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research article

Ethical moments and institutional expertise in UK Government COVID-19 pandemic policy responses: where, when and how is ethical advice sought?

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Background: The emergency response to the COVID-19 pandemic has required a rapid acceleration of policy decision making, and raised a wide range of ethical issues worldwide, ranging from vaccine prioritisation, welfare and public health 'trade-offs', inequalities in policy impacts, and the legitimacy of scientific expertise.

Aims and objectives: This paper explores the legacy of the pandemic for future science-advice-policy relationships by investigating how the UK government's engagement with ethical advice is organised institutionally. We provide an analysis of some key ethical moments in the UK Government response to the pandemic, and institutions and national frameworks which exist to provide ethical advice on policy strategies.

Methods: We draw on literature review, documentary analysis of scientific advisory group reports, and a stakeholder workshop with government ethics advisors and researchers in England.

Findings: We identify how particular types of ethical advice and expertise are sought to support decision making. Contrary to a prominent assumption in the extensive literature on 'governing by expertise', ethical decisions in times of crisis are highly contingent.

Discussion and conclusions: The paper raises an important set of questions for how best to equip policymakers to navigate decisions about values in situations characterised by knowledge deficits,

complexity and uncertainty. We conclude that a clearer pathway is needed between advisory institutions and decision makers to ensure ethically-informed debate.

Key words institutions • values • science-policy nexus • pandemic

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Background: ethics of pandemic governance

COVID-19 has been a significant policymaking challenge for governments. In addition to the public health implications of a global pandemic, it has impacted most, if not all, areas of government policy and citizens' lives. Labour, education, workforce, business, families, border control have all been called on to make swift and broad-ranging policy decisions under conditions of uncertainty. The centrality of public health to policy and everyday life has become a prominent feature of public debate. In the future much will be learned about policymaking practice in light of the pandemic (Dunlop et al, 2020; Weible et al, 2020). While all policy decisions have an ethical dimension, many distinctively ethical areas of concern have emerged during the COVID-19 crisis. These include clinical or medical concerns, such as how decisions are made about triage, and about who will be prioritised for vaccines; public health ethical concerns around national and global health inequalities, individual and collective behaviour, the use of lockdown and other restrictions; societal concerns about (mis)information, data use and privacy relating to infection testing, tracing contacts and vaccination status of individual citizens and worker groups; and concerns about trade-offs between economic recovery and health. Fundamental issues have resurfaced regarding the place of values in political decision making and the policymaking process itself. This paper will not detail each of the ethical concerns and how they have been addressed, but, following Birch (2021), critically examines how ethical advice has been organised in the UK over the course of the pandemic.

Despite existing national expertise in biomedical and healthcare ethics, it has been argued that the UK neglected ethical considerations (Baines et al, 2020), and that, despite governmental 'efforts to plot an ethical path, the current approach is piecemeal, confusing, and risks needless duplication' (Fritz et al, 2020: 1). Identifying a deficit of openness, coordination and political leadership, Fritz et al called for the UK Government to 'develop an ethical plan'. They argued this should be based on transparent and public ethical guidance as a basis for decision making, consultation with expert stakeholders and patients, coordination of ethical guidance support structures across health and social care systems, and generation of new research to inform, develop and interpret ethical policies. The perceived lack of a coherent approach on ethics has led established institutions of bioethical expertise like the Nuffield Council on Bioethics, an independent body established in 1991, to ask 'is the UK Government using its own ethical framework' (Gadd, 2021). The main framework available has been *Responding to pandemic influenza – The ethical framework for policy and planning* (Department

of Health, 2007; 2011; DHSC, 2021). This outlines a set of principles to aid judgment and decision making, centred on the principle of equal concern, and including considerations of respect, minimising harm, fairness, working together, reciprocity, proportionality, flexibility and good decision making (openness and transparency). The UK is not alone in lacking coordination of ethics advice in policymaking. In a recent review, Köhler et al (2021: 138) found that around 25% (21/87) of national ethics committees 'did not make any ethics recommendations to their governments'.

In this paper we focus on the questions of where, when and how ethical expertise is sought and delivered in the UK national context. We focus on England because public health and ethical advisory systems differ between the UK's devolved nations. In distinction to bioethical forms of expertise specifically relating to biosciences and health, we define ethical expertise as the explicit interlinkage of both epistemic claims about the validity of certain knowledge and evaluative claims about the relevance and legitimacy of certain values and norms for political decisions (Straßheim, 2015). Paying particular attention to the temporalities and institutional whereabouts of ethics within a context of pandemic governance, we examine the processes of 'ethicisation' by which issues become publicly and explicitly value-laden, and the role of epistemic cultures of ethical expertise in shaping public discourse and policy intervention. Since all political and policy issues are potentially ethical we are interested in *how* ethical advice to policymakers operates. We identify specific gaps, knowledge deficits and implications for policymakers. Current research maintains that ethical expertise has the function of 'taming' public conflicts and of gaining trust in the perceived scientific foundations of policy decisions (Evans, 2006; Edwards, 2014). It assumes that ethical professionals are orchestrated, aligned and calibrated by policymakers in order to 'govern through expertise' (Littoz-Monnet, 2020). By contrast, we argue that this assumption only concerns the front-stage of policymaking. Behind the scenes there is what we call 'ethical adhocracy'. It becomes visible, even undeniable, in times of crisis. Ethical adhocracy means that decisions about values are highly contingent, depending on opportunities and situations, with ambiguity and contestation. In ethical adhocracy, the very definition of a 'crisis' often emerges more or less by chance from a multitude of different understandings. Mostly, ethical adhocracy is carefully covered behind the impression of a finely-tuned orchestration of expertise. In times of crisis, however, this ex-post rationalisation erodes.

There are multiple *varieties of ethical adhocracy* embedded in institutions and cultures of policy advice and expertise. In this paper, we take the case of the pandemic policy in the UK as an opportunity to identify the modes and mechanisms of ethical adhocracy, to get an understanding of the degree to which ethical decisions are informed by stated principles and ethical frameworks and shed light on the contested dynamics between ethical forms of expertise often assumed to be associated with judgment, and epistemic forms, assumed to relate to evidence. The UK has been described by some as a 'chaos' country in its pandemic governance response, alongside countries such as Brazil, India, Italy, and the US – where 'political division and inaction or incoherent action' prevailed (Jasanoff et al, 2021: 17). We suggest, however, to get a more nuanced understanding of situational and contingent governance in times of crisis, it might be fruitful not to rely on the front-stage mode of ethical alignment, to consider what is distinctive about this perceived chaos in the UK context in comparison to other countries, but also to be aware of ethical adhocracy and the ways it can be enclosed in institutions and cultural understandings.

In the first section we briefly describe our research methods. In the second section we outline the ways in which particular moments, stages and aspects of lockdown in the UK have become matters of ethical concern. Subsequently, we consider how different types of institutions and cultures of expertise make a difference to this process. We conclude by setting out the implications of our analysis for policy decision making, policymakers and governance under conditions of uncertainty.

Methods

Our methods include documentary analysis of publications arising from UK Government advisory committees such as SAGE (Scientific Advisory Group for Emergencies) and MEAG (Moral and Ethical Advisory Group), and grey literature on ethics advice and frameworks from UK-based independent ethics councils and networks. We limit our analysis to England because lockdown policies and ethical advisory committees have varied across the UK, and perceptions of 'chaos' may not apply across the devolved nations. The documentary analysis included all documents since the first meeting of SAGE focused on COVID-19 until the end of 2020, meetings of SPI-B (Scientific Pandemic Insights Group on Behaviours) and MEAG from April to December 2020. Documents were then sampled on the basis of whether or not they discussed ethics and/or lockdown. We used the Department of Health (2007) pandemic influenza ethical framework to identify keywords as proxies for 'ethics' including respect, minimising harm, fairness, working together, reciprocity, proportionality, and flexibility. During a close reading of documents flagged we used memos to capture emerging themes, institutions and a timeline of events (Dalglish et al, 2020: 1429) and these were used to inform the workshop discussion. Subsequently we carried out a systems mapping exercise involving a desk-based review of ethical institutions, committees, frameworks and research centres in England in February 2021 (Figure 2). We then charted the links between these bodies and frameworks with specific government committees, departments and arms-length public bodies. We presented this institutional mapping and our timeline (Figure 1) at an online workshop on 25 March 2021. The contributors were four UK Government ethics advisors and researchers either involved in government advisory committees or research. The workshop aimed to surface discussion on moments and policy stages related to lockdown which our contributors believed to be salient. It also served as a prompt for them to consider how their ethical advice and contributions to government advisory committees had been given and received at specific times. We shared our institutional map to elicit discussion about the relationships between different kinds of institutions, subcultures of expertise, the degree of independence of ethics advice available, sought and given. We followed this up with the same workshop format in Germany with ten participants in August 2021, the results of which will be reported elsewhere.

Findings

The role of ethics during the UK's COVID-19 lockdown

In this section we outline the moments at which particular stages and aspects of quarantine measures or 'lockdowns' in the UK became matters of ethical and

Figure 1: 2021 UK timeline of 'ethical' moments and legislative change used in stakeholder workshop, March 2021

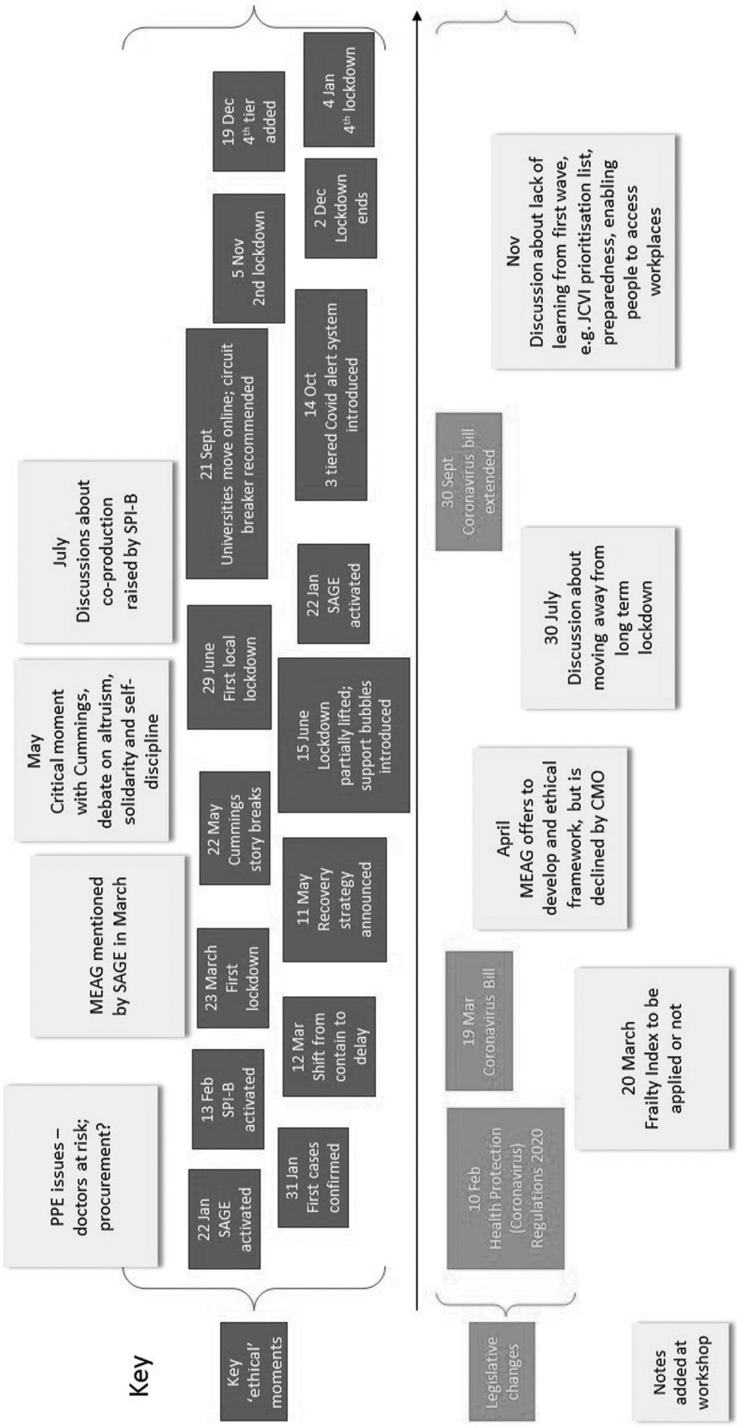
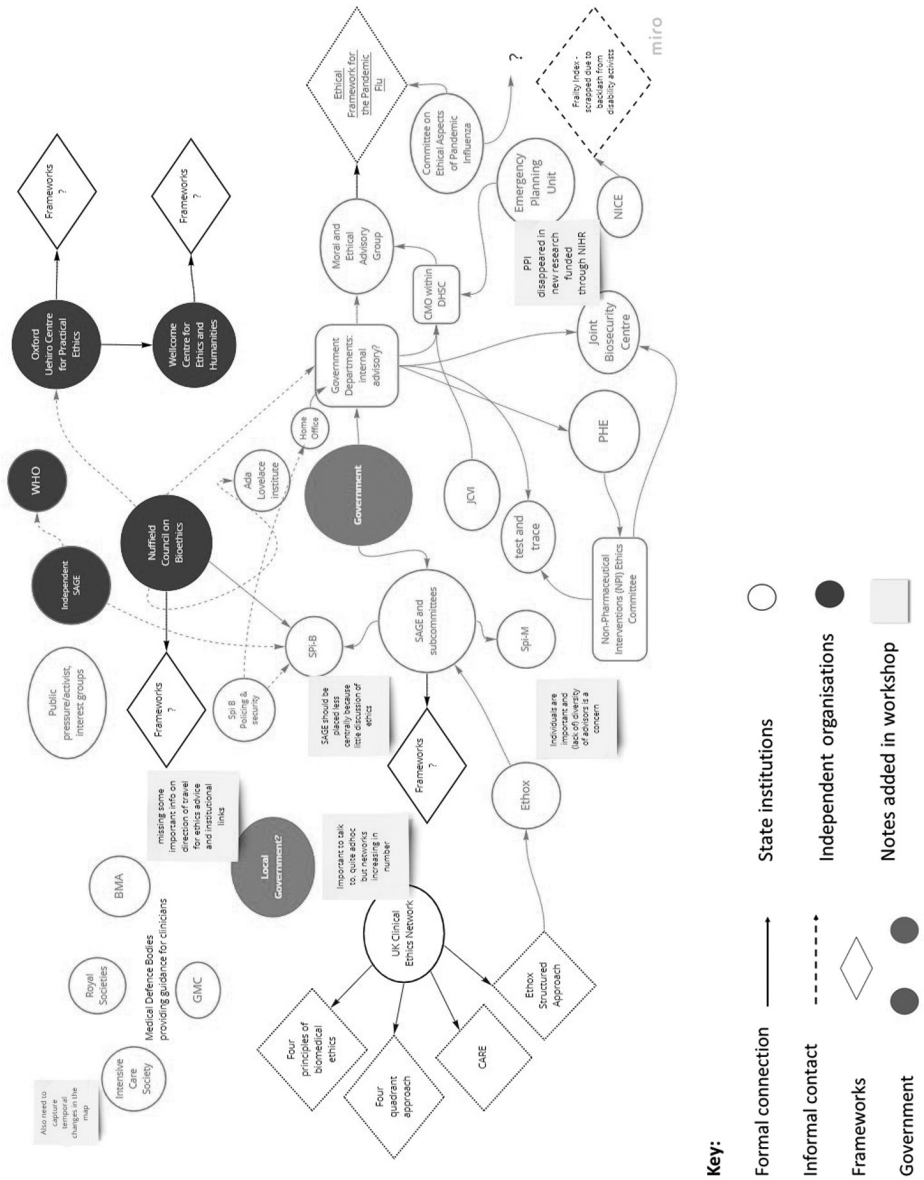


Figure 2: UK Institutional mapping of ethics advice during the COVID-19 pandemic, March 2021 (source: authors)



expert concern in the period from January 2020 to January 2021 (see Figure 1). We examine documentary evidence from SAGE and MEAG to establish what issues were legitimised as 'ethical' and explore what ethical frameworks and advice were provided to deliberate on these. Lockdowns refer to government restrictions on leaving home, social gatherings and closure of workplaces, retail, leisure and other places. Lockdown has been a significant contributor to ethical debates surrounding the COVID-19 pandemic in the UK and worldwide. This requires a broad understanding of ethics with reference to competing priorities and value conflicts between different spheres of life. While there has been plenty of public commentary, there has been surprisingly little

published academic research and public consultation on the ethical dimensions of the UK government's pandemic policy responses in general and lockdowns in particular. The SAGE minutes have rarely mentioned 'ethics' since it was convened in early 2020. MEAG met 23 times between March and November 2020 but mentioned lockdown only three times. We consider why this apparent disjuncture may have occurred.

2020 timeline of 'ethics and expertise moments' for lockdown policies in England

We will not provide a detailed narrative of policy decisions taken during the pandemic, but some brief context will be useful. Shortly before the first cases of COVID-19 infections were identified in the UK on 31 January 2020, the UK Government convened SAGE on 22 January, its subcommittee SPI-M (Scientific Pandemic Influenza Group on Modelling) soon after, and SPI-B in February. The role of SPI-B in particular has generated some political controversy, reflecting scientific and public concerns about the behavioural, economic and social assumptions underpinning the models, science advice, communications and intervention strategies pursued by governments (Michie et al, 2020; Dodsworth, 2021). The concept of 'behavioural fatigue' as an argument against entering lockdown too soon was a specific of publicly-aired scientific disagreement (Mahase, 2020). The initial response to the breakout of COVID-19 in March 2020 focused on mitigation, intending to 'contain, delay, research, mitigate'. By 23 March it was clear that an outbreak could not be prevented in the UK, and the first lockdown was announced. In March, SAGE minutes show that the MEAG would be invited to discuss the ethical ramifications of household quarantine in terms of risks to household members where one resident is symptomatic, though MEAG minutes make no reference to any such request.

During March, MEAG focused on the possibility of producing ethical guidance for clinicians and healthcare workers on patient care, by invitation of the Chief Medical Officer (MEAG note 20-03-20).[1] This idea was dismissed by the following week as it was decided that the Intensive Care Society already had such a document in place. MEAG was provoked into the first of several discussions about its role in providing ethical guidance to inform policies. The episode demonstrates some of the ambiguity created by the perceived need to develop new ethical principles, guidance and frameworks rather than using well-established principles, such as those from the Committee on Ethical Aspects of Pandemic Influenza (CEAPI) (Department of Health, 2007; 2011; DHSC, 2021). While this 'may need to be put in to practice very soon… it is going to be a living document, which can be updated to reflect changing circumstance' (MEAG note 01-04-20). It also shows the limitations of a bioethics perspective in responding to the extensive and complex social ethical dilemmas raised by pandemic management. This weakness has been noted by researchers across Europe, who have called for a reorientation of humanities and social science research to challenge the framing of the pandemic as a health crisis (Gaille et al, 2020).

Ethical issues raised within MEAG included the importance of engaging with the public in developing the recovery strategy, reaching out to more vulnerable groups, improving public trust in government, focusing on social care issues, crossover effects in other areas of policy on health outcomes, and the disproportionate impacts of the

pandemic on communities from black and ethnic minority backgrounds (MEAG note 20-05-20). Effective testing and vaccination programmes were key to the possibility of exiting lockdowns. The UK's Joint Committee on Vaccination and Immunisation (JCVI) discussed patient prioritisation and the ethical considerations of this (JCVI 07-05-20, p16). They heard from the co-chair of MEAG, Jasvir Singh, and were signposted to a 2006 paper by the other co-chair and former chair of the UK's Nuffield Council on Bioethics, Professor Sir Jonathan Montgomery, on vaccine prioritisation during a pandemic. However, the 'Committee agreed that JCVI advice would be based on scientific principles from the available scientific evidence and this would not include detailed ethical considerations which were for the Department of Health and Social Care (DHSC) to consider, informed by MEAG'. Some government ethics advisors and researchers who participated in our stakeholder workshop were frustrated that the JCVI prioritisation list had been developed without sufficient ethical consideration, with the criteria and answers determined in advance of the discussion. Some participants were concerned that the role of the committee had been to deliver on policy decisions already made.

Around this time, the role of scientific advice and expertise was gaining a substantial amount of media attention. SAGE minutes and member details began to be released in May. In response to the perceived lack of transparency of the official SAGE committee, former Chief Scientific Advisor to the UK Government, David King, convened Independent SAGE (iSAGE), a group of scientists (including some members of SAGE) in May 2020 to encourage open public and policy debate on the scientific evidence. This group gained widespread media attention which they used, alongside their own YouTube channel, to challenge the UK Government on its use of science. While this remit was framed as an ethical responsibility, ethics principles have rarely been explicitly discussed as such by iSAGE. Nevertheless, this group has regularly raised concerns, gradually shifting from a source of independent scientific review to active advocacy of alternative policies based on different political and ethical assumptions to those ascribed to the official government advisers.

Wavering public confidence in government policymaking was further impacted on 22 May when the lockdown was apparently breached by the Prime Minister's Chief Advisor, Dominic Cummings. This led to extensive media attention, and concern that his actions undermined trust in the government. This was exacerbated by the government's choice to support Cummings despite calls for his dismissal. Evidence in June by members of SAGE to the Science and Technology committee raised further concerns that the initial lockdown had been introduced too late. The lockdown was lifted in June (in stages). At this stage, MEAG were mooting the possibility of developing ethical guidance on lifting lockdown measures with a view to reducing unequal impacts on different social groups, and mindful of the severe health inequalities which had been surfacing in relation to people from black and minority ethnic backgrounds (MEAG note 10-06-20). Concerns were still being raised by several SAGE members and other public health experts that the lockdown was lifted too soon.

It has become increasingly clear that the government's decision making did not always align with the scientific advice offered (see Cairney, 2021 for a real-time assessment of evidence-informed policy during 2020). A salient example was that SAGE and iSAGE had recommended to government on 21 September that delaying action to reduce cases would result in a very large rise in deaths and increase strain on hospitals. SAGE were considering a package of interventions needed to prevent or stall this. The shortlist of

non-pharmaceutical interventions considered for immediate introduction included: a circuit breaker (short period of lockdown) to return incidence to low levels; advice to work from home for all those that can; banning all contact within the home with members of other households (except members of a support bubble); closure of all bars, restaurants, cafes, indoor gyms, and personal services (for example, hairdressers); all university and college teaching to be online unless absolutely essential. However, on 13 October the UK Government chose not to pursue the full lockdown route, which seemed to some, such as iSAGE, to be in direct opposition to the advice of SAGE. At this time, iSAGE were advocating an alternative ten-point plan (iSAGE16-10–20). Only one of the five SAGE recommendations was implemented: the call for people to work from home if possible. The publication of SAGE minutes led several media outlets to raise questions about why other recommendations had not been implemented. Structures of science-policy interfaces exist in order to provide advice during a crisis, but this advice is not value-free, is not necessarily implemented, and there are no commonly agreed principles or mechanisms for evaluating their effectiveness. It has been argued that the UK's policy strategy 'denied the role of competing values in assessing highly uncertain evidence, and ultimately undermined the credibility of official expertise' (Jasanoff et al, 2021: 95). Conversely, Birch (2021) describes this moment as an example of SAGE providing an unhelpful mixture of simultaneously 'normatively heavy' and 'normatively light' scientific advice (Birch, 2021: 22). This suggests a blurring of boundaries between ethical judgments and scientific evidence. Birch argues that the scientific modelling of reasonable worst-case scenarios was interpreted through the perspective of political optimism, which ultimately led to a much worse rise in COVID-19 cases. It is crucial to examine how such advice is organised, represented, used and perceived (Pearce, 2020). On 5 November new national restrictions were introduced. This lockdown lasted until 2 December. Following this, England transitioned to a three-tier system by which local areas with high COVID-19 infection rates had further restrictions imposed. On 19 December a new tier four was introduced – a stay-at-home order, akin to the earlier lockdown orders – in the most affected areas. During this time, concerned with rising infection and death rates and the highest rates of hospitalisation since the start of the pandemic, iSAGE was actively calling for a new national lockdown with a clear exit strategy, border controls, and a vaccine roll-out strategy in the UK and low and middle-income countries (ISAGE30-12–20). On 4 January 2021, the tiered system was again replaced by a national lockdown.

Making the right decisions in troubled times: value-laden policy advice

From this descriptive account of policy strategies related to lockdown during 2020, we can draw out some key insights on the limited remit of government ethical advisory institutions in the UK, the role of public reasoning in constructing the 'ethicisation' of particular policy decisions, and the implications for understanding the role of ethics advice in policymaking.

Firstly, this evidence suggests that as a national government ethics advisory committee, MEAG was underutilised as a forum for coordinating ethical expertise. While a range of issues were discussed during regular weekly meetings throughout 2020, the group were somewhat constrained in their remit by the prior work of the Committee on Ethical Aspects of Pandemic Influenza (CEAPI). This Committee had not been formally dissolved, but its influence was still felt, with several members

having been appointed to MEAG. It was presumed that this was the ethical framework that would be enacted in a pandemic situation. This problem has been previously acknowledged by Giacomini et al (2009: 68) who found that ethics frameworks in public health, 'in many cases seem to play a more decorative than developmental or foundational role'. The group did not have a clear route to influencing policy or strategy. Its deliberations also appeared to be – initially at least, and understandably given they sit within the DHSC – limited to a clinical and biomedical focus. Understanding the disconnect between these institutional relationships and that of the Civil Contingencies Committee (COBR) in the Cabinet Office will be paramount in evaluating the governance mechanisms in operation during the pandemic. The biomedical focus led MEAG to be considering such issues as primary patient care, funeral arrangements, the clinically vulnerable, vaccine prioritisation, and PPE guidance for healthcare workers who could not shave their beards for religious reasons (MEAG note 01-04-2020; 13-05-2020). While this emphasis shifted during the year, with more focus on recovery strategy, impacts of lockdown, issues of government messaging, health inequalities and public trust, there were no clear boundaries for what counts as an ethical issue, and the committee was not called upon by other scientific expert committees to comment on what we might call societal, rather than clinical, ethical concerns. This confirms Huxtable's (2020: 1) insistence that in the first months of the pandemic, there was no 'authoritative ethical guidance in England' that could help professionals find answers to the pressing ethical concerns they were facing.

Secondly, ethical issues have repeatedly but often momentarily surfaced in the public sphere, through political speeches and media appearances, which would benefit from rigorous and systematic interpretation. In particular, the media have played an integral role in what we term 'ethicisation'; shaping moments deemed of ethical concern during the pandemic. These are moments which have informed public discussion and public attitudes, and which have thus indirectly informed the UK Government's COVID-19 strategy. Surveys have frequently shown that policy strategies in the UK have been 'behind' the curve of public opinion (Ibbetson, 2020; ONS, 2021), although these findings must be treated with caution given the extent to which public opinion has been 'nudged' in particular directions (Dodsworth, 2021). Ethical moments have been influenced by events and individual stories such as Dominic Cummings' alleged breaking of lockdown rules, and lobbying from public interest groups – such as to raise the profile of the racialised impacts of COVID-19. Unplanned events, such as the Cummings affair and subsequently the 'partygate' scandal at No 10, 'overtook' official ethics expertise to highlight issues such as inequalities of sacrifice, public trust in government, and the apparent myth of social solidarity.

Arguably, iSAGE played a more visible role in the 'making public' of ethical issues, questioning the interpretation of scientific evidence, and shaping the terms of public and media debates on the ethics of lockdown and the use of evidence to support this. Their role reflects what Edwards (2014: 3, after Moore, 2010: 727) has described as a central legitimisation process, which is usually the preserve of national ethics committees: to decide on what issues are legitimately 'ethical' as opposed to passing issues of political and public concern. Bioethics bodies in the UK have put vast efforts into making bioethics more public in order to address calls for the democratisation of scientific expertise, but they are still engaged in practices of opinion forming, constructing publics, deciding on hierarchies of expertise, precluding partisan interests and 'interpreting' public views: 'The facilitative role [of public bioethics committees]

entails the articulation by mediators of ethical positions and their reflection back to publics and, ideally, the cultivation of a capacity for reasoned ethical reflection' (Moore, 2010: 724).

Thirdly, there are policy implications in terms of the practices of developing and delivering ethical advice to governments, and navigating the contested boundaries between epistemic and ethical advice. In reading the MEAG notes throughout 2020, there is a sense of an advisory body whose potential is not fully realised. MEAG are willing to engage in a transparent manner and, for instance, to develop and communicate a framework to assist policymakers to consider moral and ethical issues in policy design (MEAG notes 22-04-20). There is mention of bringing in 'policy experts' and 'to ensure that their [MEAG's] advice can assist policymaking across the UK' (MEAG notes 20-05-20). And there is consideration of 'how the Group could provide input on new policy in a timely manner' (MEAG 27-05-20). By November, the terms of reference for MEAG were updated to 'shift in focus on to response work, acting as a constructive sounding board and advisory group to officials in the earlier stages of policy development', while at the same time Public Health England were potentially looking to set up a new forum to seek moral and ethical advice (MEAG 04-11-20). This is evidence that the current institutional arrangements for national ethics advice were constrained and not being used effectively. They were not being used to provide broader advice and reflection back to government and policymakers on ethical issues of significant social relevance, or more future-focused issues such as lessons learned.

In the UK, the narrative of a government being 'guided by the science' (Cairney, 2021: 5) has been a frequent refrain during the COVID-19 pandemic. Policymakers have voiced a clear preference for input from specific scientific disciplines or specialties. In supplying this, scientific experts came to take on the role of being 'experts in making ethical and other normative judgments' which 'go beyond the science' (Veatch, 2005: 215). Smallman (2020: 597) describes how policymaking structures in the UK are shaped by the imaginary of 'science to the rescue' and the belief that ethical and scientific issues are easily separable. According to Fritz et al (2020: 1), the perception that scientific evidence enables value-free decisions is 'disingenuous and misleading', since the utilisation and evaluation of evidence are guided by the personal values of the experts. The objectivity of science itself has been problematised by decades of sociological and anthropological analysis of science-in-the-making (Felt et al, 2017). In May 2020, MEAG acknowledged this very issue when considering the ethics of emerging from lockdown. They discussed a paper prepared for SAGE by Professor Michael Parker from the University of Oxford Wellcome Centre for Ethics and Humanities. This paper argued that 'ultimately, these [policy] decisions will involve the making of difficult judgements of value, and choices between competing priorities', and set out a number of judgments which should be required of MPs to shape their decisions. Parker (2020) recommended a 'reasonable, transparent, accountable' process for evaluating competing priorities, on the basis of six 'fundamental values': minimising harms; maximising wellbeing; prioritising the worst off; prioritising societal value; equality; and personal freedom.

More recently, the pace at which new academic research on the ethics of government pandemic policy responses is being generated has become increasingly rapid. It has been also noted how the pandemic's urgent temporality had focused the minds of civil servants: 'it's when you realise that your job really matters… that you can make big

decisions, you can turn the country around by a massive lockdown' (O'Donnell and Begg, 2020). Real-time policy tracking and analysis has emerged as a new methodology of monitoring trends and instant thematic categorisation, as researchers take on a new sense of urgency (for example, Hale et al, 2021; IMF 2021). Ethics research has also followed this trend to accelerated output and delivery on policy engagement. The Oxford Uehiro Centre for Practical Ethics provided written evidence to government committees throughout 2020–21 on topics such as vaccination, exiting from lockdown, allocation of resources and healthcare worker protection. The overall aim of their work is to support development of policy strategies and research ethics that are 'ethically and legally justified'. The UK Pandemic Ethics Accelerator group was launched in May 2021 to provide rapid ethical guidance to policymakers and support public debate, with focus on themes including data use, foresight/preparedness, prioritisation decisions in accessing resources, public health inequalities and public values, openness and governance. These demonstrate that the gaps in providing effective and timely ethical advice to policymakers may be beginning to be addressed.

Institutional and cultural contexts and their impact on expertise and ethics

A wide variety of contextual aspects must be considered when exploring how ethical questions arise and are managed in policy design and implementation. It has been argued that, despite having an 'ad hoc approach' to ethics in research and innovation, the UK 'has a very well developed sensibility around ethics and science and medicine' (Rodrigues and Shelley-Egan, 2015: 4). At the same time, others maintain that Britain has established 'a loosely structured and unofficial approach to public ethical deliberation' (Jasanoff, 2016: 235–236). To investigate how these perspectives might coincide, we sketched out the institutions that published ethics advice during the pandemic, including academic centres such as Oxford Uehiro Centre for Practical Ethics, independent national bodies such as Nuffield Council on Bioethics, and networks, and government committees such as MEAG. During our workshop we refined our institutional mapping (see Figure 2). Firstly, we added a range of medical defence bodies who provide guidance for clinicians. Medical and legal bodies, unions and member organisations such as the General Medical Council (GMC), BMA, Royal Colleges, and the Intensive Care Society were seen as playing an essential role in informing direct ethical decision making at the patient-doctor interface and in health management. Secondly, we considered the role of influential individuals, for example, Professor Michael Parker (SAGE member) and Professor Sir Jonathan Montgomery (co-chair, MEAG), to help us understand the role of named experts and the connective tissue between advisory institutions. Thirdly, we reconsidered the centrality of SAGE in our diagram. Despite being the best-known and arguably most important science advisory institution in the UK during the pandemic, it rarely discussed ethics formally. Relatedly, we added a loose category of 'public pressure, activist and interest groups' to reflect the role of patient groups, disability rights activists, race equality campaigners, politicians and groups such as iSAGE who used a range of communications channels and actions to shape ethical and political discourse regarding the place of science, trade-offs and issues of equity and justice. Finally we introduced some important temporality into the map, noting how ethical moments emerged over the course of 2020–21 in the relationship between different institutions. For instance, there were controversies around the use of 'nudging', including disagreements between a group

of scientists and the British Psychological Society (BPS) about whether the UK government's use of behavioural science during the pandemic had promoted unethical 'covert' rather than 'indirect' governance techniques (HART group, 2021), and that some groups met rarely or were 'stood down' (for example, the Non-Pharmaceutical Interventions (NPI) Ethics Committee).

It has been argued that the existence of a transparent and morally sound framework or rationale for decisions can lead to 'increased public trust in governmental and commercial entities for routine as well as crisis practice' (Subbian et al, 2021: 187). As mentioned above, the UK government's main ethical framework for pandemic influenza was published in 2007. The document has since been used to inform the 'Ethical Framework for Adult Social Care' providing guidance for policymakers at the local, regional and national level dealing with the organisation of social care (DHSC, 2021). The framework consists of eight ethical values and principles to be considered while making decisions: respect, reasonableness, minimising harm, inclusiveness, accountability, flexibility, proportionality, community (DHSC, 2021). These principles are not uncontested, but are presented as foundational for policymaking. Elves and Herring (2020: 666–7), for example, criticise the framework for favouring individualism and autonomy over 'communal and care values'. Societal and public health ethical issues need to be addressed if political liberties are to be balanced with fairness and justice, and the results publicly justified. The 'checklist' approach envisaged for policymakers to consider these principles (Department of Health, 2007: 2) needs to be complemented with specific procedures for delivering, deliberating and decision making.

As the primary formal advisory body of interest in this paper, the Moral and Ethical Advisory Group (MEAG) was established in October 2019 to 'provide independent advice to the UK Government on moral, ethical and faith considerations on health and social care related issues as they occur'. It provides this advice via Chief Medical Officers, government departments, arms-length public sector bodies and ministers or the Civil Contingencies Committee (COBRA), and is sponsored/coordinated by the Director of Emergency Preparedness and Health Protection, DHSC. Yet it has been observed that ethical considerations during the pandemic have often seemed a background consideration that was pushed aside in favour of following the science (Huxtable, 2020). The UK Government seemed to be reluctant to allow ethical considerations to contradict the government's own position and policy decisions (Cairney, 2021). Former Head of the Civil Service, Lord Gus O'Donnell, in a seminar with the Royal Society of Medicine, pointed out that the main concern of politicians during the COVID-19 crisis has perhaps inevitably been on 'the visible and immediate': people dying, hospitals being overrun. The temporality of this politically-driven crisis, for O'Donnell, has been a major limitation of the work of SAGE, which has under-represented the expertise of social scientists, economists and those able to evaluate the longer-term, social and wellbeing impacts of government responses such as lockdown (O'Donnell and Begg, 2020).

For O'Donnell, this lack of diversity in disciplinary perspectives in government science advice had led to government messaging on 'social distancing' rather than 'physical distancing', with disastrous consequences in terms of the social isolation of vulnerable people during lockdown. Advancing insights from different disciplinary perspectives is an important consideration. Yet hierarchies of scientific knowledge production and expertise are rarely acknowledged in the debates (Lepenies and

Malecka, 2019). The advice offered by committees such as SAGE tend to exclude consideration of societal and contextual price paid in the management of pandemics. The disciplines represented have been dominated by epidemiological modelling science, to the neglect of interpretation and judgment. This was confirmed during the workshop, as ethics advisors and researchers observed that they had struggled to fit counter-views to the scientific messages, and met a lack of interest from scientists involved in providing advice on ethics. Advances in the relationship between science, society and policy advice had been weakened by the pandemic.

The simultaneous significance and absence of ethics from the knowledge practices involved in the science input, both solicited and provided, to the UK's pandemic policy responses tells us something about the critical importance of ethics under conditions of crisis and urgency. In what one workshop participant described as the desperate attempts to make the pandemic governable, ethics was sidelined as a matter of concern. Another government ethics advisor noted a shift in the UK's policy-science interface to being both an *iatrocracy* – government by biomedicine (see also a public intervention by former editor of the British Medical Journal, Richard Smith, 2020) – and an *adhocracy* – where policy is made 'off the cuff' with no discernible principles or organisational structure. Between these two extremes is an ethical vacuum in which neither politicians nor scientists are willing to propose an ethical perspective. Values and judgments are presumed to be out of scope. This causes two problems. First, values remain invisible in the unacknowledged social and behavioural assumptions built into the models informing policy decisions, which are rarely subject to correction by empirical data. Secondly, it reduces the imperative for governments to provide explicit and defensible political reasons for making ethically-informed judgments.

Workshop contributors noted that the capacity of the civil service itself to provide sound, evidence-based and ethical policy advice to ministers had been hollowed out over the past decade. There was no longer a cadre of impartial and independent senior civil servants who can do ethics and analysis, or provide caution to ministers making decisions; indeed the notion of 'impartiality' has been radically questioned (MacAulay et al, 2022). The increasing centralisation of policy strategy and advisory personnel in the Cabinet Office and Number 10 has led to the politicisation of ethical questions in government. This was a particular concern of iSAGE, who cited the appearance of the Prime Minister's special advisor Dominic Cummings at SAGE meetings as part of the rationale for establishing a more independent science advisory body. Participants observed that there was very little staffing capacity, for instance within the DHSC, to lead on ethics. One perception was that the DHSC no longer has the human resources needed to fulfil this role, and that the roles of a proliferation of different agencies (some of which we capture in Figure 2) is unclear. The organisational memory needed for enacting the emergency plan in a pandemic public health crisis situation has been eroded.

Another workshop theme was the representativeness of government science advisory bodies. It was noted that the significant overlaps between people sitting on a range of different committees could be problematic, as well as stifling public debate and public trust in government. As political scientist, Marc Geddes (2018) has observed, in the context of UK House of Commons select committees prior to the pandemic, the experts providing evidence play an increasingly important role in shaping policy decisions and public engagement, but lack diversity in terms

of geographical location and gender. Early in the pandemic, SAGE itself attracted significant criticism over the lack of transparency about its membership. From the details subsequently published, it is evident that in 2020–21 SAGE members were mainly (77 of 93/84%) epidemiologists, biologists, medics, public health, bioinformatics, computer science, engineering or statistics specialists.[2] There was one bioethicist on SAGE, and a handful of social/health psychologists, an architect, a legal scholar and an astrophysicist. The wider social science and humanities disciplines are almost entirely absent. Other subgroups and committees had more diverse membership, including SPI-B which had around 40 behavioural and health psychologists, civil servants and the same ethicist, Michael Parker. When iSAGE was established in May 2020, by contrast, it was initially praised for its independence, credibility, and gender and ethnic diversity. This was 'an example of the transparency many observers of the regime of science policymaking had been craving', wrote The Lancet editor, Richard Horton (2020). Yet iSAGE was also limited in the plurality of scientific disciplines represented in its membership. It was chaired by King, a chemist and climate scientist, and its membership in 2020 was made up of experts in public health, behavioural and social psychology, clinical medicine, epidemiology, neuroscience and mathematics, and the Director of the Equalities Trust (Independent SAGE, 2022). A small number of iSAGE members also sat on SAGE subcommittees (for example, Stephen Reicher (SPI-B) and Kamlesh Khunti (Ethnicity Subgroup), and an interesting question is how much tension this may have caused for both these members and the committee chairs, especially in cases where members were publicly critical of the government's COVID-19 policies (for example, Reicher, 2021). This situation has led many ethicists, including our workshop contributors, to argue for more public involvement in ethical debates. This is one area of focus for the UK Pandemic Ethics Accelerator research group and the Nuffield Council on Bioethics. Jasanoff et al (2021) also note how public dissent in relation to national governmental COVID-19 policy strategies has depended on the degree of centralisation in public information channels; the value-laden and unstable nature of success measures; and in the UK specifically, the 'fracturing of publics across intersecting dimensions of race, social class, and geography' (Jasanoff et al (2021: 99). Both the (im)partiality of non-diverse government advisory committees and the 'public' of public health ethics need to be problematised.

Discussion and conclusions

Our institutional mapping of ethics advice in England during 2020 has shown that ethical considerations have been simultaneously widespread in public debate, yet marginalised in policy responses. A consistent and coherent institutional national coordination of expert ethics advice has been lacking. Ethics advice has had to compete with other forms of expertise seen as more scientific, credible and politically neutral. The crisis context of pandemic governance leads to a specific temporality and spatiality of science-policy advice, which can lead to prioritisation of immediate concerns, and atomises individual bodies as biomedical entities, aggregated to national populations but rarely considered as collectives – except in the case of considering health inequalities for specific social groups. Knowledge management practices, the politicisation of policy advice, and capacity within the UK Government civil service itself, were concerns raised by the workshop contributors about the lack of institutional

preparedness for a public health crisis on the scale of COVID-19. These concerns are shared by researchers, government officials and MPs who have challenged the lack of diversity at the science-policy nexus. In the space of this ethical vacuum there are concerns that public deliberation and ethical discourse is diminished.

Jasanoff et al (2021) have classified the UK as a 'chaos' country as a result of the apparently incoherent, inconsistent and publicly contested governmental strategies developed to respond to the COVID-19 pandemic. More international and devolved comparative research on adhocratic processes in the pandemic is needed to see if the UK is any more chaotic than other democracies with multilevel governance structures (Greer et al, 2021). Our mapping of the current institutional arrangements for ethics advice, official frameworks, communications, and the ethics research-policy nexus dissects their ad hoc nature and highlights the lack of scientific plurality characterising science advice in the development of the UK's policy responses to the pandemic. The knowledge practices emblematic of ethics advice to government have been shown to be shaped by urgency/speed, to reflect existing boundaries between biomedical, public health ethics and societal ethics, and have been characterised by an adversarial relationship with public debate and national media. Little is known of how the voice of the 'public' has intersected with ethical and scientific forms of expertise in the case of the pandemic. These are issues which need to be addressed in order to significantly improve on the embedding of ethics advice in policy and political decision making in the UK. Ethical principles do not straightforwardly translate into legitimate policymaking. It is therefore important to consider the institutional and cultural configurations of ethics advice, to examine how such advice intersects with scientific evidence, and to explore the value-laden nature of the science-policy interface.

There are multiple implications for policy decision making of the organisational landscape of ethics advice and the instability of what counts as an ethical moment. On the one hand, it could be argued that the adhocracy of government ethical advice in the UK enables a commitment to independence and pluralism. On the other, some critics find the lack of coherent ethical foundations and policy procedures to be troubling. Some believe that this situation could be resolved through guidance and training for clinicians (for example, Baines et al, 2020). Others believe that there should be a firm set of principles established to inform policy decisions, supported by coordinated forms of ethics advice (for example, the UK Pandemic Ethics Accelerator group). A third group of researchers has argued that the seemingly chaotic style of governing in Whitehall and in other countries is the result of increasingly complex, interlocking systems of actors in polycentric advisory structures that need to be understood better (Diamond, 2020). What is clear is that there is currently a significant lack of basic knowledge and understanding of national differences in the institutional arrangements, committee membership, routes of communication and intersection, public and political tensions, and involvement of diverse publics in the provision of ethics advice. This knowledge and understanding is needed to identify more practical ways of strengthening the democratic processes of ethical debate.

Notes

[1] The MEAG meeting notes are from https://www.gov.uk/government/groups/moral-and-ethical-advisory-group#meeting-summaries (last accessed 04-02-22). The SAGE and SPI-B minutes are from https://www.gov.uk/government/collections/

scientific-evidence-supporting-the-government-response-to-coronavirus-covid-19#meeting-minutes-and-supporting-papers (last accessed 04-02-22). Our document analysis included minutes from the following meetings: SAGE (meetings 15,17, 18, 28, 33, 34, 49, 55, 56); All MEAG meetings (22/4, 29/4, 13/5, 20/5); SPI-B (9/3,14/3, 16/3, 1/4, 13/4, 6/5, 14/5, 8/7, 29/7, 16/9).

[2] Data on SAGE membership in 2020–21 was retrieved via the Internet Archive and a websearch was conducted to identify disciplinary backgrounds and research interests of each member, from 'Transparency data. List of participants of SAGE and related sub-groups', https://web.archive.org/web/20211220110914/https://www.gov.uk/government/publications/scientific-advisory-group-for-emergencies-sage-coronavirus-covid-19-response-membership/list-of-participants-of-sage-and-related-sub-groups (accessed 23-06-22)

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Contributor statement

JP, HS, SB and TS wrote the first and subsequent drafts of the manuscript, with comments and editing from RL, LW and RD. JP and HS conceptualised the study. JP, SB, HS and RL designed the study. SB, TS and LW conducted data analysis and interpretation, with contributions from JP, HS and RL.

Conflict of interest

RD has been a member of the Committee on Ethical Aspects of Pandemic Influenza (CEAPI), the New and Emerging Respiratory Virus Threats Advisory Group (NERVTAG), and the Joint Committee on Vaccination and Immunisation (JCVI) and is currently a member of the DHSC Moral and Ethical Advisory Group (MEAG). Through his personal services company, Dingwall Enterprises Ltd, he has also undertaken paid consultancy for AstraZeneca on general issues relating to vaccine hesitancy and access to vaccines, and received fees from a number of magazines and newspapers for articles commenting on aspects of the COVID-19 pandemic.

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