

# Models of care for non-communicable diseases for displaced populations in Iraq: A scoping review

## WHAT IS THE ISSUE?

Over the past three decades, disasters, armed conflict or both have led to a major increase in the duration, frequency, and number of people affected by humanitarian crises. Non-communicable diseases (NCDs) have also become far more common in low-and middle-income countries. As a result, there is a growing need to address the chronic care needs of people with NCDs living in humanitarian settings. Historically focused on acute, episodic care, humanitarian actors increasingly acknowledge and adapt to this new reality. However, evidence about how best to address NCDs in these settings remains limited.

## WHAT WE DID

We conducted a scoping review to explore models of NCD care for displaced populations (refugees and internally displaced people (IDPs)) in Iraq and to build evidence to design context-adapted models of care. We systematically searched for peer-reviewed and grey literature referring to models of care for displaced populations in Iraq. A conceptual model of care framework was used to synthesise the data, and the findings were reported according to the PRISMA guidelines for scoping reviews.

## OVERALL FINDING

Our review concluded that (i) there is a lack of evidence on the effectiveness of NCDs models of care for displaced populations in Iraq, (ii) access rates and barriers are highly contextualised and vary across time, location, and crisis phase, (iii) primary level NCD care is critical for equitable access, while private sector providers' contributions play a role, even during the worst humanitarian crises, (iv) patients' perception of care should be a core consideration when designing a model of NCD care.

## RECOMMENDATIONS FOR ACTION

We recommend routinely collecting data and strengthening data evaluation and implementation research capacities of humanitarian and academic actors in Iraq, to harness the existing experience of implementing models of NCD care in Iraq. Future research may focus on the effectiveness of people-centred NCD models of care that address communities' perceptions of care. These efforts could build on the applied model of care framework, which has proven a useful analysis and comparison tool in this review.

## KEY MESSAGES

Addressing the challenge of providing NCD care in humanitarian settings is becoming increasingly urgent. Yet, research and evidence on NCD models of care in humanitarian settings, including in Iraq, remain scant and little is known about the outcomes or effectiveness of different models of care. We emphasise the need for good quality studies on the epidemiological burden of NCDs, improved routine data collection for quality monitoring, further high quality (quasi-) experimental implementation research, and centring the patient voice to learn what works to better care for people living with NCDs in humanitarian settings.



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# Framework for analysing of models of care for NCDs in humanitarian settings

A conceptual framework guided our scoping review. The framework was developed as part of an overarching research programme to assist with data analysis and reporting of heterogenous care models across diverse settings. It is based on an adapted version of the World Health Organization health building blocks, model of care, and high-quality health systems framework.

A description of the specific conceptual framework dimensions was provided in the original publication by Jaung MS, *et al.* (2021).

Access article [here](#)

## OVERVIEW OF REVIEWED EVIDENCE

This review contributed to the wider research programme aiming to improve NCD models of care by assessing the available evidence in Iraq, one of the programme's case studies. It assessed available evidence on models of NCD care for displaced populations in Iraq. Twenty-two articles were included in the study. The model below provides an

overview of the findings and most frequently addressed dimensions. Accessibility was addressed in 17 documents, availability in 15, facility based services in 14, socio-cultural environment in 17, and broader public and humanitarian policy in 3.

## CONTEXTUAL DIMENSIONS

- Socio-cultural environment
- Broader public and humanitarian policy

Most IDPs in Iraq are living in the **host community** (92%) rather than camp-based housing and most are hosted in central Iraq (68%). Most patients are seeking NCD care in the **public healthcare** system.

**Economic stressors and reduced public health system financing** were reportedly forcing displaced families to move to camps while healthcare professionals were likely to increase their private sector work due to salary delays and reductions.

Due to better **medicine availability and mistrust in the public system**, particularly among Syrian refugees, some families seek care from private facilities. Care-seeking patterns are also influenced by **perceptions and misconceptions** of NCDs, such as NCDs being untreatable.

Many documents focused on the **geographical differences** in humanitarian responses and challenging **economic circumstances**.

**Armed conflict** severely impacts living situations, health system capacities and the prevalence of brutality and abuse, aggravating people's stress and often leading to a down prioritization of health concerns.

## HEALTH SYSTEM AND PARALLEL HUMANITARIAN SYSTEM

### FINANCING AND GOVERNANCE



### HEALTHCARE SYSTEM INPUTS

Camp-based populations were referenced chiefly for the **facility and services dimension**, and the primary care-centred approach was most common. **Health workforce**, documents all centred on primary healthcare facilities. **Medicines and equipment** were rarely described, **community-based services** not at all and **health information systems** in one press release. An internal evaluation report of a CARE project referred to **outcome data**.



### RESPONSIVENESS



### FINAL GOAL

### PATIENT DEMAND AND PREFERENCES

**Cost and income, knowledge, education, household or cultural characteristics, and distance to service** were featured factors for the patient demands and preferences dimension. Two studies broadly mentioned the influence of wealth on access to care—none mentioned **education**.

### INTERMEDIATE GOALS

Few dimensions of the **quality** domain were addressed. A common theme was **integration and continuity**. **Clinical quality** was only described by one document. **Access and coverage** (accessibility, availability and affordability mainly) were discussed most frequently and in-depth. **Availability and affordability** focused almost exclusively on medicines, with few on healthcare services and equipment. **Patient experience** focused on preferred branded medicines and mistrust in Iraq's public health system, the **high workload of healthcare professionals** and the lack of consultation time for patient education. **Responsiveness** issues included varying opening times, the limited space in mobile clinics and the potential of cash-based assistance for increasing engagement. **Safety** is not mentioned in any reviewed document.

# Non-communicable diseases in humanitarian crises

Worldwide, close to a billion people live in fragile and conflict-affected contexts, and this number is expected to grow.<sup>1</sup> Among those impacted globally, it is estimated that 274 million people need humanitarian assistance and protection.<sup>2</sup> Many of these individuals live with NCDs such as diabetes and hypertension.

## Partnering for Change

In 2018 the International Committee of the Red Cross, the Danish Red Cross and Novo Nordisk formed a partnership to tackle the growing issue of NCDs affecting millions of people in humanitarian crises worldwide. The collective vision of the partnership is that all people affected by

humanitarian crises should have access to the NCD care they need, no matter where they are. The partnership is supported by the London School of Hygiene & Tropical Medicine (LSHTM), the lead academic partner.

To realise the vision of the partnership, we conduct research and needs assessments, develop patient materials, and carry out field projects and joint advocacy initiatives. We are currently working in Lebanon and Iraq, implementing and adapting innovative models of care.

**For more information about Partnering for Change,** visit [www.humanitarianNCDaction.org](http://www.humanitarianNCDaction.org)

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**1.** World Bank. Data: Population, total – Fragile and conflict affected situations. <https://data.worldbank.org> **2.** UNOCHA. Global Humanitarian Overview 2022. UNOCHA. <https://gho.unocha.org>

## London School of Hygiene & Tropical Medicine (LSHTM)

The Centre for Global Chronic Conditions at the London School of Hygiene and Tropical Medicine (LSHTM) aims to improve the understanding of and responses to chronic conditions in order to improve the health and health equity of people worldwide. The Centre is made up of a group of researchers from multiple disciplines (including epidemiology, economics, social-political sciences and health systems). We work in low-, middle- and high-income country settings, including with vulnerable populations during humanitarian crises and with migrant populations. The Centre includes a **Special Interest Group on NCDs in Humanitarian Settings**, which hosts a knowledge hub on the topic.

More information about the hub can be found [here](#)

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