BMJ Global Health

# 'What we lacked was the courage to take decisions that differed from the rest of the world': expert perspectives on the role of evidence in COVID-19 policymaking in Iraq

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**To cite:** Alshalah A, Douedari Y, Howard N. 'What we lacked was the courage to take decisions that differed from the rest of the world': expert perspectives on the role of evidence in COVID-19 policymaking in Iraq. *BMJ Glob Health* 2023;**8**:e012926. doi:10.1136/bmjgh-2023-012926

**Handling editor** Seye Abimbola

► Additional supplemental material is published online only. To view, please visit the journal online (http://dx.doi.org/10.1136/bmjgh-2023-012926).

Received 22 May 2023
Accepted 1 November 2023



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## ABSTRACT

**Introduction** Iraq reported its first COVID-19 case on 24 February 2020 and formed a national committee and advisory committees to support its response. While global experts have suggested that the COVID-19 pandemic provided an exceptional opportunity for advancing evidence-informed policymaking (EIPM), no research has examined this in Iraq. Therefore, this study aimed to examine evidence use in COVID-19 policymaking in Iraq.

**Methods** This qualitative study employed semi-structured interviews with 20 Iraqi policymakers and researchers. Data were analysed thematically in Arabic using inductive coding.

**Findings** Participants described COVID-19 policy in Iraq as based on research conducted in other countries, with poor access and quality of routine data and lack of national research priorities and academic freedom as barriers to national research production. Most researchers influenced policy individually, with universities and other research bodies not seen as contributing to policy development. Public non-compliance could be traced to mistrust in both political and healthcare systems and became particularly problematic during the pandemic. Proposed strategies to increase national research production included dedicated funding, establishing communication and collaboration for research priority setting, and protection of academic freedom.

**Conclusion** Sociopolitical and economic realities in Iraq were unsupportive of national or subnational evidence generation even before the COVID-19 pandemic, and government relied on international evidence and policy transfer rather than contextually informed EIPM. Strengthening evidence-informed infectious disease policymaking and policy transfer would thus require governmental focus on improving the quality and relevance of Iraqi research, engagement between researchers and policymakers, and processes of evidence use and policy transfer.

### WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ For many low-income and middle-income countries, the rapidly evolving COVID-19 pandemic brought about rapidly growing and conflicting evidence much beyond national capacities to process, while sociopolitical considerations often contrasted with or prevailed over COVID-19 evidence.
⇒ Iraq has insufficient capacity for health systems research and needs to elevate demand for evidence among policymakers.
⇒ However, the COVID-19 pandemic may have presented an opportunity to explore, and advance, evidence-informed policymaking (EIPM).

### WHAT THIS STUDY ADDS

⇒ This study is the first to explore the role of research evidence in COVID-19 policymaking in Iraq.
⇒ Findings indicate little use of Iraqi research evidence during the COVID-19 pandemic, along with reliance on expert opinion about international evidence or direct policy transfer and the attendant sociopolitical challenges of these policy choices.
⇒ Expert suggestions for strengthening EIPM in Iraq focused on improving national research production, while considerably less attention was given to improving the processes of evidence use and policy transfer.

### HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ The study documented several socioeconomic challenges relating to insufficiently contextualised policy transfer and the need for more and better social science evidence generation in the future.
⇒ Study findings highlighted the compromised autonomy and academic freedoms of Iraqi researchers both within and outside advisory committees.

## INTRODUCTION

### Evidence-informed policymaking

The concept of *evidence-informed policymaking* (EIPM) emerged from the, initially radical,[1] 1980s 'evidence-based medicine' movement to promote the use of research evidence in guiding best clinical practices[2] and subsequent calls for 'evidence-based policy' in the 1990s and 2000s.[3 4] While *evidence-based* policymaking was a reaction against public policies derived from conviction

rather than scientific data,[4] EIPM acknowledges that in the complex landscape of policymaking research evidence is only one among several inputs such as political interests, values and structural constraints.[5] Regardless of terminology, the movement expanded globally with the WHO discussing the role of research evidence in guiding health policy in its 2004 'Knowledge for Better Health' World Report[5 6] and called for more research on research-policy relationships in low/middle-income countries (LMICs).[6] Nearly two decades later, LMIC literature has grown considerably[7] and identified many barriers to research use in policy, some unique to LMICs.[8] For example, while research from high-income countries focused on the lack of funding and incentives to communicate and disseminate research findings to policymakers,[9 10] for many LMICs funding and incentives are lacking to conduct research in the first place,[11] and political and institutional realities may be unconducive to knowledge transfer (eg, instability, authoritarianism, high staff turnover).[12]

Evidence use in policymaking and policy implementation remains critical during public health crises,[13 14] and the COVID-19 pandemic offered an opportunity to examine evidence generation and use in national responses in 'real time'.[14 15] Most countries repurposed existing national advisory bodies (eg, advisory committee, national taskforce) or developed new ones to provide technical advice for their COVID-19 response.[16–18] For many LMICs, the rapidly evolving pandemic and rapidly expanding and sometimes conflicting international evidence were beyond national capacities to readily 'separate the wheat from the chaff',[13 18] while socio-political considerations often contrasted with or prevailed over COVID-19 evidence.[13]

### Iraq and COVID-19

Iraq, an upper middle-income West Asian country with an approximate population of 41 million,[19] has an estimated gross national income per capita of US$5040, poverty rate of 24.8%, unemployment rate of 14.2%[20] and life expectancy at birth of approximately 71.4 years.[21] After nearly three decades of dictatorship terminated in 2003 following US-led regime change,[22] the new democracy suffered from sectarianism, corruption, weak institutions and conflict.[23] Iraq now ranks poorly on several governance indicators including political stability, control of corruption and rule of law.[24]

Political instability affects many aspects of Iraq's health system, from underinvestment in health to emigration of staff.[25] For example, 52% of its 34 000 doctors emigrated and 2000 were killed in the 3 years following the US-led invasion.[26] Iraq now has approximately 9 doctors and 23 nurses and midwives per 10 000 population, considerably below the WHO threshold.[21 27] The health system remains largely hospital-based and clinically focused.[25] Iraq spends approximately 4.7% of general government expenditure on health, considerably below the 22.9% and 11.8% spent by Iran and Jordan, respectively.[21] Out-of-pocket expenditures constitute 78.5% of per capita health expenditure[21] and the private health sector is widely unregulated.[25 28]

Iraq reported its first case of COVID-19 on 24 February 2020[29] and its first attributable death 8 days later.[30] In response, the Iraqi government formed the Supreme National Committee to monitor the evolving situation and coordinate responses, and a supreme advisory committee of senior academics and specialists to support it.[29] Policy responses included imposition of entry restrictions for specific nationalities,[31] a total curfew from 16 March to 20 April 2020, and a range of non-pharmaceutical interventions (eg, regulations on facemask-wearing, safe distancing, case isolation, contact tracing, health education).[29] Iraq's initial responses were appropriate and rapid, but as the situation escalated in June 2020 a gradual, and seemingly counterintuitive, relaxation of measures occurred.[29 32] By August 2022, COVID-19 caused more than 2 million cases and 25 000 deaths nationally, with a cumulative incidence rate of 17 000/100 000,[33] giving Iraq the second-highest cumulative number of cases, fourth-highest number of deaths, and a rank of 16th in total vaccine doses per 100 population, among the 22 WHO Eastern Mediterranean region (EMR) countries.[34]

### Objectives

As in other EMR countries, Iraq has insufficient capacity for health systems research and limited demand for evidence among policymakers.[35] While EIPM and research use remain unexplored in Iraq, COVID-19 provided an opportunity to examine these issues.[36–38] This study thus aimed to explore the perceived role of research evidence in the COVID-19 response in Iraq during 2020. Objectives were to: (i) examine researchers' perspectives and experiences of their participation in public health policymaking during the COVID-19 response; (ii) explore policymaker and researcher perspectives on facilitators and barriers to research uptake in COVID-19 policymaking and responses; and (iii) identify lessons for strengthening evidence-informed public health policymaking in Iraq.

## METHODS

### Study design

We chose an exploratory qualitative single-case study design, employing semi-structured interviews with Iraqi policymakers and researchers. The study was underpinned by an interpretivist orientation to accommodate the richness and diversity of COVID-19 response policy development perceptions and experiences in Iraq. Our research question was: 'What was the role of Iraqi and international research evidence in COVID-19 response policymaking in Iraq during 2020?'.

### Sampling and recruitment

We used heterogeneous purposive sampling to obtain information-rich participants with diverse organisational affiliations and roles. We identified potentially eligible respondents through official records and discussions

with Iraqi policymakers and researchers. Researchers were eligible if they had conducted COVID-19 research in 2020. Policymakers were eligible if they had participated in a national COVID-19 response committee in 2020. As our key informants were hard-to-reach 'elites', we recruited through three gatekeepers who facilitated access and arranged initial contacts. All those approached agreed to participate, but three interviews could not be arranged within the study timescale.

### Consent

AA gave potential participants a study information sheet, explained the study, its purpose, researcher motivation, background and affiliations. Prior to interviews, AA obtained both verbal and written informed consents from all but one participant, interviewed remotely, who was only able to provide verbal consent.

### Data collection and management

We developed separate interview guides for researchers and policymakers based on the literature, accessible official documents and discussions with Iraqi experts. Questions were deliberately broad, to obtain situated accounts within their wider policy context without imposing our assumptions about the research-policy relationship. We piloted both guides, developed in English and translated into Arabic, with a policymaker and a researcher not involved in the study and rephrased or removed questions that appeared leading, unclear or less relevant. Interview guides are provided in online supplemental file 1.

AA conducted interviews in July to August 2022, face-to-face or remotely. Thirteen face-to-face interviews were held in private offices (ie, 10) or participant homes (ie, 3), while seven remote interviews used WhatsApp/Zoom, depending on interviewee preference and availability. There were no significant differences in length or depth between in-person and remote interviews. Interviews averaged 40 min, with a few outliers providing a range of 10–75 min. This variability in length reflected interviewees' busy schedules. AA audio-recorded interviews digitally and transcribed them verbatim in Arabic with the aid of Microsoft Azure.

To maintain confidentiality and privacy, interviews were recorded anonymously using identification codes, with additional potentially identifying information removed during transcription. We stored delinked consent forms, audio files and transcripts in password-protected files in institutional servers only accessible to the study team. As participants were recruited from a small pool, we only reported aggregated sociodemographic characteristics to enhance transferability.

### Analysis

Analysis began during data collection to iteratively inform further interviews. AA conducted analysis in Arabic, using NVivo V.12, to maintain linguistic authenticity and nuance as described by Douedari *et al*.[39] We chose reflexive thematic analysis, using Braun and Clarke's six-phase method,[40–42] because of the study's exploratory nature. Phases were: (i) data familiarisation through listening, transcribing, and reading/re-reading transcripts and case-based memos; (ii) generating 60 initial codes; (iii) collating these into nine candidate themes; (iv) reviewing, merging, breaking down, or discarding, candidate themes in discussion with coauthors; (v) defining the five final themes; and (vi) write-up, including AA translating illustrative quotes.

Data saturation was not sought in keeping with Braun and Clarke's analytical approach[43] and our interpretive exploratory orientation, iterative interview guides and heterogeneous sample. Instead, analysis and sampling were guided by a 'situated, interpretative judgement' of data depth and breadth.[43]

### Reflexivity

Green and Thorogood outline two levels of reflexivity. The first entails situating research within sociopolitical context, and the second concerns acknowledging researcher values and motivation as data coproducers.[44] Using this conceptualisation, we situated our interpretations within the global EIPM movement, our high-income institutions' respective interests in EIPM, and Iraq's political economy. Our underpinning assumption was that research should inform policy; an assumption not necessarily shared by study participants. Thus, we used broad interview questions and continually interrogated interview interactions, language and probes, to minimise imposition of researcher assumptions on data collection and interpretation.

Second-level (personal) reflexivity sits comfortably with Abimbola's call for explicit declarations of 'gaze' in reference to intended audience and 'pose' concerning researcher positionality.[45] This study was conceptualised as partial fulfilment of AA's MSc degree requirements and primarily intended for an international audience. However, to have influence in Iraq it must resonate with Iraqi policymakers and researchers. Given differing international and national audience stances and interests, we made trade-offs regarding design, orientation and emphasis, for example, rejecting the biomedical (positivist) orientation dominant in Iraq[25] that favours neo-positivist methods (ie, intercoder reliability, data saturation) over our interpretivist orientation. Pose also required trade-offs and interrogation. AA was an Iraqi clinician completing an MSc at LSHTM, YD was a Syrian dentist/governance researcher at LSHTM, and NH was an NUS-based public health researcher focused on West and Southeast Asia. Despite our varied biomedical backgrounds, we supported a greater role of social science in health policy and practice. AA was critical of the Iraqi health system's hospital-oriented focus, advocating its redirection towards prevention and primary care, which distanced his stance from that of several study participants.

Reflecting on researcher privilege, we had the social capital to access and recruit middle/high-ranking

Table 1 Participant information

| ID | Category | Interview type |
|---|---|---|
| PM-01 | Policymaker | In-person |
| PM-02 | Policymaker | In-person |
| PM-03 | Policymaker | In-person |
| PM-04 | Policymaker | In-person |
| PM-05 | Policymaker | In-person |
| PM-06 | Policymaker | WhatsApp |
| PM-07 | Policymaker | WhatsApp |
| PM-08 | Policymaker | In-person |
| PM-09 | Policymaker | In-person |
| PM-10 | Policymaker | In-person |
| PM-11 | Policymaker | In-person |
| R-01 | Researcher | In-person |
| R-02 | Researcher | In-person |
| R-04 | Researcher | WhatsApp |
| R-05 | Researcher | WhatsApp |
| R-06 | Researcher | In-person |
| R-07 | Researcher | WhatsApp |
| R-08 | Researcher | WhatsApp |
| R-09 | Researcher | Zoom |
| R-10 | Researcher | In-person |

As participants were drawn from a small pool, sociodemographic information was not included to ensure anonymity.

policymakers and researchers, while if this research originated within Iraqi academia, it might not have been feasible due to the clinically driven research focus in Iraq and political sensitivities around COVID-19 policy. We thus argue for the relativity of pose, as despite linguistic and sociocultural affinities none of us held local positionality in relation to this research question.

### Patient and public involvement

We consulted Iraqi researchers and policymakers during planning. However, they were not involved in design, conduct, reporting or dissemination of our study. We will disseminate via open-access publication and ensure Iraqi stakeholders have access.

## RESULTS

### Participant characteristics

Table 1 shows the 20 interviewees, 11 policymakers and 9 researchers. Eighteen had clinical backgrounds and all but one were male. Researchers were affiliated with Ministry of Health (MOH), Iraqi universities and international organisations. Seven researchers were full professors and two-thirds participated in one or more COVID-19 advisory committee. Seven researched public health, while two focused clinically. Policymakers were affiliated with MOH, the Council of Ministers and Parliament. All policymakers held a PhD or equivalent, seven had prior experience in research and academia, and three coproduced COVID-19 research in 2020.

### Analytic themes

Analysis yielded five themes: (i) 'science-based' policymaking; (ii) variable institutional capacity and focus on individuals; (iii) deprioritisation of COVID-19 research production; (iv) interplay of evidence applicability and socio-political realities; and (v) suggestions for improving EIPM. Policymaker and researcher accounts generally intersected and were thus only reported separately where they differed. Of note, as no distinction exists in Arabic between 'evidence-based' and 'evidence-informed' with the former appearing closer to its Arabic counterpart, our findings do not distinguish between these two English-language conceptualisations.

### 'Science-based' policymaking

In describing the role of evidence in informing COVID-19 policy, both policymakers and researchers differentiated between 'science' and 'research'. *Science* encompassed expert opinion, WHO and other guidelines, outbreak control principles, and research or decision-making in other countries. *Research* referred only to evidence produced in Iraq. According to this construction, Iraq's COVID-19 policymaking was science-based, but not research-based.

> … if your question is about whether our measures were science-based, I believe yes, to a great extent. If you ask me if our measures were research-based, I'll tell you no. We did not do a lot of research inside Iraq … But the scientific bases were largely adhered to. (Policymaker-01)

However, this interpretation was not universal, with some researchers arguing Iraqi policy was based on research, though conducted outside Iraq. Mutual in all accounts was external reliance for data and decision-making, with limited formal/systematic assessment or adaptation. As one researcher noted, decisions were made based on decision-making in other countries as much as on external scientific evidence.

> What we lacked was the courage to take decisions which differed from the rest of the world (Researcher-01)

Some criticised this reliance as 'copying' measures used elsewhere, sometimes without scientific justification or contextual adaptation.

> Measures taken by the Ministry of Health to contain the coronavirus pandemic were not research-based. They were partially science-based and the other part was impromptu, whether by the Supreme Crisis Committee or local committees in the governorates. (Researcher-04)

Participants on national committees stressed that external scientific advice should be adapted before adoption, for example, implementing lockdowns, but this did not always happen.

> I strongly opposed some decisions …. One of the decisions the committee took without scientific basis was banning

> the importation of goods from neighbouring countries … it was not science-based, but because some countries did it, Iraq took the same decision. (Policymaker-02)

Regarding sources of (international) scientific evidence, participants cited preferences for publications from highly ranked journals, especially if 'WHO endorsed their findings' (Policymaker-11), and substantial dependence on international guidelines and protocols. Some further mentioned informal communication with researchers in neighbouring countries and formal international collaboration, for example, field visits of Chinese experts. None, however, described any mechanisms by which evidence was formally identified, assessed and synthesised to inform recommendations and policies.

> We depended a lot on publications from different highly-ranked journals, we followed them step by step. We followed what we received from CDC [US Centres for Disease Control and Prevention], European CDC, NHS [National Health Service], WHO and so on. But we didn't produce our own. We didn't depend on our own data … (Researcher-10)

Most described this external reliance negatively, as due to Iraq's weak evidence production. Participants described national research as 'primitive', 'very descriptive' and 'observational', and the quantity and quality of published outputs as suboptimal and thus unable to aid decision-making. However, none commented on the reliance on expert opinion rather than systematic identification, assessment and synthesis.

### Variable institutional capacity and focus on individuals

COVID-19 advisory committees, created in response to the unprecedented nature of the pandemic, were well regarded by almost all participants because of their 'neutrality', ability to 'strengthen the validity of decisions' and provision of guidance. Inclusion of WHO representation in national committees was also viewed positively.

> Our decisions were always scientific. This was the mission of the advisory committee …. (Policymaker-05).

Research reputation was one of the metrics for selecting advisory committee members: 'The selection was according to specific criteria concerning the academic side, their research and studies, their academic ranking …' (Policymaker-05). Researchers on subnational advisory committees additionally noted these enabled them to disseminate their research findings or be commissioned to conduct operational research.

Participants described the role of research entities, such as universities and centres, as 'very weak' or nonexistent, except for University of Basra's manufacturing of viral transport media for testing. Most identified researcher contributions as individual not institutional.

> I acclaim individual efforts, but not institutions. I didn't see that universities as institutions added or contributed to containing the pandemic […]. Researchers supported the government, advised on the types of vaccines and their studying … Others were in communication with global research centres [… and some] educated the public … (Policymaker-03)

A few policymakers indicated that universities did play a role, but when probed on the nature of that role they cited the participation of professors in advisory committees. However, minority policymaker accounts of 'hidden communication' with academics—because public criticism of government measures might cause reputational or other harm—indicated greater complexity, with one describing himself as a 'conduit to their critiques'.

### Deprioritisation of in-country COVID-19 research

Both researchers and policymakers noted 'the priority was to contain the virus', describing obstacles to COVID-19 research production from fear of the virus to poor quality routine data. As MOH was occupied with COVID-19 clinical management and clinical researchers were managing the influx of COVID-19 patients, no funds were allocated to research. Iraqi research was thus deprioritised by policymakers.

> Other countries were doing it [research]. WHO was doing it. We don't have to be leaders in this phase. Let us focus on crisis management. (Policymaker-01)

While clinicians were exempted from movement restrictions, nonclinical researchers including laboratory staff were constrained.

> Because we are doctors and we were allowed to move […], it was easy for us … Other researchers were facing challenges […]. Because of curfews they were not able to execute on-site studies. (Researcher-04)

Researchers additionally described surveillance and routine data as aggregated and insufficiently granular (eg, lacking types of presentation, complications), incomplete (eg, only including public facilities) and difficult to access. Private practitioners often did not report cases despite legal requirements.

> Notification of infectious diseases is compulsory by law … Any doctor or health professional must report, or they will be fined and imprisoned for six months, but no one reported. (Researcher-09)

Routine data held by MOH required negotiation to access and were often not electronic or rapidly available.

> Because of slowness, the high number [of cases] and the presence of one employee or something like that to do the work, we couldn't [conduct research]. After which, what happened was that they sometimes brought [data] in a paper format in a pickup truck … (Researcher-10)

When asked about the types of research they lacked, participants focused on laboratory science such as genetic sequencing, and the lack of resources hindering such studies. Only two explicitly mentioned social sciences, while others indirectly suggested its value.

> We need to understand why this hesitancy. Not hesitancy, but low uptake of the vaccine, which was not a matter of

availability. It was a matter of antagonism … Why a lack of trust between the community and the governmental regulations? The people in the end didn't obey and implement the restrictions issued by the government … We must understand why. (Researcher-10)

### The interplay of evidence applicability and sociopolitical realities

While most participants praised initial COVID-19 measures as timely and appropriate, they described socioeconomic and governance factors that undermined their implementation and sustainability. For instance, lockdowns were rarely adhered to, and security forces were only able to restrict movement between neighbourhoods while life continued normally within. Moreover, due to the fragile control and command system, lockdowns were particularly unenforceable in rural and informal urban settlements and rural areas.

> Curfews were detestable formalities, like cars movement was restricted but shops were full with people, as if it was a lockdown of cars rather than a health lockdown … (Policymaker-09)

Participants discussed how misinformation, denial and 'conspiracy theories' affected public compliance with response measures. They perceived these to be fuelled by influential clinicians, academics, politicians and religious leaders who questioned the existence of SARS-CoV-2 or said it could not affect true believers. Policymakers and researchers had differing perspectives on misinformation. Policymakers discussed it in terms of 'poor health education' and 'literacy levels', while researchers described mistrust in political and health systems. Researchers suggested public mistrust as the underlying cause of vaccine hesitancy and delay in seeking treatment, for example, 'More than 50% of mortalities in hospitals happened within the first or second day of admission' (Researcher-10).

Owing to socioeconomic and governance shortcomings, respondents perceived that most measures were rendered largely ineffective while affecting other sectors such as the economy and education. Policymakers thus reported that scientific advice had to be modified or adjusted: 'In some occasions, there were small adjustments. For example, a total curfew becomes partial curfew, because we take the economic situation of people into account …' (Policymaker-11). Eventually though, policymakers supported relaxing measures and reopening of the country despite experts' advice and increasing epidemiologic curves.

> We saw that the curfew was not very effective at the time. If it was effective, we would have retained it … [It was] not rewarding or beneficial because the army or the police or other forces were not able to stop people … (Policymaker-08)

> When we were advising officials in the Ministry of Health to add this or that, their answer was very clear: 'Did they [Iraqi public] respect yesterday's measures so that they will respect new measures?'. (Researcher-09)

Besides socioeconomic influences on implementation, interviewees described unique responses. For example, while most families exclusively used Najaf governorate cemetery for religious reasons, Najaf authorities initially refused COVID-19 victims because of rumours 'that buried bodies will contaminate soil and infect the inhabitants …' (Policymaker-02). Bodies remained unburied for 2 weeks until policymakers created new cemeteries outside cities. These sites had dedicated security forces, deeper pits, night-only burials and cranes to handle bodies. Policymakers acknowledged this response had no scientific basis but responded to societal needs, with one criticising it as 'creating stigma'.

> The families of COVID-19 victims were punished societally and governmentally with these measures … I call it punishment; they might call it procedures … (Policymaker-09)

### Suggestions for improving EIPM

Policymakers highlighted the important normative role of research in guiding policy, without identifying any formal mechanisms to incorporate research evidence into policymaking. Half additionally expressed pessimism about the likelihood of local evidence informing Iraqi policy.

> A developing country like Iraq doesn't base its decisions on research. First, we don't have such research centres to support decision-making … most of the problems are global, others have found solutions for them, and you can adopt the solutions by modifying them to suit Iraq … (Policymaker-03)

When asked how to increase research uptake in policymaking, most participants considered this in terms of how to increase Iraqi research production. Several indicated Iraq lacked 'incentives or sanctions to push the trajectory of research …' (Researcher-08). Suggestions mirrored their challenges during the COVID-19 pandemic, such as funding.

> Professors cover the expenses of their studies and publish at their own expense. This is frustrating … (Researcher-04)

Nearly all researchers described the lack of communication and collaboration between academia and MOH as problematic, saying no formal mechanisms or communication channels helped researchers in priority setting.

> I think research priority setting is absent because of the weak communication between the supply side and demand side, each one is working independently of the other … (Researcher-07)

Some policymakers also recommended better collaboration, criticising health policymakers for not using existing research as most Iraqi publications 'end up on the shelves'.

> This is the mentality of the Iraqi decision-maker. We still make decisions without any basis … we are always in the

cycle of urgency because basically we don't have well-defined health policy. (Policymaker-06)

Researchers also mentioned a lack of academic freedom, describing their inability to research politically sensitive issues as a longstanding challenge.

The policymaker does not use such [research-based] solutions because he believes they will undermine or weaken his authority … Let me tell you about addiction, which is a huge problem here. When you want to study addiction and discuss the political causes, people won't allow you because this is taboo. In every era of Iraq's history there were taboos … During the era of Saddam Hussein, they would tell you: 'You want to do research? Go to the hospital and see how many people had respiratory conditions and write about it'. THIS IS NOT SCIENTIFIC RESEARCH. (Researcher-01)

## DISCUSSION

### Key findings and implications

This study, exploring the role of research in informing COVID-19 response policy in Iraq in 2020, is the first to our knowledge to do so. Findings indicate little use of Iraqi research evidence, given its perceived limitations, along with reliance on expert opinion about international evidence or direct policy transfer and the attendant sociopolitical challenges of these policy choices. Suggestions for strengthening EIPM thus focused on improving the quality and relevance of Iraqi research, national research environment and engagement between researchers and policymakers, while considerably less attention was given to improving the processes of evidence use or policy transfer.

### Evidence production and policy transfer

The limited role of Iraqi research evidence is perhaps unsurprising, as research was described as weak, poorly connected and underfunded even before the pandemic. Thus, expecting national research capacity to support emergency decision-making may not be realistic. The research-policy relationship appears insufficiently defined or discussed in Iraq, requiring further research, knowledge translation, monitoring and evaluation, and collaborative initiatives to embed research evidence into policymaking. Several theories postulate the relationship between research and policy with research non-usage often explained by two communities theory—that researchers and policymakers have cultural differences in values, reward systems and languages that hinder translation of research findings into policy.[46 47] However, perspectives of researchers and policymakers intersected notably, possibly because 7 of the 11 participating policymakers had also worked in academia. Two communities theory thus appears to have limited applicability in Iraq, given the multiple crossover of roles within its political and academic arenas. This aligns with findings by Shroff *et al* in Zambia, Nigeria and Cameroon[7] along with criticism that two communities theory inappropriately regards researchers and policymakers as two homogenous groups.[4]

Participant advocacy focused on improving the quantity and quality of Iraqi research outputs to strengthen EIPM, while largely ignoring the need to build government and advisory committee capacity to systematically appraise, synthesise and adapt internationally or locally generated evidence for effective use in contextualised policy responses.[13] Therefore, Iraqi Ministries of Higher Education and Health, along with international partner agencies, could ensure training and technical support for EIPM to reduce reliance on expert opinion and risks of uninformed or inappropriate policy transfer from other countries.

Participants' distinction between (Iraqi) 'research' and (international) 'science' aligns with distinctions in the EIPM literature between 'local research' and 'global research'. For example, Burchett *et al* described a similar construction in Ghana, with researchers and policymakers differentiating 'research with a large R' implying theory-informed, large-scale, externally funded research and 'research with a small r' referring to less rigorous, more applicable, nationally produced research.[11 48] However, in contrast with Iraqi policymakers, those in other LMICs usually preferred locally produced research.[11 48] While participant views aligned that the Iraqi COVID-19 response was principally based on international research production, what remained unclear was which international evidence was used and how, as perceptions were mixed on this and on whether policymaking was primarily science-based or simply copying other countries through direct (eg, 'uninformed[49]') policy transfer.

Rather than EIPM, Iraq's COVID-19 response relied primarily on policy transfer, the process of applying policies from one country or context to another. Policy transfer theories focus on the transmission of policy ideas, experiences and best practices between contexts through learning, adaptation and social networks.[49 50] Policy transfer was useful for Iraqi policymakers in enabling them to use strategies and lessons from COVID-19 responses in other countries. However, successful policy transfer requires evidence-informed contextual adaptation that considers sociopolitical, cultural, health system, resource and security characteristics. Given the lack of Iraqi research, side-lining of local research institutions, and limited capacity to systematically collate, appraise and synthesise existing evidence it is unclear how or whether contextualisation was attempted.

### Sociopolitical challenges

Participants discussed far more challenges than enablers in national COVID-19 policy implementation. Although participants emphasised biomedical evidence needs, we would argue that most challenges highlighted a need for more social science evidence generation for better contextualised policy transfer, for example, on public concerns, cultural appropriacy/acceptability, community engagement and risk communication.

Of note was the public non-compliance undermining Iraq's response. Policymakers attributed this to poor health literacy whereas researchers ascribed it to mistrust in the political system and, subsequently, the health system. This mistrust is historically rooted and not exclusive to COVID-19, with state fragility and widespread corruption contributing significantly.[26] This is problematic in a pandemic context in which effective risk communication relies on trust and transparency.[51] Social science and public health literatures indicate the involvement of—non-state—faith-based and community organisations in vaccine administration as one potential strategy to tackle low vaccine confidence.[52 53]

Advisory committees, sometimes used by decision-makers to gain political legitimacy,[54 55] were considered effective in Iraq's COVID-19 response. However, given Iraq's sociopolitical and governance challenges, future advisory committees would benefit from: (i) inclusion of social scientists, economists, communications and other experts; (ii) reinvigorating and redefining roles of universities and research centres to boost individual researcher contributions; and (iii) guarding committee autonomy from political or other repercussions.

### Strengthening evidence use and further research

Suggestions for strengthening evidence use in policy focused on increasing Iraqi research production. Researchers identified funding as a major hindrance, which is understandable given Iraq only spends 0.01% of its gross domestic product on health research and development, among the lowest in middle-income countries.[56] Lack of national research priorities is a problem for many LMICs.[57] Limited academic freedom in Iraq can be traced to the pre-2003 era when Iraqi universities suffered from politicisation and systemic abuse.[58]

Research is needed to interrogate whether similar findings apply outside the COVID-19 pandemic, how policymakers reconcile understandings of the role of evidence normatively versus in practice, and how researchers navigate and influence policy during everyday politics. Compromised academic freedom merits deeper exploration—although seemingly difficult to investigate. Finally, research on EIPM and policy transfer would benefit from further knowledge generation and theorisation relevant to fragile and conflict-affected settings.

### Limitations

Several limitations should be considered. First, we focused on COVID-19 policymaking in 2020 (before national vaccination rollout). Although this offered advantages in study framing and identifying participants (given high staff turnover), it excluded potential insights from subsequent phases of COVID-19 policymaking. Second, some participants chose to evade or redirect questions. This, along with shorter interviews for some participants—due to busy schedules, is common in elite interviews.[59] Such accounts are not biased in qualitative research and remain valid responses but did mean that some questions were less explicitly addressed than others. Third, we focused on senior policymakers and researchers, almost all of whom were men as women were under-represented in advisory committees and policymaking generally. Thus, women's perspectives were largely absent despite efforts to recruit them. Fourth, translation of illustrative quotes was complex, with some cultural nuances inevitably lost.[60] Participant checking was also unrealistic given their busy schedules. Finally, it was not possible to schedule three interviews within our timescale, although they did not differ in ranking and expertise from those interviewed.

## CONCLUSION

Sociopolitical and economic realities in Iraq were unsupportive of national or subnational evidence generation even before the COVID-19 pandemic, and COVID-19 policy development and implementation in 2020 relied on international evidence and policy transfer rather than contextually informed EIPM, with national advisory committees acting as a conduit. National research was suboptimal in both quantity and quality and thus could not aid decision-making. However, insufficient contextualisation of COVID-19 policy transfer and subsequent socioeconomic challenges undermined implementation and forced the government to relax response measures. Strengthening EIPM and policy transfer for infectious disease control thus requires governmental focus on improving the quality and relevance of Iraqi research, engagement between researchers and policymakers, and processes of evidence use and policy transfer.

**Acknowledgements** Many thanks to study participants for their contribution. Thanks to Dr Jawad Diwan and Dr Ziad Al-Ali for support on the practicalities of data collection in Iraq. Finally, thanks to the LSHTM MSc Trust Fund Award for covering the cost of AA's flight to collect data in Iraq.

**Contributors** All authors conceived the study, and approved this version for submission. AA collected and coded data and drafted the manuscript with inputs from YD and NH. NH and YD contributed to data interpretation. NH provided critical revisions. AA is the guarantor of this study.

**Funding** Research is funded by NH's Medical Research Council Health Systems Research Initiative foundation grant (MR/S013121/1) along with to the LSHTM MSc Trust Fund Award that covered the cost of AA's travel for data collection. Funders were not involved in study design, data collection and analysis, decision to publish, or preparation of the manuscript. The views expressed are those of the authors and not necessarily shared by any individual, government or agency.

**Competing interests** None declared.

**Patient and public involvement** Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

**Patient consent for publication** Not applicable.

**Ethics approval** This study involves human participants. The Arab Board of Health Specialisations in Iraq (reference 146) and MSc Research Ethics Committee at London School of Hygiene & Tropical Medicine in the UK (reference 27380) provided ethics approval. Participants gave informed consent to participate in the study before taking part.

**Provenance and peer review** Not commissioned; externally peer reviewed.

**Data availability statement** No data are available.

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## Supplement

**INTERVIEW GUIDE: The role of research and scientific evidence in informing COVID-19 policy in Iraq: a qualitative study**

REMEMBER: record ID code at the beginning of the audio recording and on your notes. Do not say interviewee's name. Questions are indicative only, as some topics will be new or irrelevant for some participants.

READ: *Your identification code is [.....]. Please confirm that you have been informed about this study, your questions have been answered, you understand that if you wish to avoid a question or stop at any point you may do so, and that you are participating willingly.

**Researchers**

1. Could you please describe your role within the COVID-19 advisory committee? OR Could you describe your work in relation to COVID-19 in 2020?
2. Did you conduct any research pertaining to COVID-19 in Iraq in 2020? [Probe: were they published? Did this influence any recommendations to the higher committee?]
3. How would describe the relationship between researchers/academics and policymakers during the COVID-19 pandemic?
4. How was the communication between researchers and policymakers?
5. What were the evidence bases for your recommendations and reports?
6. To what degree did policymakers adhere to your recommendations and reports?
7. What factors shaped or affected the Iraqi response?
8. Did universities and research centres play a role? [Probe: To what degree?]
9. What types of research you perceived to be lacking? Why?
10. What was your stance regarding the relaxation of containment measures in June 2020? What factors shaped that decision in your experience?
11. What do you think of the COVID-19 response in Iraq overall in 2020?
12. How do you think the public perceived the response?
13. What strategies would you recommend to increase uptake of research evidence by policymakers?

**Policymakers**

1. Could you please describe your role within the COVID-19 response crisis committee?
2. Could you describe the role of the advisory committee in informing the response? [Probe: What worked well/poorly?]
3. What factors influenced or affected the COVID-19 policy in Iraq? [Probe: How much influence did they have and why?]
4. Did universities and research centres play a role in relation to the policy? [Probe: To what degree?]
5. Were there any challenges or enablers during policy implementation? [Probe: Why did they help or hinder implementation?]
6. What factors influenced the crisis committee's decision to relax measures in June 2020?
7. What do you think of the COVID-19 response in Iraq overall in 2020?
8. How do you think the public perceived the response?
9. What strategies would you recommend to increase uptake of research evidence in policymaking?

**Wrap-up**

Thank you for your time. We have reached the end. Is there anything else you would like to add?

**دليل المقابلة: أثر البحث العلمي في صناعة القرار الصحي خلال جائحة كوفيد-19 في العراق**

تذكر: الرمز التعريفي للضيف. لا تذكر اسم الضيف ....

مقدمة: الرمز التعريفي هو {....} حضرتك اطلعت على ورقة المعلومات الخاصة بالبحث وكان عندك الفرصة ان تسئل او تستفسر عن البحث، كذلك اذكرك ان مشاركتك طوعية كليا ومن حقك رفض الاجابة عن اي سؤال او انهاء المقابلة في اي وقت.

**الباحثين**

1. هل من الممكن أن تكلمني عن دورك وعملك في اللجنة الاستشارية العليا في سنة 2020؟ أو كلمني عن عملك فيما يخص جائحة كوفيد-19 في سنة 2020.
2. هل كان عندك أي بحوث تخص كوفيد في سنة 2020؟ {هل هي منشورة ام غير منشورة؟ هل اثرت على قسم من التوصيات التي كنتم ترفعوها؟}
3. كيف تصف العلاقة ما بين اللجنة الاستشارية العليا واللجنة العليا للصحة والسلامة الوطنية (خلية الازمة) في ذلك الوقت؟
4. كيف تصف التواصل ما بين اللجنة الاستشارية واللجنة العليا؟
5. ماذا كانت الاسس التي تعتمدون عليها فيما يخص التوصيات والتقارير؟
6. كيف تعاطت خلية الازمة مع التوصيات والتقارير التي كنتم ترفعوها؟
7. ما هي العوامل التي ساهمت برسم اجراءات وسياسات العراق في وقتها؟
8. هل لعبت الجامعات والمراكز البحثية دورا؟ ولأي درجة؟
9. هل كان هناك جوانب بحثية غائبة؟ {ما هي}
10. ماذا كان موقف حضرتك فيما يخص تخفيف أو رفع قسم من القيود الذي حصل بشهر السارس لسنة 2020؟ ما هي العوامل التي ساهمت بهذا القرار في وقتها؟
11. ما هو تقييمك لاداء العراق في مواجهة الجائحة في سنة 2020؟
12. تعتقد المواطن العادي ماذا كان رأيه فيما يخص اجراءات وسياسات العراق؟
13. ما هي الاستراتجيات التي يمكن أن تساهم بدور اكبر لمخرجات البحث العلمي في رسم السياسات الصحية؟

**صناع القرار**

1. ممكن تكلمني عن دورك وعملك باللجنة العليا للصحة والسلامة الوطنية في سنة 2020؟
2. كيف كان اداء اللجنة الاستشارية (لجنة الخبراء) حسب وجهة نظرك؟
3. ما هي العوامل التي ساهمت برسم اجراءات وسياسات العراق في وقتها؟ {ما حجم هذا التأثير ولماذا؟}
4. هل لعبت الجامعات والمراكز البحثية دورا؟ ولأي درجة؟
5. هل كانت هناك مشاكل او صعوبات في تطبيق سياسات احتواء الجائحة على ارض الواقع؟ وهل كان هناك عوامل مساعدة او جوانب سهلت التطبيق؟ {لماذا؟}
6. ما هي العوامل التي اثرت على قرار اللجنة العليا بتخفيف أو رفع قسم من القيود الذي حصل بشهر السارس لسنة 2020؟
7. ما هو تقييمك لاداء العراق في مواجهة الجائحة في سنة 2020؟
8. تعتقد المواطن العادي ماذا كان رأيه فيما يخص اجراءات وسياسات العراق؟
9. ما هي الاستراتجيات التي يمكن أن تساهم بدور اكبر لمخرجات البحث العلمي في رسم السياسات الصحية؟

**ختام**

شكرا على وقتك وعلى اعطاءنا هذه الفرصة. عندك اي اضافة فيما يخص الموضوع؟ عندك اي سؤال أو استفسار يخص البحث؟