Strengthening services for NCDs in all-hazards emergency preparedness, resilience and response

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Contents

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Acronyms

AAP	accountability to affected populations
CVD	cardiovascular disease
DHIS2	District Health Information Software 2
EPHS	essential package of health services
FCV	fragile, conflict-affected and vulnerable (settings)
HEPR	Health Emergency Preparedness, Response and Resilience
HeRAMS	Health Resources and Services Availability Monitoring System
HIS	health information systems
HPC	Humanitarian Programme Cycle
HSS	health systems strengthening
IADA	International Alliance for Diabetes Action
IASC	Inter-Agency Standing Committee
ICRC	International Committee of the Red Cross
IDP	internally displaced person
IRC	International Rescue Committee
LMICs	low- and middle-income countries
MHPSS	mental health and psychosocial support
MSF	Médecins Sans Frontières
NCD	noncommunicable disease
NGO	nongovernmental organization
PHSA	public health situation analysis
PLWNCDs	people living with NCDs
SDG	Sustainable Development Goal
SIDS	Small Island Developing States
STEPS	WHO STEPwise approach to NCD risk factor surveillance
TWG	technical working group
UHC	universal health coverage
UN	United Nations
UNHCR	UN Refugee Agency
UNHLM	UN High-level Meeting
WHA	World Health Assembly
WHE	WHO World Health Emergencies Programme
WHO	World Health Organization
WHO PEN	WHO’s Package of essential NCD interventions

Key messages

Noncommunicable diseases (NCDs) are a major cause of death and disability worldwide, and people living with NCDs (PLWNCDs) are particularly vulnerable during health service disruption due to health or humanitarian emergencies, including outbreaks and pandemics, as COVID-19 vividly demonstrated. However, NCDs have not yet been adequately and systematically integrated into many countries' essential package of health services (EPHS) at primary care level, or into their emergency preparedness and response procedures and emergency national action plans.

This report highlights key lessons for strengthening NCD programming in emergency preparedness and response, that have emerged from the work of the World Health Organization (WHO) over the past six years:

- **Collaborative surveillance and health intelligence for NCDs**: NCDs and their common risk factors should be integrated into health information systems – pre-crisis health information system data can guide emergency response plans, complementing collection of rapid assessment data during the acute phase of an emergency. Ongoing NCD surveillance should be based on aggregated facility-level data or WHO STEPwise approach to NCD risk factor surveillance (STEPS) surveys, with mobile surveys in acute emergencies or new mass displacement.
- **Community protection and community engagement in relation to NCDs**: PLWNCDs must be included and actively participate in emergency response planning. Feedback mechanisms and collaborative platforms should also be implemented to improve accountability and information exchange between beneficiaries, communities, health authorities and other stakeholders.
- **Safe and scalable care for NCDs**: Responses need to take into consideration the various needs and interventions that need to be maintained and preserved and restored across the continuum of care and different levels of care, for example, primary care versus more specialist services such as dialysis or cancer care. If NCDs have not been included in the EPHS prior to the emergency, the WHO NCD kit (with clinical protocols and training module) can be used as an entry point for integration of NCDs into primary care beyond the acute emergency.
- **Access to countermeasures to prevent service disruption for NCDs**: A priority list of medicines, laboratory and medical equipment for NCDs should be defined that can be made rapidly available (including prepositioning of standardized kits). Contingency planning should be undertaken including pre-agreements, where possible, with suppliers to enable scale-up of production and maintenance of supplies if services are disrupted.
- **Ensuring emergency coordination is cognisant of NCDs**: NCDs should be included in the national health sector response plan in the acute phase of the emergency, and in the national health strategy/national development agenda within the countrywide recovery plan. A national multisectoral working group on NCDs and rehabilitation should be established to enable alignment with (among other technical areas) trauma and emergency services, food security, security and law enforcement, and protection.
- **Strengthening governance and financing for NCDs in emergencies**: National NCD programmes should ensure that the key care components for NCDs are included in primary care services, covering the full continuum of care from prevention through to palliation. PLWNCDs should be considered as a vulnerable group, with NCDs included in national emergency risk management policies and legislation. Regulatory frameworks relevant to NCDs should consider needs during emergencies (including drug importation and accreditation of local suppliers).

Taken together, and fully implemented, these recommendations would make a significant impact to the quality of life of PLWNCDs, their families and communities in emergencies.

Introduction: The importance of NCDs in emergencies

At the end of 2022, there were more than 50 ongoing graded humanitarian emergencies[1] across the world – 42 acute emergencies and 11 protracted emergencies (1) – many of which are crises nested within crises, such as conflict in a context of drought. There were an estimated 35.3 million refugees, of whom 76% were hosted in low- and middle-income countries (LMICs) and a further 62.5 million people were displaced within their home countries. (2) The average length of time for displacement is now 20 years for refugees and 10 for internally displaced people (IDPs). (3)

Box1: What are humanitarian settings?

A humanitarian crisis is defined as a single event or series of events that threaten the health, safety or well-being of a community or large group of people. They include natural disasters (such as earthquakes), public health emergencies (such as infectious disease outbreaks that exceed the coping capacity of the responsible authorities) and armed conflict and its consequences (such as civil disruption and displacement, which often become protracted or chronic emergencies). (4) "Humanitarian settings" is an informal term that captures both humanitarian crises and fragile, conflict-affected and vulnerable (FCV) settings. (5)

Humanitarian crises are increasingly caused or magnified by climate change, such as extreme meteorological events (droughts, flooding etc.) and outbreaks of infectious diseases in non-endemic areas, and well as climate migration or conflicts over water and farmable land resources that have been diminished by climate change. (6)

NCDs – see also box 2 – form the majority of the disease burden globally and in many LMICs: 86% of all premature deaths from NCDs occur in LMICs, and people of all ages are affected. (7) Diabetes prevalence in Syria is estimated at 13.6% (2021),(8) and NCDs account for 92% of deaths in Ukraine (2019) and 71% of deaths in Myanmar (2019). (9) Even prior to a crisis taking place, the vast majority of countries of the world are on a trajectory to fail to meet Sustainable Development Goal (SDG) 3.4 to reduce premature mortality from NCDs by a third by 2030.

Box 2: Which NCDs are of concern in humanitarian crises?

In the context of humanitarian crises, global health actors and humanitarian agencies use the term NCDs to refer primarily to cardiovascular diseases (CVD), cancer, diabetes and chronic respiratory diseases, together with their risk factors and complications, as they are responsible for the vast majority of global mortality and morbidity. Mental health and psychosocial support (MHPSS) as well as care for neurological illnesses such as epilepsy are also key priorities in crises, although historically these conditions have often been managed by mental health services. (11) Mental health conditions and other NCDs can be closely related, so integrated care is important – but often lacking. (12) There are also many other NCDs, such as rheumatic heart disease, chronic kidney disease and sickle cell disease, which form a substantial part of the burden of NCDs in many low-income countries, including during emergencies. Services for these conditions are particularly hard to access, leaving people living with these diseases extremely vulnerable during humanitarian crises. (13) (10)

Humanitarian crises act as an additional risk-magnifier for NCDs. PLWNCDs in humanitarian settings – whether at home or displaced – are at substantially higher risk of exacerbation of their condition due to trauma and stress, medication interruptions, and difficulty accessing care, resulting in increased premature mortality from NCDs. (14) Access to dignified palliative care may also be severely limited, (15) which is particularly important for those patients with specific cancers and other conditions for which life-sustaining treatment is no longer available due to the crisis. (16) Emergencies also increase the risk of developing NCDs in the first place, through poor dietary options due to a lack of availability of healthy, nutritious food; constrained physical activity opportunities; and increasing susceptibility to use of addictive substances such as tobacco, (17) alcohol (18) and drugs. Those at risk of NCDs struggle to access preventive programmes, screening and diagnosis.

[1] Grading is an activation procedure within WHO that triggers WHO emergency procedures and activities for the management of the response: WHO grading of public health events and emergencies (undated) https://www.who.int/emergencies/grading

However, although morbidity linked to NCDs increases in humanitarian crises, until recently NCDs had not been afforded the same priority as other important health concerns and have often been insufficiently integrated into emergency preparedness and response. As WHO recently noted, "The verticalization of communicable (disease) versus NCD procurement has been a distortion in terms of how you access essential medicines." (19) Prior to the development of the WHO NCD kit in 2016 – which provides a standardized quantity of essential NCD medicines for a population of 10 000 for three months (20) – NCD medicines and basic technologies (such as blood glucose tests) were largely missing from standard emergency response medical kits such as the Interagency Emergency Health Kit.

Financing for NCDs in humanitarian settings is also lagging behind. (21) In part this reflects a general shortfall in donor funding for NCDs, as only around 1–2% of development assistance for health is allocated to NCDs each year. (22) Additionally, the initial rapid assessments that take place in acute humanitarian emergencies tend to focus primarily on infectious disease outbreaks and trauma, with the result that "flash appeals" based on the results of these rapid assessments often do not include provision for NCD care. WHO often carries out public health situation analyses (PHSAs) soon after the rapid assessment, but even these analyses often give minimal attention to NCDs. If NCDs are included neither in rapid assessments nor in PHSAs, resource mobilization for NCDs is likely to be inadequate. Notable positive exceptions include Ukraine (2022) and Sudan (2023), where the PHSA contained extensive data on NCDs and prompted a substantial interagency response.

This report aims to define the critical priorities for improving NCD care in humanitarian crises and FCV settings. It describes recent changes in policy and practice regarding NCDs in humanitarian settings, and highlights gaps and lessons that have emerged from operational reviews and case studies of NCD care in recent humanitarian emergencies. Finally, it presents comprehensive recommendations for strengthening integration of NCD prevention and control in preparedness, resilience and response to humanitarian emergencies.

Purpose of this report

At the 2022 World Health Assembly, Member States requested WHO to provide technical assistance to strengthen NCDs in humanitarian response, ahead of the 4th UN High-level Meeting on NCDs in 2025. (40) In response, WHO has established a joint programme of work between the NCD Department and WHO Health Emergencies Programme (WHE), including a landscaping review of WHO support for NCD programming in recent graded emergencies, development of an operational manual on NCDs in emergencies, and a series of regional workshops on NCDs in emergencies.

This report outlines the main findings of the landscaping review and the subsequent regional workshops, and integrates the lessons learnt through the process of development of the operational manual on NCDs in emergencies, which has been guided by technical reference groups from the three levels of WHO. It has been developed to inform the Global high-level technical meeting on NCDs in emergencies in Copenhagen in February 2024, and will form the starting point for development of a policy brief on NCDs in emergencies.

The first part of the report describes recent changes in policy and practice regarding NCDs in humanitarian settings, and highlights gaps and lessons that have emerged from operational reviews and case studies of NCD care in recent humanitarian emergencies. The second part presents comprehensive recommendations for strengthening integration of NCD prevention and control in preparedness, resilience and response to humanitarian emergencies.

Part 1: An overview of progress since 2016

1.1 New policy and guidance

Since the current SDGs were agreed in 2016, substantial progress has been made to address the needs of PLWNCDs in emergencies, as outlined in table 1 below. (23) The WHO Global high-level technical meeting on NCDs in humanitarian settings (2024) marks the half-way point of the SDG cycle, which finishes in 2030.

Table 1: NCDs in emergencies timeline of policies and guidance since 2016

Year	WHO	UN agencies and NGOs
2017	First use of the formal WHO emergency NCD kit in Syria	
2018	WHO SEARO, *Guideline: Integration of NCD Care in Emergency Response and Preparedness* (24) WHO, *Integrating Palliative Care and Symptom Relief into the Response to Humanitarian Emergencies and Crises: A WHO Guide* (25)	Political Declaration of 3rd UN High-level Meeting (UNHLM) on NCDs includes humanitarian emergencies (26) UN Global Compact on Refugees (27) MSF, *NCD Programmatic and Clinical Guidelines (v.3)* (28)
2019	WHO, Promoting the health of refugees and migrants: global action plan, 2019–2023 (29) (now extended to 2030) WHO Europe, *Prevention and Control of NCDs in Refugees and Migrants: Technical Guidance* (30)	Boston Declaration on diabetes in humanitarian crises, (31) leading to the founding of the International Alliance for Diabetes Action (IADA) (32)
2020	Establishment of WHO Health and Migration programme (33) *WHO, The Impact of COVID-19 on Non-communicable Disease Resources and Services: A Rapid Assessment* (34)	IRC, *Package of Essential Non-Communicable Diseases Interventions for Humanitarian Settings (PEN-H)* (35) IRC and UNHCR, *Integrating non-communicable Disease Care in Humanitarian Settings: An Operational Guide* (36) ICRC, *Operational Guidelines for Field Staff* (37)
2021	Global Diabetes Compact (workstream 11 on humanitarian emergencies) (38) World Health Assembly (WHA) resolution on "Reducing the burden of noncommunicable diseases through strengthening prevention and control of diabetes" included "provide concrete guidance for the uninterrupted treatment of people living with diabetes in humanitarian emergencies" (39)	
2022	Global NCD Compact 2023–2030 (22) WHA Recommendations on NCD prevention and control in humanitarian emergencies (40) WHO Global technical meeting on NCDs in emergencies (Cairo) and launch of regional technical meetings (41) Revision of the WHO emergency NCD kit	
2023	Small Island Developing States (SIDS) Bridgetown Declaration on NCDs and Mental Health includes emergency preparedness and response (42) WHO, *Strengthening the global architecture for health emergency prevention, preparedness, response and resilience* (43)	Second UN High-level Meeting on Universal Health Coverage (44)
2024	Global high-level technical meeting on NCDs in humanitarian settings (Copenhagen, February) (45) WHA to endorse global accord on pandemic prevention, preparedness and response (46) WHO to report to UNSG before the end of the year, ahead of the 4th UNHLM on NCDs in 2025	
2025		4th UNHLM on NCDs: the resulting political declaration should include NCDs in humanitarian emergencies

Awareness of both the short-term urgency and long-term importance of NCD treatment and prevention is increasing at international level, with NCDs in humanitarian emergencies included in the Political Declaration of the UN High-level Meeting on NCDs in 2018 and then in the more recent Global NCD Compact (2022), which calls for the lives of 1.7 billion PLWNCDs to be protected during humanitarian emergencies before 2030. At the World Health Assembly in 2022, governments supported the first WHO recommendations on how to strengthen policies to prevent, control and treat NCDs in humanitarian emergencies. (40) Perhaps as a consequence, wider attention is now being paid to NCDs in crises. For example, in the early days of the Ukraine crisis there was a strong focus on NCDs, not only from the Ministry of Health and the health cluster, but also from wider media, which covered the need for insulin supplies to be maintained in conflict-affected areas. PLWNCDs also play a central role in highlighting the priorities for action (see box 3).

Box 3: The importance of lived experience

PLWNCDs have valuable knowledge born of lived experience, and are increasingly involved in policy, advocacy, programme design and research. Their views are actively sought through, for example, the NCD Alliance's Our Views Our Voices initiative (47) and Global Charter on Meaningful Engagement of PLWNCDs (48) and WHO's Framework for Meaningful Engagement of People Living with Noncommunicable Diseases, and Mental Health and Neurological Conditions. (49) There is significant further opportunity to ensure that their voices are fully heard and that they are engaged and involved in processes relevant to them – and this is particularly true of those living in humanitarian settings. Engagement of PLWNCDs as advocates remains a gap and is particularly challenging in humanitarian settings, but humanitarian agencies are starting to work on engagement, and it is a critical way forward.

A people-centred focus also aligns with the accountability to affected populations (AAP) approach, developed by the Inter-Agency Standing Committee (50) (the UN's humanitarian coordination forum). AAP highlights the importance – at all stages of a crisis – of enabling people to influence decisions made about them during emergencies, the need to provide clear information on plans and how they were made, and facilitating feedback processes on activities that affect individuals and populations. (51)

The NCD kit has now been used in over 20 countries (52) both for emergency preparedness (buffer stocks) and acute emergency response, bridging supply gaps where stocks were inadequate or where NCDs had not been sufficiently integrated into the essential package of health services as part of universal health coverage (UHC) – see box 4. Humanitarian and public health agencies have developed new operational tools and guidance that are implementable in fragile settings. These have built on WHO's *Package of essential noncommunicable (PEN) disease interventions for primary health care in low-resource settings* and on guidance for specific NCDs, such as the WHO's *HEARTS: Technical package for cardiovascular disease management*. The Sphere guidance, which sets out minimum standards in humanitarian aid, (53) has evolved to include a greater focus on NCDs. The evidence base is strengthening, with a significant increase in the number of relevant academic articles and resources such as the London School of Hygiene and Tropical Medicine's "NCDs in Humanitarian Settings" hub (54) providing ready access to a wide range of academic and grey literature.

Box 4: NCDs and UHC

The SDGs include a specific target (target 3.8) to achieve universal health coverage by 2030. (55) To deliver on this, and on the right to health, UHC benefit packages must include NCDs and, crucially, they must be available to all, with no one left behind. This includes those living in humanitarian settings, including refugees and migrants. (56) Strengthening UHC through primary health care will inevitably benefit people living with NCDs, as NCDs make up such a sizeable proportion of conditions addressed in primary care. This approach is also more resilient and cost-effective than providing prevention and treatment through the hospital system. The support of a full range of health care providers is crucial in humanitarian crises – for example, sometimes patients may be able only to access pharmacists. (57)

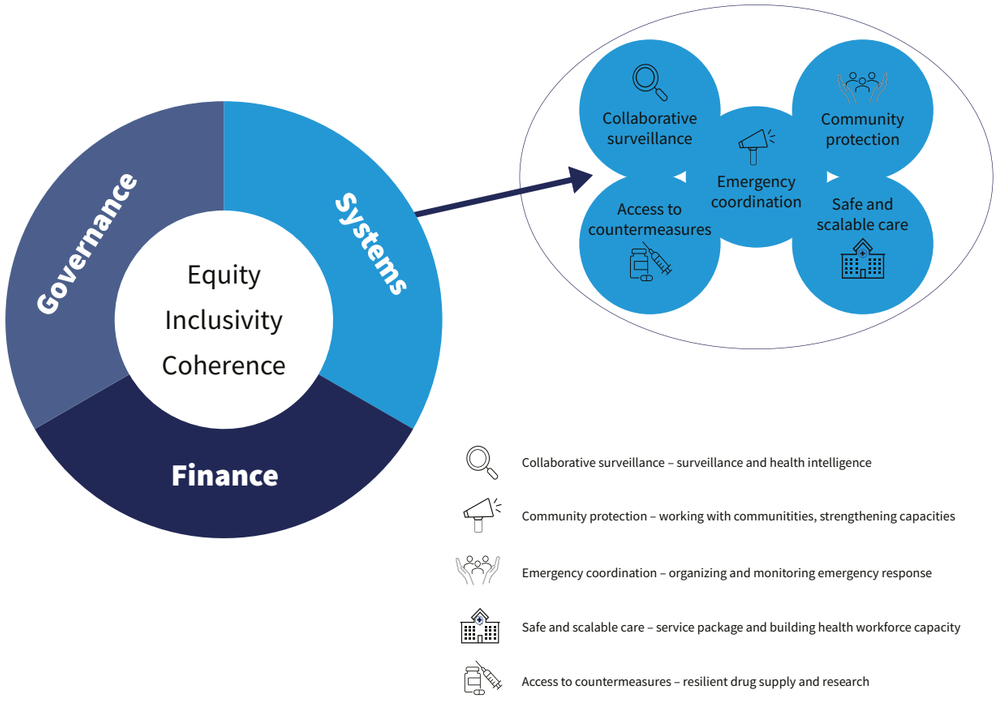
The Political Declaration to the second UN High-level Meeting on UHC, held at the UN General Assembly in September 2023, contained several references to humanitarian emergencies, including that the "increasing number of complex emergencies is hindering the achievement of UHC" and that "humanitarian emergencies have a devastating impact on health systems, leaving people, especially people in vulnerable situations, without full access to health-care services" (para. 43). It specifically calls for enhanced emergency health preparedness and response systems, and stresses "the need to enhance coordination, coherence, and integration between disaster and health risk management systems including at the local levels" (para. 97). (43)

1.2 Strengthening the emergency preparedness and response architecture

The COVID-19 pandemic (box 5) has highlighted the interconnected nature of global health hazards, such as infectious disease epidemics, chronic diseases and humanitarian emergencies. (58) Addressing these multiple hazards in a coherent way (the "all-hazards" approach) requires better alignment between health systems strengthening and disaster preparedness and response work. In light of this, WHO has developed a strategic approach to strengthening health emergency preparedness, response and resilience (HEPR), (59) which is increasingly used by ministries of health and humanitarian agencies to better align resilience building, health system strengthening and emergency preparedness activities to improve health security and mitigate risk to populations.

The framework has five core components – collaborative surveillance, community protection, safe and scalable care, access to countermeasures and emergency coordination – as well as two overarching elements (namely, strengthening governance and financing) (see figure 1). Given the renewed global focus on health security as a result of COVID-19, this framework may provide a means to increase the visibility and priority of NCDs, in view of their impact on the health workforce (many of whom themselves are living with NCDs) and on the national economy.

Figure 1: HEPR framework (59)



Source: Adapted from *Strengthening the global architecture for health emergency prevention, preparedness, response and resilience* (59)

Box 5: COVID-19, health security and NCDs

"Many of the actions needed to strengthen the resilience of medicine supply chains in the context of pandemics and emergencies overlap with those needed to create health systems that are responsive, equitable and accountable, including strengthening governance and financing mechanisms" – WHO, *Access to NCD medicines: emergent issues during the COVID-19 pandemic and key structural factors* (2023) (19)

The global impact of COVID-19 highlighted the link between NCDs, health and economic security, showing the world the speed with which health systems can be undermined. The pandemic affected manufacturing and procurement (including importation and delivery), as well as availability and affordability of medication, as supplies dwindled. (19) At national level, disinvestment in NCDs was frequent, because COVID-19 was seen as more urgent. (60)

As early as May 2020, WHO conducted a rapid assessment of the impact of the pandemic on NCD resources and services globally, which showed very significant disruption: 75% of the 163 governments that replied to the survey had disruption to at least some services, with rehabilitation and palliative care the most impacted. (34) Prioritizing short-term response over long-term need meant that PLWNCDs were among the most affected by service disruptions as well as by COVID-19 co-morbidities: as Dr Tedros Gebreyesus, the Director-General of WHO, put it, COVID-19 has "preyed on people with NCDs". (61)

As health systems recover from the pandemic, however, an opportunity emerges to take a multisector approach to preventing and mitigating the impact of emergencies on PLWNCDs, through increasing the resilience of health systems and better embedding disaster response.

WHO's Dr Egmond Samir Evers leading an online health sector coordination meeting in Cox's Bazar during the COVID-19 pandemic (2021)
Photo credit: WHO / Tatiana Almeida

Part 2: Lessons from recent emergencies, and recommendations for action

In 2022 WHO conducted a landscaping review of NCD integration in preparedness and response to graded emergencies over the previous five years. (23) This consisted of:

1. A desk review, for which peer-reviewed articles were searched, along with internal and published WHO (and health cluster) documentation (including policies and frameworks, guidelines and standard operating procedures, reports and evaluations, tools and data). External literature and resources on NCDs in humanitarian emergencies were also identified, including grey literature, evaluations, and documentation from implementing agencies. The findings of the desk review were validated and enriched through key informant interviews with staff from headquarters and with experienced global health cluster members.
2. Development of eight case studies in countries where WHO has supported NCD care in recent emergencies, based on in-depth interviews (including group interviews, where appropriate) including with NCD focal points, health system strengthening (HSS) advisors and emergency teams in the countries (Afghanistan, Bangladesh, Ethiopia, Philippines, Syria, Ukraine, Venezuela and Yemen).

The findings from this review were presented and discussed at a series of regional WHO workshops (EMRO, EURO, SEARO) and at a SIDS ministerial conference, (42) and were triangulated with the initial findings of emergency operational reviews focusing on NCDs (Yemen, Ukraine, Moldova). The final set of key lessons and recommendations that emerged from this process are presented here, structured around the core components of the WHO HEPR framework, (59) with examples drawn from country case studies. The accompanying recommendations cover strategic actions that are relevant to those working in health systems strengthening, disaster risk reduction, and in preparedness and response to emergencies.

Daangbantayan District Hospital in the Philippines in December 2013, following Typhoon Haiyan in early November of that year
Photo credit: WHO / Francisco Guerrero

2.1 Collaborative surveillance and health intelligence for NCDs

Learning

There is a need for accurate, actionable data before, during and after a crisis, which will improve both emergency preparedness and the maintenance of essential health services during a crisis.

Stronger national surveillance and health information system data on NCDs can help ministries of health to include NCDs in emergency preparedness – for example, using data to inform the appropriate quantity and positioning of buffer stocks of medication. National or facility-level NCD disease registers (digital or manual) greatly facilitate emergency preparedness and response, enabling accurate calculation of medication requirements and identification of high-risk patients for outreach during emergency. Reliable data on disease and risk factor prevalence also strengthens proposals for long-term development funding.

In protracted crises or fragile, conflict-afflicted or vulnerable settings, patients themselves should hold their own data in a way that can easily move with them to other settings (such as a "patient passport"), with careful attention paid to data protection.

Example

In the context of the ongoing refugee crisis in Cox's Bazar, Bangladesh, essential disease components of NCDs are included in the health information system (DHIS2[2]), with digitization enabling real-time management of data. The Ministry also supported a NCD risk factor survey (WHO STEPS[3]) for the Rohingya population, (62) which helped in further emphasizing the need for NCD services in protracted emergencies. Good understanding of patient numbers, disease prevalence and medication requirements (based on recent STEPS data) has enabled sustainable bulk procurement and is included in quarterly monitoring. Innovations such as patient feedback – using pictorial approaches for Rohingya refugees – is also included in quarterly monitoring.

Recommendations to strengthen surveillance and health intelligence for NCDs

Objective

Ensure integration of NCDs in surveillance and health information systems, develop and maintain disease profiles and registers of PLWNCDs, and integrate these registers into emergency response processes to ensure continuity of services.

Recommendations:

- Strengthen diagnostic and laboratory capacity to ensure blood glucose testing and urinalysis as a minimum at all primary health services, and ensure that all PLWNCDs have access to HbA1c, lipid profile, renal and liver function tests on an annual basis.
- Integrate NCDs and key risk factors (especially diabetes, hypertension and smoking status) in health information systems (HIS), with facility-based NCD data collection (i.e. individual patient level) including outcome data where feasible. (63) (64) (65) Pre-crisis health information system data can guide emergency response plans, complementing collection of rapid assessment data during the acute emergency.
- Ensure that NCD surveillance is up to date – either aggregated data from the HIS or WHO STEPS surveys – and carry out mobile surveys to understand the NCD burden needs of PLWNCDs in newly displaced populations in the acute phase of a crisis. (66)
- Harmonized health facility assessments can be used to assess facility-level readiness, ensuring availability of essential medicines, protocols and diagnostics for NCDs. For new or ongoing emergencies, ensure that NCD indicators are included in the health operations plan, public health situation analysis and the humanitarian response plan, as well as in subsequent service availability monitoring [e.g. HeRAMS]) (67) especially stocks and supplies of NCD medications to plan for ongoing procurement.
- Carry out analysis of barriers to access and utilization of NCD services (e.g. Tanahashi framework (68)), with inclusion of perspectives of PLWNCDs. (23) (64) (66)

[2] District Health Information Software 2: the most widely used (open-source) health information system platform.
[3] WHO STEPS (STEPwise approach to NCD risk factor surveillance) is a simple, standardized method for collecting, analysing and disseminating data on key NCD risk factors: https://www.who.int/teams/noncommunicable-diseases/surveillance/systems-tools/steps

2.2 Community protection and engagement in relation to NCDs

Learning

PLWNCDs and the communities within which they live should be meaningfully engaged in discussions around service delivery. This can improve understanding of needs and generate solutions for service delivery during response and recovery.

PLWNCDs and their families can provide essential insights into the needs of communities, enabling better provision of treatment and strengthening community-based health-promotion activities. (69) Particular care should be taken to include vulnerable populations such as refugees and internally displaced people, as well as those in host communities. Communities, including PLWNCDs, can also play a key role in service delivery, such as triage and referral of people with complications of NCDs.

Additional study is required to assess the effectiveness and limitations of remote consultations (e.g. online) as an alternative to in-person patient follow-up, particularly in contexts of unreliable electricity and internet supply. It is advisable to train and empower patients to manage their NCDs and to support family members with NCDs, in case of service disruption.

Example

During the 2021 COVID-19 pandemic in Sudan, the Ministry of Health, with the support of WHO, initiated a telemedicine hotline service to ensure uninterrupted access to essential health care for NCD patients. The service was provided by family doctors who offered consultation, triage, treatment, health education, counselling, medical information and referral through mobile phones. The service was widely used by PLWNCDs during the pandemic and helped to bridge the gap caused by disrupted services. A secondary objective was to build community trust in primary care services and providers. Engagement of relevant stakeholders such as telecommunications operators, medical societies and patient groups played a central role in the success of this initiative.

Recommendations to strengthen community protection in relation to NCDs

Objective

Ensure information exchange with beneficiaries to improve understanding of needs, inform service delivery, and ensure meaningful engagement of PLWNCDs in decisions about the services they receive and in programme evaluation.

Recommendations:

- Strengthen the capacity of community health workers, volunteers, peer educators and individuals with lived experience to provide NCD health services in emergency settings. (70) This includes population-level triage to identify vulnerable individuals and groups where disruption in care will be life-threatening; psychosocial support and rehabilitation; and basic palliative care including support for family caregivers. (63) (71)
- Strengthen capacity of community and peer support groups to deliver improved self-care and peer support for PLWNCDs, and to enable sharing of experiences and information.
- Ensure the inclusion and participation of PLWNCDs in emergency response planning and during the recovery planning process programming throughout the emergency cycle. (40) (51) Implement feedback mechanisms for beneficiaries to improve accountability and foster collaboration with PLWNCDs, including platforms for dialogue and information exchange between communities, health authorities and other stakeholders. (23) (66)
- Maintain disease registers of PLWNCDs and integrate these registers into emergency response processes to enable patient tracing to ensure continuity of services for PLWNCDs. Consider establishing vulnerability registers for elderly, isolated, disabled and terminally ill people where possible. (72)
- Establish risk-communication and knowledge-sharing/exchange channels during emergencies (including the use of traditional media, social media and online resources) to provide access to coordinated, relevant NCD information on health promotion, risk factors and self-management. (73)

2.3 Safe and scalable care for NCDs

Learning

Where not already included in the essential package of health services (EPHS), NCDs can be rapidly integrated into primary care services in the event of a humanitarian crisis, using the WHO emergency NCD kit as an entry point.

Several countries have used WHO PEN to undertake basic NCD capacity-building of the workforce in the context of protracted crisis. (74) Workforce capacity can be expanded through task-shifting and task-sharing and through online training and delivery of services (digitization that has been precipitated, in many cases, by COVID-19). In emergencies in settings where NCDs were not managed at primary care level, the WHO NCD kit has been used as an entry point for integrating NCDs into primary care.

Example

During the ongoing conflict in north-west Syria, 400 community health workers have been trained in NCD health promotion and screening, enabling them to refer patients appropriately. Health workers were trained on WHO PEN and on the use of the NCD kit by a partner NGO, Primary Care International. In the wake of COVID-19, training and capacity-building has shifted online, which has been shown to function effectively. In Afghanistan, WHO launched a pilot project to embed NCD services into existing primary care packages, supplying 27 NCD kits to primary care centres supported by the Afghanistan Red Crescent. The NCD kit proved to be an effective “entry point”, enabling rapid inclusion of NCDs into the EPHS.

Recommendations to strengthen safe and scalable care for NCDs

Objective:

Build and expand the coverage of essential primary care services to all PLWNCDs, through recruitment and ongoing training based on appropriate adaptation of WHO packages and tools, to mitigate the risks of service disruption to PLWNCDs arising from acute and protracted crises and during long-term recovery.

Recommendations:

- Ensure contingency planning and prioritization of core NCD components of the EPHS to be continued in emergencies. Where NCDs have not been included in the EPHS for primary care prior to the emergency, the WHO NCD kit can be used as an entry point to enable the integration of NCDs into primary care beyond the immediate crisis. (23) (40) (66)
- Ensure that crisis-resilient service delivery models have been defined (e.g. fixed, mobile and outreach models), that consider the need for proximity to a clinician (or access via telehealth), reliable access to language-appropriate medication, referral pathways for needs that cannot be managed in primary care (including emergency care) and integration with MHPSS. (23) (66)
- Ensure the availability of national treatment protocols for priority NCDs and national/regional drug formularies and essential technologies lists and guidelines, which are regularly reviewed. (66) (75) (76)
- Recruit and train health workers (and implementing partners), based on context-adapted WHO packages and tools (including WHO PEN (77) and WHO’s *HEARTS Technical package for cardiovascular disease management* (78)). Where there are health workforce shortages, consider task-shifting or task-sharing to ensure uninterrupted service provision, and the use of online training, including on self-care. (23)(66)
- Promote the use, where appropriate, of innovative approaches to NCD care, including digital health innovations such as telehealth for follow-ups, and task sharing with non-traditional cadres such as pharmacists and retired health workers. (23)

2.4 Access to countermeasures to prevent service disruption for NCDs

Learning

Supply chains for NCD medicines and technologies must be resilient and context-appropriate. NCD surveillance data (for example, from WHO's STEPS surveys) can help with forecasting and accurate calculation of drug and medical supply needs. Many countries do not have national-level buffer stocks of medication, which may result in considerable initial reliance on rapid procurement through humanitarian mechanisms in the event of a crisis. Since emergency procurement is also difficult without accurate data on needs, the NCD kit has been a helpful innovation. However, the cost of the kit and (current) long lead time mean that governments and NGOs should aim to move to bulk procurement as early as possible. In some cases, governments have made up their own kits in-country, using the WHO kit's list of medicines and supplies.

Drugs procured through emergency procurement mechanisms may not be labelled in the appropriate language, and brands will often be unfamiliar, which can result in poor adherence even when patients can access them. Effective emergency procurement, particularly in the acute phase of a crisis, requires detailed market knowledge, and utilization of networks with private sector and professional associations.

Implementation research is an important "countermeasure" to service disruption. A recent WHO review of research in humanitarian settings (79) has highlighted the marked dearth of implementation research in humanitarian settings, and yet evaluations of service models that ensure continuity or care for people with NCDs could help to inform service delivery during humanitarian response and in FCV settings. (80) (81)

Example

The Philippines Ministry of Heath has extensive experience of emergency medicines procurement, which was well demonstrated in the response to Typhoon Haiyan in 2013. The government has an essential medicines list that is tailored to emergencies, and this informs mechanisms to control prices in emergencies to reduce out-of-pocket payments by patients. Regulation has also been used to allow the dispensing of more medication to PLWNCDs to protect against supply disruption.

Recommendations to strengthen countermeasures for NCDs

Objective

Strengthen supply chains and procurement of safe, affordable and effective NCD medicines, technologies and supplies, with implementation research on the use of the WHO NCD kit and on models of care.

Recommendations:

- Identify a priority list of medicines, laboratory and medical supplies/equipment that need to be available in timely fashion (pre-positioned or via rapid procurement and import procedures), with guidance on drug switching, standard operating procedures and protocols.
- Ensure supply chains for essential NCD medications and technologies, working with suppliers and the private health sector on contingency planning prior to emergencies and during emergency response, to ensure capacity to scale up production and maintain supplies.
- Ensure resilient procurement mechanisms for essential NCD medicines and technologies, including familiarity with procurement processes for the NCD kit, so that this can be rapidly ordered in the event of an emergency.
- Ensure safely stored buffer stocks of in-date, language–appropriate NCD medications at national and facility level, and with quality assurance visits, determined by patient registers/HIS/STEPS or equivalent survey data.
- Research on NCDs in emergencies should focus on implementation research and best-practice case studies on integration of NCD care, including models of care (with costing analysis) and patient satisfaction.

2.5 Ensuring emergency coordination is cognisant of NCDs

Learning

Efficient coordination between health systems strengthening, emergency response departments and non-health sectors can strengthen provision of care for NCDs.

Until recently, health emergency preparedness and response planning has placed little emphasis on NCDs relative to infectious disease outbreaks, trauma and MHPSS. COVID-19 has provided a salient reminder of the interconnectedness of health needs and vulnerabilities, but also the way that different types of hazards (e.g. public health emergencies and conflict) disproportionately affect those with pre-existing health needs such as NCDs. Taking a holistic, "all-hazards" approach to preparedness and response planning can improve outcomes for PLWNCDs, through strengthened collaborative working between health systems and disaster management communities before, during and after a crisis.

In the event of an emergency, establishing an NCD working group under the health cluster has shown potential for improving information sharing on NCDs, and better integration of NCDs into broader coordination mechanisms. (23)

Example

In the current war in Ukraine, NCDs were rapidly identified by the Ministry of Health as a critical unmet need. The Ministry called on the support of international and national organizations (as well as community volunteers), and an NCD technical working group (TWG) was set up under the Health Cluster. NCDs were included in the Public Health Situation Analysis, and early engagement with pharmaceutical industry and professional associations prevented a breakdown in care for diabetes and dialysis patients. The international solidarity of various NGOs has made a significant contribution to continuity of treatment of NCDs in-country, as well as ensuring that refugees from Ukraine were provided with appropriate medical care in host countries.

Recommendations to strengthen emergency coordination for NCDs

Objective

Ensure collaboration between health systems and health emergency communities to enable joint planning for emergency preparedness and service continuity. Ensure that the essential components of care for NCDs that are part of the national UHC benefits package are guaranteed for people living in humanitarian settings.

Recommendations:

- Ensure that NCDs are included both in risk, vulnerability and capacity assessments, and in emergency situation analysis and rapid assessment processes. (23)
- Integrate NCDs into the national health sector response plan in the acute phase of the emergency, and also in the national health strategy/national development agenda within the countrywide recovery plan (including the humanitarian–development–peace nexus (82) and building back better). (59) (73) (83)
- Implement or strengthen national collaborative platforms (such as disaster risk reduction) that convene the health systems and emergency response communities to plan together. Establish a national multisectoral working group (strategic and technical) responsible for addressing NCDs in emergency response. (23) (59)
- Establish an NCD TWG under the country health cluster (84) to improve the focus on people with NCDs; mobilizing implementing partners to ensure coverage for NCD care; flag NCD priorities for other clusters through intercluster coordination (food security and nutrition, shelter and site planning, WASH, protection), including for humanitarian corridors/supply chains. (66)
- Develop operational partnerships with NGOs, professional associations, patient alliances and other stakeholders engaged in NCD prevention, treatment and care to better ensure service continuity and fully take into account the voices and experiences of PLWNCDs. (23) (66)

2.6 Strengthening governance and financing for NCDs in emergencies

Learning

Domestic financing is the main source of funding for NCDs in emergencies, although NCDs are not always integrated in health insurance and other domestic financing mechanisms. Few countries have national-level contingency funds that can be activated for funding additional services during emergencies, including for NCDs. International resource mobilization remains a critical source of financing for acute emergency response in the majority of countries. However, lack of awareness of the burden and impacts of NCDs, and the vulnerability of PLWNCDs in emergencies, means that NCDs are not consistently included in rapid needs assessments, and hence do not feature in the humanitarian response plans that underpin flash appeals for humanitarian funding. As a result, NCDs are frequently under-resourced in the acute phase of emergencies.

In protracted crises, refugees and/or people on the move without legal status may not be included in the UHC benefits packages of host countries. Advocacy for appropriate legislation and respect for the rights of refugees is therefore important to ensure that coverage is truly universal.

Example

In 2017 in Yemen, public sector primary health care was implemented during the conflict, with integrated NCD services. This included the opening of 12 NCD clinics, strengthening the NCD surveillance system using DHIS2, developing and implementing relevant national guidelines and protocols, training and supervising health workers on NCD management using WHO PEN, and raising awareness on risk factors among the population. Efforts to strengthen data capture greatly facilitated funding requests, as well as enabling the national WHO office to provide regular updates to donors on the impact of funding. Over time, this has led to a strong working relationship with donors, enabling the continuation and integration of what was initially a pilot programme into routine service provision.

Recommendations for strengthening governance and finance for NCDs in HEPR

Objective

Update and implement national policies and action plans to ensure that health systems and health emergency communities work together to include NCDs in emergency preparedness, countermeasures, and care delivery in emergencies. Ministries should work with funders to ensure adequate contingency and transitional financing for NCD care in emergency response and recovery.

Recommendations:

- National NCD programmes should ensure that the key care components for core NCDs are included in the EPHS and implemented at primary level, and that this covers the full continuum of care from prevention through to treatment and palliation. National NCD action plans should include emergency/contingency planning.
- Ensure that PLWNCDs are considered as a vulnerable group (with appropriate risk stratification), with NCDs included in national and subnational emergency risk management policies, strategies and legislation as an essential part of health system preparedness and response (including referral pathways for emergency care, cancer treatment and dialysis). (23) (66)
- Ensure regulatory frameworks relevant to NCDs consider needs during emergencies (including drug importation and accreditation of local suppliers), and that legislative measures are in place to ensure that implementing partners can be accredited and that international human resources can be brought into the country as part of surge planning. (23) (85)
- Develop and implement legislation to ensure that refugees, IDPs and people living in humanitarian crises have access to full UHC benefits packages that include long-term NCD care, and that NCD care is integrated into national insurance and other social protection mechanisms. (86)
- Establish a national-level contingency fund that can be activated for additional health sector requirements during emergencies, including NCDs. Ensure that resource mobilization in the acute phase of the crisis includes funds for NCDs services and medicines and NCD surveillance/surveys to quantify needs. Identify early the need for post-emergency funding and ensure proposals make use of evidence-based resources, such as WHO PEN. (23) (66) (77)

Conclusions and call to action

Over the last few years, there has been substantial progress in the integration of NCDs in response to humanitarian crises, both at the level of policy/guidance and at the level of programme implementation. However, considerable opportunities remain to strengthen health emergency preparedness, response and resilience with regard to people living with NCDs. Policies should highlight the vulnerability of PLWNCDs, and national level disaster risk reduction platforms need to bring together health-systems planners and emergency/disaster departments. NCDs should be an important concern not only to health workers, but also to all stakeholders working with refugees, migrants and displaced people.

Strengthening NCD surveillance and health information systems is critical to ensure adequate pre-emergency buffer stocks, accurate and efficient emergency procurement. This also enables applications both for emergency funding and long-term development funding applications.

In the context of emergency response, it is feasible to integrate NCD services even where these were not previously part of the primary care benefits package. This can be done using the WHO NCD kit, often with task-sharing with nonclinical cadres of health worker who can be trained in person, on the phone or online. Digital solutions can also be used to strengthen and expand service delivery.

Finally, engaging and involving people living with NCDs will provide insights that will benefit self–care and improve wider policy. Trust in services and strengthened compliance are improved through community-based workshops, peer support and self-management groups, proximity of services and contact with health workers, language–appropriate medication, and feedback mechanisms through which beneficiaries can influence service delivery.

Box 6: Call to action

WHO calls on governments, humanitarian agencies, funders and development agencies to consider these recommendations in their NCD policies and programmes:

- Development partners should specifically integrate and include resources for NCD prevention and treatment in their development assistance.
- Humanitarian agencies should ensure budget allocation to address NCDs within humanitarian health programmes, engage with national disaster risk reduction initiatives, and support resilience strengthening of health systems.
- Funders should ensure that funding provided for primary and secondary care and service delivery in acute and protracted emergencies integrates NCD prevention and treatment.
- Governments should develop and implement policies to ensure that the particular vulnerability of PLWNCDs is recognized in health system strategies and emergency planning. They should strengthen NCD surveillance and ensure NCDs are included in health information system data. Platforms to improve joint planning between the health systems and emergency communities should also be developed and reinforced.

Finally, and crucially, people living with NCDs should be included in design, planning and implementation of these interventions.

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