# We must not neglect rehabilitation in Ukraine

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In the coming months and years, there will be many urgent health priorities competing for resources in Ukraine as a result of Russia's military invasion. The damage and disruption to usual health services, coupled with conflict related traumatic injuries and the forced displacement of millions of people, will create an enormous surge in rehabilitation needs.

WHO defines rehabilitation as "A set of interventions designed to optimise functioning and reduce disability in individuals with health conditions in interaction with their environment". By preventing or reducing complications and improving an individual's functioning, rehabilitation cuts the costs of ongoing care and supports individuals to participate in education, employment and community and famaily life. Ensuring continued access to rehabilitation and assistive products must be a key consideration of the early and ongoing health response in Ukraine.

The vital role of rehabilitation is well supported in global emergency guidelines, <sup>2,3</sup> and emergency medical teams (EMT's) with surgical capacity are required to include rehabilitation professionals. However, rehabilitation is rarely prioritised in the early stage of conflict responses, with devastating consequences for those in need of rehabilitation services. In many countries, rehabilitation and assistive technology provision within the national health system is out of focus and under resourced. When rehabilitation needs surge, such as in conflict, systems are quickly overwhelmed.

Not only does conflict cause direct physical harm necessitating immediate health care, conflict also impacts health systems with damage or disruption to infrastructure, workforce and health facilities, affecting

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the provision of, and access to, health services, including rehabilitation. In conflict, the need for rehabilitation and assistive products multiplies. Those with pre-existing functioning impairments that require long term rehabilitation interventions may be unable to access essential health services. Traumatic injury resulting from the conflict can cause devastating and long-lasting physical and psychological impairment, requiring early and specialised rehabilitation interventions from a multidisciplinary team and long-term follow-up to reduce complications and optimise functioning and quality of life.4 Consequently, conflict increases both the demand for rehabilitation and difficulties in accessing services, exacerbating the already existing unmet rehabilitation need. The consequences of not receiving early rehabilitation for injuries such as fractures, amputations, spinal cord and traumatic brain injuries has been documented in previous conflicts, whereby over half of individuals with conflict related trauma injuries in the first three weeks of the conflict experienced complications and long-term disability resulting from the lack of early rehabilitation.5

In August 2020, the WHO Situation of Rehabilitation in the Ukrainian health system assessment was conducted and in 2021 the 'STARS' report was published<sup>6</sup> in a collaboration between the Ukrainian Ministry of Health, WHO country office and WHO Regional Office for Europe. The foundational report outlines key achievements, needs and opportunities for rehabilitation in Ukraine, with the Ministry of Health recognising rehabilitation as a key component of universal health coverage. This commitment was exemplified with the adoption of the new landmark law "On rehabilitation in health care" which was signed by President Volodymyr Zelenskyy in December 2020, and subsequent by-law imbedding multidisciplinary rehabilitation into the Ukrainian health system at all levels.

However, the Ukrainian STARS report found no national strategy on rehabilitation and described fragmented and severely understaffed services. No information was available on planning or consideration for rehabilitation in emergency situations. The greatest eClinicalMedicine 2022;50: 101537 Published online xxx https://doi.org/10.1016/j. eclinm.2022.101537

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## Comment

impediment to upscaling rehabilitation capacity in Ukraine was found to be that rehabilitation, and its benefits, were poorly understood. In a recent national analysis of assistive technologies, products were found to be of low quality, with incomplete service provision and restricted to only those with a registered disability. These findings are common in countries where health service development is restricted by significant financial constraints.

To minimise disability and to optimise functioning and health, the following immediate actions are needed:

- Ukraine's rehabilitation professionals are key to providing early rehabilitation and need immediate recognition, support, and training to provide safe and effective rehabilitation for complex multi trauma cases
- International donors and responding international organisations should prioritise building sustainable and quality rehabilitation capacity within the health system.
- Assistive product donations must meet international standards<sup>10</sup> and be supported with training for prescription, fitting and follow up.
- The response strategy should be based on accurate information such as injury prevalence and type, and rehabilitation need and availability, to later evaluate the response and inform long term service planning.

The conflict will create a huge rehabilitation surge, that will be complex, extensive and long lasting. We must ensure that rehabilitation is included in the response. If we fail, the consequences of the conflict will be greater felt, and longer lasting at the individual and societal level.

### Contributors

Justine Gosling conceptualised, drafted and submitted the manuscript.

### **Declaration of interests**

All the authors have nothing to declare.

#### References

- WHO. 2017. Rehabilitation in health systems. Available from: https://www.who.int/publications/i/item/9789241515986.
- Mills JA, Gosney J, Stephenson F, Skelton P, Norton J, Scherrer V, Jacquemin G, Rau B. Development and implementation of the World Health Organization emergency medical teams: minimum technical standards and recommendations for rehabilitation. PLoS Curr. 2018. Version I. 10. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6050053/.
- 3 World Physiotherapy 2016. The role of physical therapists in disaster management. Available from: https://world.physio/sites/default/files/2020-06/Disaster-Management-Report-201603.pdf.
- 4 Jain RP, Meteke S, Gaffey MF, et al. Delivering trauma and rehabilitation interventions to women and children in conflict settings: a systematic review. *BMJ Global Health*. 2020;5:e001980.
- 5 WHO 2011. World report on disability. Available from: https://www.who.int/publications/i/item/9789241564182.
- 6 WHO Regional Office for Europe. 2021. Situation assessment of rehabilitation in Ukraine. Available from: https://www.euro. who.int/en/health-topics/Life-stages/disability-and-rehabilita tion/publications/situation-assessment-of-rehabilitation-inukraine-2021.
- 7 On rehabilitation in health care: law of Ukraine from 03.12.2020 #1053-IX. 2020. Available from: https://zakon.rada.gov.ua/laws/show/1053-20#Text [cited 2022 Apr 15] (in Ukrainian).
- 8 Cabinet of Ministers of Ukraine. Issues of organization of rehabilitation in health care. Decree from 03.II.2021 #1268. 2021. Available from: https://zakon.rada.gov.ua/laws/show/1268-2021-%D0%BF#Text [cited 2022 Apr 15] (in Ukrainian).
- 9 WHO Regional Office for Europe. 2022. A situation assessment of assistive technology in Ukraine. Available from: https://apps.who.int/iris/bitstream/handle/10665/352416/9789289057790-eng.pdf.
- 10 WHO 2016. Priority assistive products list. Available from: https://www.who.int/publications/i/item/priority-assistive-products-list.