychosocial dynamics.

This academic and practical ecosystem has the potential to inform national policy reforms, guide curriculum development, and contribute to the international dialogue surrounding post-conflict social reconstruction. In conclusion, the 3R Programme is more than just a programme; it represents a scientifically grounded, policy-relevant, and globally significant framework for the healing and reconstruction of societies affected by war and displacement.

Conclusion

Ukraine is facing the challenges of reconstructing social welfare alongside the physical restoration of infrastructure following full-scale warfare. The 3R Programme focuses on innovative recovery methods, including animal-assisted therapy and trauma-informed care, while also training a new generation of professionals through participatory and immersive educational techniques. Ultimately, the 3R Programme aims to foster resilience, social cohesion, and a culture of care, ensuring that reconstruction efforts address both physical and emotional recovery in Ukraine.

The 3R model has been developed by Zhytomyr Polytechnic State University, influenced by and in collaboration with other institutions, including Lund University in Sweden and the Boulder Crest Institute in the USA. It

presents a comprehensive, research-based, and scalable framework for post-conflict recovery. This model serves as both a practical initiative and an academic advancement, offering significant contributions to the fields of social science, public policy, and humanitarian practice.

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