ABSTRACT

Objective: The circumstances of people living in refugee camps means that they have distinct medical care requirements. Our objective is to describe clinical guidance in published WHO guidelines that refer to people living in refugee camps; and how evidence and context are used and reported in making recommendations.

Design: Systematic review and analysis of WHO guidelines approved by the organization’s quality oversight body and published between 2007 and 2018. We sought for key terms related to camps and humanitarian settings, and identified text that included guidance. We compared this to Médecins Sans Frontières (MSF) guidelines.

Results: No WHO guideline published in the last 10 years focused exclusively on clinical guidance for healthcare in camp settings. Seven guidelines contained guidance about camps; three made recommendations for camps—but only two used formal evidence summaries. We did not find any structured consideration of the situation in camps used in the decision-making process. We examined seven WHO guidelines and six chapters within guidelines that concerned humanitarian settings: none of these documents contained recommendations based on formal evidence summaries for camp settings. One of the eight MSF guidelines was devoted to clinical care in refugees and the authors had clearly linked the health problems and recommendations to the setting, but this guideline is now >20 years old.

Conclusions: There is an absence of up-to-date, evidence-based medical treatment guidelines from WHO and MSF that comprehensively address the clinical needs for people living in camps; and there is no common framework to help guideline groups formulate recommendations in these settings. WHO may wish to consider context of special populations more formally in the evidence to decision-making approach for clinical guidelines relevant to primary care.

INTRODUCTION

Worldwide, 8.7 million people are living in temporary communal settlements in 61 countries. In recent years, the influx of refugees from countries such as Syria affected by civil war or conflict into bordering countries and into Europe has garnered international attention on the ongoing crisis. There may be even more people living in temporary communal settlements given the ongoing crises in Syria and Myanmar, the sociopolitical stigmatisation of camps and the absence of good quality location data.

These temporary communal settlements include planned camps put in place by national governments or international agencies; self-settled camps developed by affected populations; transit camps used by people travelling through a country or region; and collective centres—where an existing building is repurposed. Refugees have international protection under the 1951 Refugee Convention and its 1967 Protocol.

Although 26.4 million people of concern are recorded as living in individual accommodation, 8.7 million still live in planned camps, self-settled camps, transit camps and collective centres. There are also a large number of people of concern whom location of accommodation is unknown (19.8 million) according to United Nations High Commissioner for Refugees (UNHCR).

For simplicity, all temporary communal settlements will be referred to as ‘camps’ in this paper. While people living in camps have varying status according to the United Nations, they are labelled as ‘people of concern’ (table 1). The table outlines definitions used in the paper for people of concern, drawing on UNHCR and Amnesty International.

People living in camps face a range of health, social and environmental hazards...
that can impact their well-being. For example, poor water and sanitation, food insecurity, lack of essential medications, loss of primary caregivers and exposure to extreme temperatures. Overcrowding combined with poor vaccination coverage contributes to the risk of infectious disease outbreaks. Forced displacement, violence, rape and loss of family members all contribute to mental health problems. People are often vulnerable and poor, which contributes to the risk of sexual abuse and domestic violence. This results in people with a wide variety of health problems. People are often vulnerable and poor, which contributes to the risk of sexual abuse and domestic violence.

The personal experience of two of the authors (HB, SN) was that national guidelines were often ill-fitting, volunteer providers from different countries felt inexperienced in managing these patients, and global guidelines—such as those issued by WHO—did not take the context into account.

For both WHO and MSF guidelines, we sought guidance about people in camps by free-text searching for 15 key terms: ‘emergency’, ‘conflict’, ‘disaster’, ‘humanitarian’, ‘war’, ‘asylum’, ‘displaced’, ‘forcibly’, ‘refugee’, ‘migrant’, ‘returnee’, ‘stateless’, ‘camps’, ‘settlement’ and ‘temporary’. We examined each occurrence of these key terms to establish if they were being used in reference to a camp setting, humanitarian setting, and if explicit guidance was being provided to the reader.

Guidelines containing only comments about affected populations or cross-references to other guidelines were excluded at this step. The guidance that explicitly addressed camp settings was then described. We sought recommendations that explicitly drew on formal evidence summaries; and we sought guidance statements where a course of action was proposed, but without reference to formal evidence summaries. We sought initially to divide other guidance statements into ‘good practice’ (recommendations without explicit consideration of the evidence, usually when the authors assume high net benefit supported by a large body of indirect evidence).

### METHODS

Our inclusion criteria were all WHO guidelines approved by the Guidelines Review Committee (GRC), the internal quality assurance body established in 2007 to ensure that WHO guidelines are trustworthy and have optimal impact.

We included the most recent versions of approved guidelines, and only those published in English. We contacted the GRC to ensure we had a complete set of all guidelines. MSF guidelines are widely used and recognised as a benchmark in camp and humanitarian settings, so we drew on these as a comparator. MSF guidelines were identified through the MSF website and their online repository of guidelines.

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statements based on ethics principles or human rights; or into guidance about implementation and delivery, but these categories were not possible to identify.

For each recommendation that explicitly drew on formal evidence summaries, we evaluated whether these recommendations were linked to evidence synthesised using the GRADE framework. GRADE is a transparent system used to develop and present summaries of evidence in order to make robust clinical practice recommendations, and is generally required for WHO guidelines.8

Patient and public involvement

The question for the evaluation arose out of practical experience providing medical care in camps (SN) and whether the care, and the guidance of health professionals matched the needs of these vulnerable groups. Refugees, patients or the public were not involved in the design of this research.

RESULTS

The search results are displayed in figures 1 and 2 (screening of WHO and MSF guidelines), table 2 (WHO guidelines that refer to camp settings and propose a course of action) and table 3 (topics covered in WHO guidelines that refer to humanitarian settings).

WHO guidance for camp settings

Out of 222 GRC approved WHO guidelines, there were none dedicated exclusively to camp settings. Seven WHO guidelines on specific topics provided explicit guidance for the care of people living in camps (table 2).

Three of these seven guidelines included recommendations for camp settings, two guidelines on tuberculosis (TB) contained evidence-based recommendations (table 2). One TB guideline12 included evidence-based recommendations using the GRADE system to assess the evidence; a single study to support one recommendation; and another recommendation was transplanted from other WHO guidelines. The single evidence-based recommendation in the other TB guideline used a GRADE system which included a study carried out in a refugee camp to inform the acceptability of screening for the detection of active TB.13 One paediatric guideline contained a recommendation that was not linked to a formal appraisal of evidence.14

MSF guidelines

There were eight MSF guidelines published between 1997 and 2018 that met our inclusion criteria (online supplementary annex 1). One guideline was dedicated to healthcare professionals delivering care in refugee settings, including camps15 it is over 20 years old. This guideline was designed to be practical for use in the field, and throughout the manual made reference to the particular conditions, for example, in explaining the problems faced and in formulating the recommendations. For example, with measles vaccination, the authors make clear this is an absolute priority, irrespective of the presence of cases; that high coverage must be maintained, and cases immediately assessed; and any outbreak needs review of strategies.

Measles is one of the most severe health problems throughout the world, killing 1 in every 10 children affected in developing countries. Displacement, overcrowding and poor hygiene in the camps are all factors that encourage the emergence of very large-scale epidemics. In Tuareg refugee camps in Mauritania, a survey over a five month period in 1992 showed that 40% of childhood deaths were due to measles as a result of insufficient immunization. The mass vaccination of children from 6 months to 15 years old should always be an absolute priority during the first week, and can be conducted together with the distribution of vitamin A.15

For MSF, in addition to the refugee health manual,15 we found four guidelines published between 2006 and 2018 which provide some guidance for people living in camp settings within the text. These concerned communicable diseases (management of a measles epidemic, with specific advice on vaccine regimens in the camp.
### Table 2  WHO guidelines that refer to camp settings and propose a course of action

<table>
<thead>
<tr>
<th>Guideline</th>
<th>Type of statement</th>
<th>Specific text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter-agency field manual on reproductive health in humanitarian settings20</td>
<td>Several guidance statements</td>
<td>For example, ‘Every maternal death that occurs within a refugee camp should be recorded’; or ‘Provide context for all reported data. If known, and safe to do so, provide information on the camps/clinics/districts from where the cases are reported. Be specific, for example, ‘reported cases from X number of health facilities’’.</td>
</tr>
<tr>
<td>Manual for healthcare of children in humanitarian emergencies31</td>
<td>One guidance statement</td>
<td>‘Vulnerable groups of children should be located in a safe place in the camp’ (a recommendation for the prevention of HIV infection after the acute phase of an emergency).</td>
</tr>
<tr>
<td>Systematic screening of active TB22</td>
<td>Recommendations based on evidence summaries (uses GRADE)</td>
<td>‘Migrants including refugees and immigrants from high burden settings are considered as part of community screening. Community screening can be done by systematically screening individuals in shelters, refugee camps and other specific locations’.</td>
</tr>
<tr>
<td>TB infection control in healthcare facilities, congregate settings and households23</td>
<td>Recommendations based on evidence summaries (uses GRADE)</td>
<td>‘To decrease TB transmission in congregate settings, cough etiquette and respiratory hygiene, and early identification, followed by separation and proper treatment of infectious cases should be implemented’ (Strong recommendation, low quality of evidence).</td>
</tr>
<tr>
<td>One recommendation taken from another WHO guideline published prior to the establishment of the GRC</td>
<td></td>
<td>‘Directly observed therapy (DOT) while a patient is on treatment is also recommended’ linked to The Stop TB Strategy: building on and enhancing DOTS to meet the TB-related millennium development goals.24</td>
</tr>
<tr>
<td>One recommendation based on a single study</td>
<td>Recommendation to screen people for TB prior to entering a congregate setting, based on a study in a correctional facility in Singapore.25</td>
<td></td>
</tr>
<tr>
<td>Numerous guidance statements</td>
<td></td>
<td>For example, ‘In any congregate settings, overcrowding should be avoided’.</td>
</tr>
<tr>
<td>Pocket book of hospital care for children26</td>
<td>One recommendation with no supporting evidence summary</td>
<td>‘The extra measles dose is also recommended for groups at high risk of death from measles, such as infants in refugee camps, infants admitted to hospitals, HIV positive infants and infants affected by disasters and during outbreaks of measles’.</td>
</tr>
<tr>
<td>Infant and young child feeding27</td>
<td>Several guidance statements</td>
<td>For example, ‘Shelters for families should be provided in preference to communal shelters. Breastfeeding women need private areas (as culturally appropriate) at distribution or registration points, and rest areas in transit sites’.</td>
</tr>
<tr>
<td>Community based rehabilitation guidelines28</td>
<td>Several other guidance statements</td>
<td>For example, ‘Provide advice and assistance to humanitarian stakeholders to make temporary shelters accessible to people with disabilities’.</td>
</tr>
</tbody>
</table>

A "recommendation based on evidence summaries" is defined as a statement supported by a formal appraisal of the evidence

Other "guidance statements" make recommendations with no link to evidence appraisal (statements about good practice, or in line with ethical principles and human rights, or notes on how to deliver care).

**WHO guidance for humanitarian settings**

We were surprised not to identify any specific guidelines from WHO related to camps. We therefore expanded our analysis to include humanitarian settings—the context in which camps most commonly arise. Of the 222 guidelines in this cohort, 13 included guidance applicable to humanitarian settings. Six of these guidelines were wholly...
concerned with the humanitarian setting, while the remaining seven included a specific chapter. The clinical areas covered by these thirteen guidelines are summarised in table 3. A further 23 WHO guidelines contained guidance in the form of a paragraph or sentence related to humanitarian situations. None of these guidelines or guideline chapters presented information as to how they were adapted for humanitarian settings. These are listed in online supplementary annex 1.

**DISCUSSION**

The study includes guidelines that have been developed prior to the formal evidence to decision-making approaches developed as part of GRADE, which were published in 2016. While transparent evidence to decision-making taking context into account has been happening for much longer than this, the formal publication of these procedures occurs after some of the guidelines we had reviewed. Even so, it is important to note how ad hoc and unsystematic are the approaches in the WHO guidelines to considering the needs and circumstances of vulnerable groups, including refugees and people living in camps.

While the topic for our analysis is refugees in camps, refugees and displaced people are sometimes more highly dispersed. We maintained the intended analysis on this particular vulnerable group for two reasons: first, there remain large camps worldwide and acute care for these groups are important; and second, their circumstances are more clearly defined, and allow clearer thinking related to context that providers need to take into account in evidence to decision-making guideline processes.

MSF provides a manual for primary care in refugee settings which carefully identifies priorities, recommendations and implementation notes that take into account the camp setting, but this document is 20 or more years old. In all the current WHO guidelines, camps are mentioned only in passing. Camps appeared to be an incidental afterthought during guideline writing, or the authors felt they should underline healthcare needs in refugee settings without providing explicit guidance. There is no attempt to explicitly identify priority clinical conditions in camps or to evaluate medical options in the light of the circumstances. The applicability of evidence in other settings needs to be explicitly considered, along with the feasibility and acceptability of various treatment options in the formulation of recommendations.

WHO guidelines and chapters related to humanitarian crises do not make specific recommendations for camp settings; nor does the topic coverage in humanitarian crises appear to be strategic. There are, however, more comprehensive efforts in reproductive and child health, and in TB and malaria.

Developing global evidence-based guidance for people living in camp settings is challenging, owing to the diversity of settings and populations. It cannot be assumed that systematic reviews from general populations can simply be directly applied to camp and humanitarian settings. However, what is needed is more thoughtful and tailored guidelines that encompass common considerations and features of the camp environment when addressing priority health conditions. For example, we propose that the considerations listed in table 4 are a starting point when formulating recommendations focused on individual care, the camp environment or health services delivery.

| Table 3 Topics covered in WHO guidelines that refer to humanitarian settings |
|---------------------------|---------------------------------------------------------------|
| **Topic**                | **WHO guideline**                                             |
| Sexual and reproductive health | Inter-agency field manual on reproductive health in humanitarian settings (2010 revision) |
| Mental health            | Guidelines for the management of conditions specifically related to stress and MhGAP module assessment management of conditions specifically related to stress (2010) * |

*Chapter on humanitarian settings in a general guideline.
CONCLUSION

There is a need for current, evidence-based guidelines from WHO and MSF that provide explicit guidance tailored for managing common conditions in people living in camps. We propose that in their planning stage, all new WHO guidelines should consider whether recommendations to camps and humanitarian settings more broadly are relevant to the guideline topic, and if so, how the recommendations for more general populations might need to be adapted to these settings.

Second, guideline methodologists should urgently develop, implement and evaluate modified evidence-to-decision-making frameworks relevant to camps and humanitarian emergencies. Finally, WHO or another international agency should consider curating guideline collections across health topics relevant to the camp context, with appropriately adapted recommendations and guidance.

Contributors SN and PG originally conceived the project. RM and HJB developed the initial concept; all authors developed the question. HJB led the data extraction methods and analysis working with RM. All authors contributed to the analysis and writing of the paper.

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Competing interests PG was a methods adviser to the WHO Malaria Treatment Guidelines Committee up to 2018; is a member of the GRADE Guidance Group, concerned with developing methods for transparent guideline development. SLN is the WHO Scientist in charge of the WHO Guidelines Review Committee; she is also an active member of the GRADE Working Group.

Patient consent for publication Not required.

Provenance and peer review Not commissioned; externally peer reviewed.

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REFERENCES


Table 4  Factors to consider when planning a guideline for people living in camp settings to guide topics, evidence synthesis and the formulation of recommendations

<table>
<thead>
<tr>
<th>Level</th>
<th>What might be different</th>
<th>Questions to consider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>Camp occupants come from a variety of backgrounds with differing experiences of healthcare.</td>
<td>Has their previous occupation and experience with healthcare been considered?</td>
</tr>
<tr>
<td></td>
<td>Camp occupants are away from their social and cultural homes.</td>
<td>Are there important cultural or religious values or norms (held by the individual, their family or their close social network) that may influence their condition, their perception of their condition, or the acceptability of care being offered?</td>
</tr>
<tr>
<td></td>
<td>Camp occupants may have often been subject to multiple, traumatic, stressful and threatening life-events—because of displacement or migration.</td>
<td>Are people injured physically or mentally because of their forcible displacement? How will this affect their acceptance of care being offered? How will the psychological trauma influence their well-being, perceptions of illness and behaviour?</td>
</tr>
<tr>
<td>Camp environment</td>
<td>Camps may be unsafe and unstable.</td>
<td>Has the camp environment been considered in relation to the condition they are presenting with, the feasibility, acceptability and likely adherence to the treatment offered?</td>
</tr>
<tr>
<td></td>
<td>The conditions in camps (water, living conditions, density, food insecurity) are likely to influence the spread of disease and predispose to common illnesses.</td>
<td>Is the recommendation feasible? Does it take these conditions into account?</td>
</tr>
<tr>
<td>Healthcare systems</td>
<td>Availability of services and drugs may vary. Health provider and staff expertise will vary; they may be from a different culture. They may speak a different language.</td>
<td>Do the recommendations consider alternatives? Are the recommendations simple and easy to communicate? Are notes provided about how culture may influence what you might ask or how people might respond?</td>
</tr>
<tr>
<td>National context</td>
<td>National laws may restrict some medical interventions (eg, abortion).</td>
<td>Does the guideline flag this to the provider?</td>
</tr>
</tbody>
</table>

Patient consent for publication Not required.


13. WHO. Systematic screening for active tuberculosis - principles and recommendations, 2013


