Health system governance in settings with conflict-affected populations: a systematic review

ABSTRACT

Health system governance has been recognised as critical to strengthening healthcare responses in settings with conflict-affected populations. The aim of this review was to examine existing evidence on health system governance in settings with conflict-affected populations globally. The specific objectives were: i) to describe the characteristics of the eligible studies; ii) to describe the principles of health system governance; iii) to examine evidence on barriers and facilitators for stronger health system governance; and iv) to analyse the quality of available evidence. A systematic review methodology was used following PRISMA criteria. We searched six academic databases, and used grey literature sources. We included papers reporting empirical findings on health system governance among populations affected by armed conflict, including refugees, asylum seekers, internally displaced populations, conflict-affected non-displaced populations and post-conflict populations. Data were analysed according to the study objectives and informed primarily by the Siddiqi et al. (2009) governance framework. Quality appraisal was conducted using an adapted version of the Mixed Methods Appraisal Tool. Of the 6,511 papers identified through database searches, 34 studies met eligibility criteria. Few studies provided a theoretical framework or definition for governance. The most frequently identifiable governance principles related to participation and coordination, followed by equity and inclusiveness and intelligence and information. The least frequently identifiable governance principles related to rule of law, ethics and responsiveness. Across studies, the most common facilitators of governance were collaboration between stakeholders, bottom-up and community-based governance structures, inclusive policies, and longer-term vision. The most common barriers related to poor coordination, mistrust, lack

of a harmonised health response, lack of clarity on stakeholder responsibilities, financial support, and donor influence. This review highlights the need for more theoretically informed empirical research on health system governance in settings with conflict-affected populations that draws on existing frameworks for governance.

INTRODUCTION

In 2020, there were 56 active armed conflicts worldwide (Peace Research Institute Oslo, 2020). While definitions of armed conflict are contested, it has commonly been defined as involving armed force that results in more than 25 battle-related deaths per year (Heldt, 1992). The severity of the impact of armed conflicts on civilian populations clearly varies substantially between different contexts depending on the nature of the conflict and the contextual, socio-economic and epidemiological characteristics (Checchi *et al.*, 2007). Conflict-affected settings include areas where active armed conflict is occurring, areas hosting populations forcibly displaced by the conflict, and post-conflict settings which can be understood as settings in the transitional period following war and before peace (Cunningham, 2017). Conflict-affected populations can include those remaining in the areas of conflict, forcibly displaced persons such as internally displaced persons (IDPs) who remain within their country of origin and refugees and asylum seekers who have left their country of origin, and those living in post-conflict settings.

Armed conflict has a major, long-term impact on health systems. Health facilities may be damaged by being deliberately targeted or as "collateral damage" (Iqbal, 2010; Levy and Sidel, 2016). Health workers may be killed, injured or may have to flee (Birch and van Bergen, 2019). The availability of essential medical supplies may also be disrupted (Muyinda and Mugisha, 2015). Demand for healthcare is likely to simultaneously increase due to the rising burden of injuries and illness from the direct and indirect effects of conflict (Debarre, 2018; Garry and Checchi, 2020). The presence of displaced conflict-affected populations may increase pressure on often already stretched host health services and systems (Lafta and Al-Nuaimi, 2019; Odhiambo *et al.*, 2020). In high-income settings, health systems need to adapt to be responsive to the health needs of refugees and asylum seekers.

Those responsible for managing health services for conflict-affected populations often have to adapt to a new and more complex organisational landscape involving new bilateral and multilateral actors such as humanitarian NGOs, UN and donor agencies with different missions, mandates and agendas (Alexander, Darcy and Kiani, 2013; Barnett, 2013; Akl *et al.*, 2015; Debarre, 2018). This can result in poorly coordinated and fragmented responses, services and systems; the diversion of financing and expertise away from host governments; the undermining of national strategic plans; and the marginalisation of existing leadership structures (Bennett, Foley and Pantuliano, 2013; Humphries, 2013; Tan and von Schreeb, 2015; Colombo and Pavignani, 2017; Spiegel, 2017; Elshazly, Alam and Ventevogel, 2019). Although steps have been taken to reduce these challenges, in particular implementation of the Humanitarian Cluster Approach in 2005, these challenges remain (Spiegel, 2017) and confusion continues over roles, responsibilities, and accountability (Hill, 2011; Jarrett *et al.*, 2021). Recognition of these ongoing problems has occurred at global events like the World Humanitarian Summit in 2016, where there was a specific focus on improving outcomes for people in humanitarian emergencies. This momentum in recent years has led to recommendations to move away from shorter-term humanitarian crisis management approaches to longer-term, development-oriented approaches. This involves greater engagement with health systems and national governments, and strengthened coordination between different actors (World Bank Group, 2017).

Health system governance is recognised as essential for improving coordination, accountability, leadership, and performance of health care responses. The World Health Organization (WHO) describes health system governance as “ensuring strategic policy frameworks exist and are combined with effective oversight, coalition-building, the provision of appropriate regulations and incentives, attention to system-design, and accountability” (World Health Organization, 2007). Health system governance

has been commonly framed around governance principles (also referred to as functions, domains, components or elements in the literature) (Pyone, 2017; Barbazza & Tello, 2014). While there are many health systems governance principles referred to in the literature, they broadly address: accountability, partnerships, policy/strategy, information/intelligence, capacity, participation and consensus, regulation, and transparency (Barbazza and Tello, 2014; Pyone, Smith and van den Broek, 2017). The concept of humanitarian governance is also relevant for health systems in settings with conflict-affected populations because of the role of humanitarian actors (including NGOs and UN agencies) in responding to crises. Definitions of humanitarian governance stress the role of humanitarian action as an "organized and internationalized" means of responding to human suffering (Barnett, 2013). Humanitarian governance and health system governance do overlap, but sometimes humanitarian governance mechanisms create parallel systems and involve a different range of actors.

Health system governance is especially important in settings with conflict-affected populations given the complexity created by multiple actors and commonly cited challenges of leadership, coordination, accountability, and performance (Hilhorst, Desportes and de Milliano, 2019; Jarrett *et al.*, 2021). However, to the best of our knowledge, there has been no systematic examination of health system governance in settings with conflict-affected populations. This systematic review aims to examine the existing evidence on health system governance in settings with conflict-affected populations globally. The specific objectives are to: i) describe the characteristics of eligible studies; ii) describe the principles of health system governance; iii) examine evidence on barriers and facilitators supporting health system governance; and iv) analyse the quality of available evidence.

METHODS

We followed the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) standards for conducting and reporting of systematic reviews (Moher *et al.*, 2009). The main health system governance framework informing our systematic review was that by Siddiqi et al. (2009). We selected this framework as it: (i) assesses the governance of the health system at different levels (national, district, facility); (ii) is tailored to health systems in low- and middle-income countries; (iii) has been widely used in empirical research studies; and (iv) aligns with common governance principles used in other frameworks (Barbazza and Tello, 2014). The Siddiqi framework consists of 10 principles (or "domains"): strategic vision, participation and coordination, rule of law, transparency, responsiveness, equity and inclusiveness, effectiveness and efficiency, accountability, intelligence and information, and ethics. The definitions of these terms are reproduced and adapted from Siddiqi et al. (2009) in Table 1. We adapted this Siddiqi framework inductively in two ways to incorporate themes that emerged during extraction. Firstly, we added 'formulation and implementation of policies and strategic plans' from the WHO list of governance functions (WHO, 2014). There was overlap between the components identified by Siddiqi et al. and the functions listed by WHO except for the area of policy, so we incorporated this aspect to be more comprehensive. Secondly, we incorporated the concept of "coordination" within the Siddiqi principle of "participation and consensus orientation", and renamed this concept: "participation and coordination". Coordination is particularly important in humanitarian settings, where multiple actors are involved in responding to crises, so it was important to explicitly include this aspect of governance in our analysis. Moreover, these adaptations best responded to the themes that were emerging from the extracted data. Throughout the study, we included studies that addressed health system governance directly or indirectly by addressing one or more governance principles.

Data sources and search terms

We searched six academic databases (Medline, Embase, PsycINFO, Global Health, Web of Science, and Academic Search Complete) in October 2020. The database search incorporated three components: (i) armed conflict/forced displacement; (ii) health, and (iii) health system governance. The search terms for health system governance were based on the Siddiqi framework, as explained in the previous paragraph. Online Annex 1 outlines the general terms used in the database search and Online Annex 2 outlines the additional subject matter terms used for each database. Our search terms related to populations were those affected by conflict and forced displacement resulting from conflict, and so we did not include generic terms for migration of populations in our search, such as migrant/migration. We supplemented the academic database search with a search of Google Scholar and searched for grey literature using Google applying the following three search strings: "refugee" AND "health" AND "governance"; "forced displacement" AND "health" AND "governance"; and "humanitarian" AND "health" AND "governance". Results for Google and Google Scholar were limited to the first 200 hits per search, browsing data was cleared after each search and the searches were conducted without signing into Google, in order to prevent results being influenced by location and search history (Piasecki, Waligora and Dranseika, 2018). We also searched the reference lists of included papers and websites of key agencies such as WHO and Active Learning Network for Accountability and Performance (ALNAP), but these searches did not register further papers.

Eligibility criteria

The eligibility criteria are provided in Table 2. Our population of interest was populations affected by armed conflict (as defined by the authors of papers), including refugees, asylum-seeking populations, IDPs and host populations as well as non-displaced entrapped populations. Post-conflict populations were also included, based on the definition stated earlier in the paper and on how authors described their study settings. We did not use any date restrictions or restrictions related to the study country in

our eligibility criteria. Health system governance needed to be directly or indirectly referenced in the paper, including mentioning principles related to health system governance. Studies were included if they directly used the term 'governance', or indirectly by not specifically using the term governance, but addressing one or more of the governance principles in the Siddiqi et al. framework or referring to governance as per the WHO definition (2007). We took this broad approach to governance to capture relevant information on the quality/level of governance. Our study included primary research studies (both academic and grey literature). The inclusion and exclusion criteria were piloted first and iterated before being finalised.

Study screening

A group of co-authors (BLINDED FOR REVIEW) and an additional researcher double screened all articles in two stages using Covidence. In the first stage we screened titles and abstracts based on the inclusion criteria in Table 2, with 98% agreement between reviewers. Any conflicts were discussed in weekly meetings. In the second screening stage, a smaller group (BLINDED FOR REVIEW) and an additional researcher conducted a full-text review and held weekly meetings to discuss conflicts and reach consensus.

Data extraction and analysis

For each article, a group of co-authors (BLINDED FOR REVIEW) used Covidence software to extract data for four main fields. First, general information: author, title, year, journal, country where the study was conducted, conflict-affected population type. Second, study characteristics: article aim, link between aim and health system governance, study design, methods, participants, sample size. Third, health system governance: a) conceptual framing of governance; b) level of health system; c) relevant health system building blocks apart from leadership/governance (i.e. service delivery, health workforce, health

information systems, access to essential medicines, financing); d) level of governance content; e) principles/functions of governance emerging from the findings; and f) key findings on governance. To support this, we applied the health system governance framework of Siddiqi et al. (2009), but adapted it to reflect additional key findings in our analysis (e.g., including coordination along with the participation principle, and adding a key function of Formulation and implementation of policies and strategic plans). Fourth, any other findings, including on gender, recognising how gender inequality influences governance.

Within the extraction section on governance, reviewers classified studies based on what level of health governance was being discussed: governance of the overall health system, governance related to a programme or service (e.g., related to organisational implementation), or governance of a humanitarian response (e.g., related to the cluster system). We rated the level of detail on governance within the findings and discussion. There were three possible ratings: "Very weak" included brief/vague references that could be linked to governance; "Moderate" included only brief descriptive information on governance functions or principles; and "Good" included detailed analysis of findings on governance functions or principles.

For the quality appraisal, we used an adapted version of the Mixed Methods Appraisal Tool (MMAT) (Hong *et al.*, 2018) that assesses the methodological quality of different types of research studies (qualitative, quantitative and mixed methods). This tool includes two general screening questions, as well as specific quality assessment questions for each type of study design. We adapted the tool and removed the "can't tell" option, thereby limiting options to yes/no. Details on the MMAT tool can be found in Online Annex 3.

A smaller group of co-authors (BLINDED FOR REVIEW) conducted a narrative synthesis. We reviewed the extracted data to ensure each finding was classified according to our extended list of governance principles (see Table 1), and their barriers and facilitators. We analysed the main findings under each governance principle, synthesising across studies to identify key themes and similarities and differences between studies. We conducted thematic analysis within each principle based on barriers and facilitators. Recommendations made by study authors to improve governance were also extracted as part of the data synthesis, but presented separately from the observed empirical findings.

FINDINGS

The results of the screening process are provided in Figure 1. Our search returned 6,511 results, of which 2,788 were duplicates, leaving 3,723 unique records for screening. During the title/abstract screening, 3,605 records were excluded because they did not meet the inclusion criteria. In addition to the academic database search, we identified 12 further unique records using Google Scholar (n=10) and Google (n=2) that were deemed eligible for full-text review. During the full-text review of papers identified in databases, 118 articles were reviewed and 85 were excluded. Studies were excluded for not being the right publication type, not focusing on governance and not being focused on conflict-affected populations. Of the records identified through Google Scholar and Google, 11 were excluded, leaving one paper, which was from an academic journal. In total, 34 articles were included in the review (see Table 3 for list of eligible studies).

Study characteristics

Eligible studies were published between 2005 and 2020, with 68% (23 papers) published in the last five years. Nearly one-third of eligible studies (n=12) were conducted in Africa, followed by the Middle East (n=7), Europe (n=6), the Asia-Pacific (n=4), North America (n=1) and South America (n=1). Three studies were conducted across multiple regions, while one study did not state its geographical focus. Of all eligible studies, 32 were qualitative studies and two used mixed methods. In total, 12 studies focused on refugee/asylum seeking populations, 2 focused on IDPs, 4 focused on a mix of refugees or IDPs with host populations, 5 focused on populations in post-conflict settings, 3 focused on non-displaced conflict-affected or entrapped populations, and 8 focused on multiple populations. The review thus reflects findings from studies on displaced populations rather than host populations. While the majority focused broadly on health systems and policies, two focused on specific conditions including sexual and reproductive health (Cignacco *et al.*, 2018; Amodu *et al.*, 2020), two on mental health and psychosocial support (Zwi *et al.*, 2011; Wylie *et al.*, 2020), one on newborn care (Sami *et al.*, 2018), one on infectious diseases (Bozorgmehr *et al.*, 2019), one on sleeping sickness (Palmer, Robert and Kansiime, 2017), and one on nutrition (Rossi *et al.*, 2006).

Quality of the evidence

We assessed the methodological quality of the evidence using the MMAT tool (Hong *et al.*, 2018). Most studies (86%) were considered to have clear research questions/objectives and the collected data were based on the research questions. All studies used an appropriate research approach and 94% used suitable methods to address their research objectives, i.e. qualitative or mixed methods. Further, 94% of studies were assessed as deriving their findings from the data. Most qualitative studies (91%) in our review were considered by our team as coherent in terms of data collection, analysis and interpretation. Finally, one of the two mixed methods studies fulfilled the requirement to explain how the qualitative and quantitative criteria in MMAT was met. Full quality appraisal findings are presented in Annex 3.

Health system governance

Studies were classified according to content related to governance in the findings and discussion. Overall 10 studies were classified by the research team as having "very weak" content on governance, 20 studies were classified as "moderate", while five studies were classified as "good" (Ruano, 2013; Jones, Howard and Legido-Quigley, 2015; Sami *et al.*, 2018; Chuah *et al.*, 2019; Douedari and Howard, 2019). Of the five studies classified as "good", only one specifically referred to governance in the aim, research questions, or objectives (Chuah *et al.*, 2019), and only one provided a theoretical framework or definition for governance (Douedari and Howard, 2019). Of the 34 eligible studies, only three provided a theoretical framework or definition for governance: Aembe & Dijkzeul (2019) drew on Barnett's definitions of humanitarian governance, Cometto and colleagues (2010) used the concept of stewardship, and Douedari & Howard (2019) used the UK Department for International Development's definition of governance as well as the Siddiqi et al. (2009) framework.

References to "good governance" within included papers were minimal despite a focus on the quality of governance within existing literature (Siddiqi *et al.*, 2009; Brinkerhoff and Bossert, 2014; Dijkstra, 2018). Among papers with the highest level of governance content, two referenced good governance. One observed that good governance is linked to conflict prevention, development and poverty reduction (Douedari and Howard, 2019), and the other grouped good governance and good leadership with transparency and accountability, suggesting these are important for health system strengthening and trust-building (Jones, Howard and Legido-Quigley, 2015). Among studies with 'moderate' content on governance, one referred to good governance, suggesting donors seek to introduce elements of good governance into health systems (Aembe and Dijkzeul, 2019). No studies with 'poor' content on governance referenced good governance.

Overall, 20 studies explored governance at the health system level in general, while 11 studies explored the governance of a programme or service; many studies in both categories also reflected on the governance of the humanitarian response. Four studies focused explicitly on the governance of the humanitarian response (Rossi *et al.*, 2006; Parmar *et al.*, 2007; Olu *et al.*, 2015; Cailhol, Gilson and Lehmann, 2019).

All but one study addressed multiple governance principles. The most frequently occurring principle was participation and coordination (29 studies), followed by effectiveness and efficiency (17 studies), equity and inclusiveness (16 studies), intelligence and information (14 studies), formulating policies and strategic plans (13 studies), strategic vision (12 studies), accountability (11 studies), transparency (8 studies), rule of law (5 studies), ethics (4 studies) and responsiveness (3 studies). This is displayed in Figure 2. Overall, one study covered just 1 principle, seven studies covered 2 principles, nine studies covered 3 principles, six studies covered 4 principles, eight studies covered 5 principles, eleven studies covered 6 principles and one study covered 10 principles.

We also examined other health system blocks that the governance principles were applied to in the eligible studies. The most frequent was service delivery (28 studies), followed by financing (17 studies), health workforce (10 studies), health information systems (8 studies), and access to medicines (7 studies). Two studies (Parmar *et al.*, 2007; Ruano, 2013) were classified as relating to only the leadership/governance building blocks.

There were few references to gender within eligible studies. Those that did were not directly related to governance. For example, studies focused on the need for health responses to be responsive to the

vulnerability of women and girls to gender-based violence (Cignacco *et al.*, 2018; Alameddine *et al.*, 2019; Amodu *et al.*, 2020; Legido-Quigley, Leh Hoon Chuah and Howard, 2020; Pursch *et al.*, 2020), the need to recognise women's role in the health workforce (Jones, Howard and Legido-Quigley, 2015; Bertone *et al.*, 2018), or mentioned the male dominated health system (Zwi *et al.*, 2011). Notably, of the 34 eligible studies, only five provided sex-disaggregated figures for their study participants (Tanaka *et al.*, 2004; Jones, Howard and Legido-Quigley, 2015; Bertone *et al.*, 2018; Sami *et al.*, 2018; Wylie *et al.*, 2020), while one paper included disaggregated figures as supplemental data (Atallah *et al.*, 2018).

Barriers and facilitators for stronger health system governance in settings with conflict-affected populations

We first summarise general findings on barriers and facilitators, and then detail them for the separate governance principles (and see Table 4 for individual study findings).

On facilitators, studies highlighted the importance of collaboration between stakeholders (Parmar *et al.*, 2007; Jones, Howard and Legido-Quigley, 2015; Karemere *et al.*, 2015; Cailhol, Gilson and Lehmann, 2019; Khalid *et al.*, 2019; Wylie *et al.*, 2020). The need for engagement with communities and bottom-up, community-based approaches to governance were also mentioned by several studies (Atun *et al.*, 2007; Cometto, Fritsche and Sondorp, 2010; Zwi *et al.*, 2011; Olu *et al.*, 2015; Aembe and Dijkzeul, 2019; Chuah *et al.*, 2019; Duclos *et al.*, 2019; Amodu *et al.*, 2020; Jamal *et al.*, 2020; Mammana *et al.*, 2020; Wylie *et al.*, 2020). Other facilitators included refugee-inclusive policies to address the needs of affected communities and longer-term strategic vision for refugee-inclusive policies and integration (Atun *et al.*, 2007; Cometto, Fritsche and Sondorp, 2010; Grit, den Otter and Spreij, 2012; Jones, Howard and Legido-Quigley, 2015; Palmer, Robert and Kansiime, 2017; Douedari and Howard, 2019; Jamal *et al.*, 2020).

A few studies identified financial resources as a facilitator of governance (Parmar *et al.*, 2007; Ruano, 2013; Jones, Howard and Legido-Quigley, 2015), but lack of financial support was more frequently cited as a significant barrier (Alameddine *et al.*, 2019; Chuah *et al.*, 2019; Douedari and Howard, 2019; Amodu *et al.*, 2020; Legido-Quigley, Leh Hoon Chuah and Howard, 2020). Other barriers related to financing included fragmented financing structures (Cailhol, Gilson and Lehmann, 2019), lack of inclusive finance systems (Grit, den Otter and Spreij, 2012), inefficient resource allocation (Atallah *et al.*, 2018) and a lack of clarity on financial needs (Rossi *et al.*, 2006). Other barriers included poor coordination, mistrust, a lack of harmonisation and a lack of clarity on responsibilities within the health response (Parmar *et al.*, 2007; Atun *et al.*, 2007; Cometto, Fritsche and Sondorp, 2010; Ruano, 2013; Jones, Howard and Legido-Quigley, 2015; Olu *et al.*, 2015; Palmer, Robert and Kansiime, 2017; Atallah *et al.*, 2018; Cignacco *et al.*, 2018; Aembe and Dijkzeul, 2019; Marzouk *et al.*, 2019; Bozorgmehr *et al.*, 2019; Duclos *et al.*, 2019; Akik *et al.*, 2020; Lupieri, 2020; Mammana *et al.*, 2020; Wylie *et al.*, 2020; Altare *et al.*, 2020; Amodu *et al.*, 2020). The way donor interests may dominate decision-making, funding and policy-making was also cited as a barrier across multiple studies (Parmar *et al.*, 2007; Zwi *et al.*, 2011; Marzouk *et al.*, 2019; Altare *et al.*, 2020; Legido-Quigley, Leh Hoon Chuah and Howard, 2020).

The barriers and facilitators reported below for the individual governance principles are based on the most frequently occurring principles. However, it should be noted there is overlap between many of them. We did not observe differences in barriers/facilitators between population groups, and so the findings have not been presented by population group.

Participation and coordination

Barriers related to participation and coordination included poor coordination and siloed working between different stakeholders (Atun *et al.*, 2007; Parmar *et al.*, 2007; Cometto, Fritsche and Sondorp,

2010; Zwi *et al.*, 2011; Olu *et al.*, 2015; Bertone *et al.*, 2018; Marzouk *et al.*, 2019; Akik *et al.*, 2020; Altare *et al.*, 2020; Wylie *et al.*, 2020; Amodu *et al.*, 2020; Mammana *et al.*, 2020), tension and lack of trust between different actors (Cometto, Fritsche and Sondorp, 2010; Palmer, Robert and Kansiime, 2017; Atallah *et al.*, 2018; Bertone *et al.*, 2018; Aembe and Dijkzeul, 2019; Duclos *et al.*, 2019; Wylie *et al.*, 2020), hierarchical structures within organisations (Tanaka *et al.*, 2004; Atun *et al.*, 2007; Parmar *et al.*, 2007; Zwi *et al.*, 2011; Olu *et al.*, 2015), vertical programme delivery (Atallah *et al.*, 2018; Aembe and Dijkzeul, 2019; Akik *et al.*, 2020), a lack of understanding of referrals processes from primary care to specialist services (Palmer, Robert and Kansiime, 2017; Wylie *et al.*, 2020), high turnover of health staff that affected relationships (Karemere *et al.*, 2015) and NGOs needing to fill gaps left by government, which linked to coordination challenges (Pursch *et al.*, 2020). Other barriers included, in the Syrian response, the presence of multiple coordinating hubs with different approaches implemented by humanitarian actors and the government, and fragmentation as a result of the conflict, all of which affected coordination (Akik *et al.*, 2020). There was also evidence from Syria on how third party monitoring and evaluation disrupted relationships between different stakeholders, affecting coordination (Duclos *et al.*, 2019). Challenges were also mentioned that arose from roll-out of the Humanitarian Cluster Approach without appropriate buy-in, and a distinction between the coordinating role of the “health sector” and the “health cluster” in settings where the “health cluster” did not include representatives of the national “health sector” (e.g. Ministry of Health) (Olu *et al.*, 2015). A study in Jordan referenced lack of agreement between donors and the local government on responsibility for the health of host communities (Lupieri, 2020). A global study identified donors as both central to problems related to coordination and central to solutions regarding coordination (Parmar *et al.*, 2007). Only one study explicitly mentioned the issue of limited opportunities for service user participation (Douedari and Howard, 2019).

Observed facilitators included ensuring coordination and collaboration between actors (Grit, den Otter and Spreij, 2012; Karemere *et al.*, 2015; Bozorgmehr *et al.*, 2019; Jamal *et al.*, 2020), decentralising operational decision-making that contributed to greater service continuity (Jamal *et al.*, 2020), adopting a cluster approach (Olu *et al.*, 2015), ensuring active participation of refugees and asylum seeking populations in facilitating access to information and services (Tanaka *et al.*, 2004; Chuah *et al.*, 2019), and hiring refugees to deliver health services (Jamal *et al.*, 2020). In one high-income setting, another observed facilitator was the use of collaborative care models combined with informal processes to support patients in Canada (Wylie *et al.*, 2020). In the post-conflict context of Sudan, stakeholder analysis and regular, individual engagement with each stakeholder helped to generate consensus (Cometto, Fritsche and Sondorp, 2010). Recommendations included integrating community-based approaches into governance systems in high-income settings like Italy and Canada (Mammana *et al.*, 2020; Wylie *et al.*, 2020), forming partnerships with different actors in Canada (Wylie *et al.*, 2020), and in LMICs, giving national/local actors a stronger role (Altare *et al.*, 2020), engaging communities from the outset in the design and provision of the primary healthcare system (Atallah *et al.*, 2018) and using donors to encourage coordination (Parmar *et al.*, 2007).

Effectiveness and efficiency

Barriers related to effectiveness and efficiency tended to intersect with other governance barriers and related to fragmented or poorly-used financing structures (Bertone *et al.*, 2018; Alameddine *et al.*, 2019; Bozorgmehr *et al.*, 2019; Amodu *et al.*, 2020), poor coordination (Jones, Howard and Legido-Quigley, 2015; Bertone *et al.*, 2018; Cignacco *et al.*, 2018; Cailhol, Gilson and Lehmann, 2019), the political motivations linked to funding affecting how countries form refugee policies (Lupieri, 2020). In a few high-income settings, different barriers arose around the use of differing models of care in Italy

(Mammana *et al.*, 2020), problems with referrals between primary care and specialist services in Canada (Wylie *et al.*, 2020), and government restrictions to care in France (Pursch *et al.*, 2020), and. Observed facilitators included the adoption of service delivery structural reforms, for example using a family medicine model for implementation, which improved coordination and effectiveness (Atun *et al.*, 2007).

Equity and inclusiveness

Barriers related to equity and inclusiveness in LMICs included a lack of legal status that affected access to healthcare for refugees (Chuah *et al.*, 2019; Marzouk *et al.*, 2019) and the absence of a refugee-inclusive policy environment (Lupieri, 2020). In high-income settings, barriers included a lack of translation services for refugees in Switzerland and Canada respectively (Cignacco *et al.*, 2018; Wylie *et al.*, 2020), a lack of access to cultural mediators in Italy (Mammana *et al.*, 2020), and a systemic/cultural barrier of law enforcement creating an environment of intimidation and fear to prevent refugees from accessing and NGOs from delivering services in France (Pursch *et al.*, 2020).

Observed facilitators included solidarity and empathy with the refugee and asylum seeking population that impacted on organisational changes to support healthcare responses for refugees (Alameddine *et al.*, 2019), having policies to reduce the financial burden on refugees (Jamal *et al.*, 2020), promoting values of providing safety and inclusion underpinning policy-making (Khalid *et al.*, 2019), and including refugee and asylum-seeking populations in policies at the level of government (Palmer, Robert and Kansiime, 2017; Khalid *et al.*, 2019), with Uganda cited as an example (Palmer, Robert and Kansiime, 2017).

Intelligence and information

Barriers focused on a lack of data including computerised data (Cignacco *et al.*, 2018; Chuah *et al.*, 2019; Khalid *et al.*, 2019; Marzouk *et al.*, 2019; Mammana *et al.*, 2020), inefficient/inconsistent data collection practices (Douedari and Howard, 2019), a lack of donor prioritisation for collecting certain kinds of data to guide decision-making (Sami *et al.*, 2018), the absence of accurate costing of interventions (Rossi *et al.*, 2006), and not collecting the right kind of data required to inform interventions (Atallah *et al.*, 2018). Observed facilitators included the use of information from various sources and databases for policy-making (Khalid *et al.*, 2019), and information sharing (Karemere *et al.*, 2015). Recommended facilitators were conducting community assessments based on local knowledge and demands (Atallah *et al.*, 2018).

Formulating and implementing policies and strategic plans

Barriers related to a lack of policies (Bozorgmehr *et al.*, 2019; Chuah *et al.*, 2019), policies that restricted access to healthcare for refugee populations (Grit, den Otter and Spreij, 2012; Sami *et al.*, 2018), or gaps between policies and implementation (Mammana *et al.*, 2020). Additionally, a lack of expertise and capacity was identified as a barrier to the implementation of policies (Jones, Howard and Legido-Quigley, 2015; Sami *et al.*, 2018). One study (Ruano, 2013) in post-conflict Guatemala identified a lack of clear legal guidance on rights of communities to be involved in decision-making about interventions as a barrier to health policy-making. Lupieri (2020) highlighted how refugee policies become a political bargaining tool between different stakeholders who hold different levels of power, which affected the formulation and implementation of health policies.

Observed facilitators included having systems and plans in place to manage changing needs and emergency preparedness (Alameddine *et al.*, 2019; Lupieri, 2020) and strong support from the central

level to facilitate deployment of resources at the local level (Jamal *et al.*, 2020). Recommended facilitators included the importance of an overarching policy framework for health sector reconstruction in post-conflict Sudan (Cometto, Fritsche and Sondorp, 2010).

Strategic vision

The only barriers to strategic vision explicitly identified were differences in perspective between donors and governments concerning the political and social integration of refugees into host countries (Lupieri, 2020), and lack of an overarching (global) entity with global strategic vision and authority, legitimacy and funding to coordinate humanitarian responses (Parmar *et al.*, 2007).

No observed facilitators were mentioned. Recommended facilitators included decision-makers acknowledging and providing better support for local health directorates to enable longer term funding perspectives and strategic vision (Douedari and Howard, 2019).

Accountability

Barriers included lack of trust in government agencies which was linked to perceptions of accountability (Atun *et al.*, 2007; Cometto, Fritsche and Sondorp, 2010; Ruano, 2013; Cailhol, Gilson and Lehmann, 2019; Altare *et al.*, 2020; Amodu *et al.*, 2020). Another reported barrier was stated as voluntary participation of actors in the cluster system , which one study identified as affecting coordination due to lack of accountability (Olu *et al.*, 2015). Observed facilitators raised by Douedari's (2019) study in Syria included accountability mechanisms such as audits, election rather than appointment of directors at health directorates, and the existence of beneficiary feedback processes.

Transparency

Barriers to transparency included health workforce recruitment practices based on patronage (Bertone *et al.*, 2018). Observed facilitators were the availability of information about services and budget allocation, including making information accessible for service users (Douedari and Howard, 2019). Recommended facilitators to improve transparency were strengthening risk communication and community engagement to improve trust (Altare *et al.*, 2020).

Rule of law

Barriers related to a lack of legal protection for refugees that affected structures supporting them (Chuah *et al.*, 2019) and in one high-income setting, criminalisation of asylum seekers that resulted in lack of systems and services in France (Pursch *et al.*, 2020). No observed or recommended facilitators were identified.

Ethics

Barriers included unethical practices such as reporting non-existent needs to obtain funding (Amodu *et al.*, 2020). Another study reported ethical issues associated with prioritising cost effectiveness over meeting the medical needs of refugees affected by non-communicable diseases (Marzouk *et al.*, 2019). No observed or recommended facilitators were identified.

Responsiveness

The presence of armed extremist groups was a barrier to responsiveness, which resulted in humanitarian responses not being implemented in those geographical areas (Akik *et al.*, 2020). Observed facilitators included the continuous reflection of organisations on the condition of their system inputs and the needs of staff and communities, which facilitated service responsiveness and the resilience of service provision (Jamal *et al.*, 2020).

DISCUSSION

This systematic review reveals a lack of substantive evidence on health system governance settings with conflict-affected populations. Even when it is mentioned, it is rarely the primary focus of papers and lacks theoretical framing. Consequently, there was limited engagement with the concept of governance and the notion of "good governance", linked to the lack of a clear definition of what constitutes governance. This reflects findings from the global literature in more stable settings (Barbazza and Tello, 2014; Brinkerhoff and Bossert, 2014; Dijkstra, 2018; Bigdeli *et al.*, 2020). Despite some papers explicitly recognising the importance of governance of health responses in settings with conflict-affected populations, papers included in our review largely used implicit, indirect descriptions of governance principles and only tangentially explored the barriers to and facilitators of better governance. Few studies went further to deepen the analysis by exploring "good governance". The lack of definitions for governance sometimes resulted in vague connections to governance principles. While frameworks such

as Siddiqi et al's (2009) are helpful in framing governance principles, more work is needed to apply governance frameworks in settings with conflict-affected populations and explore new frameworks and models of governance that are specifically tailored to these settings. For example, in our review, the issue of coordination emerged as a dominant theme but was not included in Siddiqi et al.'s framework. There is a need for research on this topic to be further informed by theoretical and conceptual governance work from social, political and health sciences. In addition, such research might include approaches that place greater focus on the importance of horizontal and interactive forms of governance that challenge traditional hierarchical models (Barbazza and Tello, 2014; Hilhorst, Desportes and de Milliano, 2019). This includes approaches that position governance as inclusive, participatory and people-centred (Bigdeli *et al.*, 2020; Jarrett *et al.*, 2021), which could be better used in the multi-actor landscape that is typical of a humanitarian response.

Our analysis of barriers and facilitators to health system governance reveal several key themes, though it is also important to note that it was challenging to identify if barriers and facilitators always related directly to health system governance or to the functioning of the health system more broadly. Additionally, it was not clear from some studies if the barriers and facilitators related to principles as part of health system governance, or the principles alone. These two challenges are linked to the above point about the indirect versus direct connections to governance. In general, the most common facilitators of governance were collaboration between stakeholders, the use of bottom-up and community-based governance structures, inclusive policies, and longer-term vision. The most described barriers were poor coordination, mistrust between stakeholders, the lack of a harmonised health response, a lack of clarity on the responsibilities of stakeholders, lack of financial support and problems with resource allocation, and the dominance of donor influence. This aligns with existing literature on facilitators and barriers to improved governance (Brinkerhoff and Bossert, 2014; Hilhorst, Desportes and

de Milliano, 2019; Bigdeli *et al.*, 2020; Jarrett *et al.*, 2021). More in-depth analysis of collaboration and coordination would support a better understanding of the mechanisms required to strengthen both aspects. Where relevant, we drew attention to differing barriers, facilitators and recommendations in high-income settings compared to other settings. Barriers in high-income settings included lack of cultural appropriateness of services and institutionalised criminalisation of displaced populations affecting healthcare delivery. Facilitators and recommendations included community-based approaches and the use of collaborative care models. As future studies on governance are conducted, it might be possible to conduct deeper comparative analysis in LMICs and high-income settings.

This review identified participation and coordination as the most frequently examined governance principles, which is perhaps unsurprising as they reflect how issues related to coordination are also an important and recurring theme in humanitarian response across multiple settings (Hill, 2011; Akl *et al.*, 2015; Jarrett *et al.*, 2021). In contrast, barriers include siloed working, a lack of trust between actors, hierarchical organisational structures and the lack of clear delineation of responsibilities. These have also been identified in literature on coordination and collaboration of governance within responses for conflict-affected populations (Balcik *et al.*, 2010; Moshtari and Gonçalves, 2011; Akl *et al.*, 2015; Clarke and Campbell, 2018; Sanderson, 2019; Comes, Van de Walle and Van Wassenhove, 2020). As a key governance principle, participation and coordination was often directly linked to coordination. In our review, these barriers to coordination were also similar across different settings and time periods, suggesting these challenges are longstanding and ongoing. This raises questions about the extent to which evidence and experience of coordination challenges can positively inform changes to health system governance. Included studies identified a wide range of facilitators of participation and creation of consensus such as decentralising decision-making and providing local actors with greater power, which echo existing literature on the importance of taking “bottom-up” and participatory approaches

and being participatory in forming partnerships for health service delivery (Sabatier and Mazmanian, 1980). These recommendations are not new in the field of humanitarian coordination, yet our review highlights gaps in operationalising these practices, suggesting more work is needed to avoid repeating failures (Colombo and Pavignani, 2017).

While the humanitarian cluster systems sought to improve coordination, two studies in our review raised challenges with its implementation and reflect broader concerns expressed elsewhere (Clarke and Campbell, 2018; Comes, Van de Walle and Van Wassenhove, 2020). A lack of wider support and strong leadership within the cluster system can create challenges, emphasising the importance of ensuring all stakeholders understand the value of certain processes and do not see them as an obstacle or as unnecessarily hierarchical. More work may be needed to explore how power is distributed and how it might be more equitably shared across the cluster system, to ensure all actors feel their needs and concerns are reflected in decision-making and programmatic choices (Clarke and Campbell, 2018; Durrance-Bagale *et al.*, 2020). Again, more collaborative and participatory governance models might help in thinking about how the cluster system can function more equitably.

Donors emerged as both facilitators and barriers in strengthening coordination to support governance. Existing analysis has already highlighted the need to rethink the position of donors within the humanitarian system (Barakat and Milton, 2020; Nguya and Siddiqui, 2020). Adopting a governance perspective might provide new insights into the role of donors in healthcare responses for people affected by conflict. More research is needed to explore the power dynamics between donors and other humanitarian actors and the impact of these dynamics on governance.

Our findings highlight the interconnectedness between different governance principles. For instance, practices to improve the effectiveness and efficiency of an equitable and inclusive service delivery model require engaging with other governance principles such as accountability, participation, and responsiveness. Moreover, there is a need to contextualise and understand the political environment surrounding the health sector that may negatively affect the ability of actors to shape the humanitarian response in alignment with their values, preferences and interests. For example, there are particular issues in what are termed “frozen conflicts” and in some conflict-affected settings, where the collapse of central governments leaves areas under the control of non-state actors that may have profound consequences for health (Kennedy, McKee and King, 2015; Gugushvili and McKee, 2021).

Based on our findings, we suggest the following four recommendations. First, more studies are needed on health system governance in settings with conflict-affected populations. Such studies should clearly define and conceptualise governance, for example, with greater reference to key governance principles and the quality of governance, and should include more in-depth analysis on what governance involves in a given setting. This may include drawing on more collaborative and less hierarchical governance models. It may also mean including principles and definitions of governance from the perspective of conflict-affected populations themselves. As more theoretically informed studies are conducted, it may also be possible to include greater comparison between LMICs and high-income settings which are affected by conflicts. Second, future studies should explore the power dynamics between different actors, notably donors and humanitarian actors, recognising the strategic role donors play in health system governance, especially in relation to participation and coordination, transparency, accountability, and effectiveness and efficiency. Third, future studies should draw on contextual elements, including the political environment to understand further facilitators and barriers and identify best practices. Finally, responding to the way coordination appears as a consistent barrier to health

system governance within this review and prior to this review, we suggest there is a need to ensure research findings on coordination and health system governance are fed back to humanitarian actors, government agencies and other entities involved in health governance to bridge the gap between research and practice.

Limitations

First, governance is a broad and potentially vague concept that is sometimes used indirectly, which may have complicated efforts to minimise the subjective interpretation of data during extraction and analysis. Most studies took a normative approach to articulating what might be considered desirable governance principles, but they did not define or qualify the nature of governance. The degree of engagement and focus on governance varied in studies, making it challenging to link findings to specific governance principles, barriers and facilitators. At times it was challenging to identify if the barriers and facilitators were solely related to governance or more related to health system functioning. Interpretations of governance principles were subjective, based on broad inclusion criteria rather than solely on direct reference to governance. We sought to mitigate against these challenges with double-screening of potential studies and double-extraction. Second, we acknowledge the wide variety of contexts in our eligible studies (e.g., in terms of economic development and stability) and that our ability to comment on contextual differences was limited due to word limit restrictions and our focus on synthesising findings to identify common themes. Third, the MMAT quality appraisal tool focuses on a limited number of basic quality checks. As such, some methodological and other limitations in the studies may not have been recorded, such as lack of reference to sample size or location of the study which is not captured in MMAT. Fourth, this review focused only on studies on settings with conflict-affected populations, and studies on health governance in other types of humanitarian crises, such as

environmental disasters, were excluded. Last, while we did not limit the review by language, we did not search regional databases that may be more likely to host research published in languages other than English, which may have prevented the inclusion of other studies.

CONCLUSION

This systematic review revealed the very limited evidence on health system governance in settings with conflict-affected populations, along with several important conceptual gaps. Research on this topic is scarce compared to other health system building blocks. Health actors, researchers, and donors should support the generation of evidence-informed recommendations on how to strengthen health system governance in settings with conflict-affected populations. This includes applying governance frameworks, exploring issues of power more intentionally in shaping healthcare responses settings with conflict-affected populations.

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