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Freezing deliberation through public expert advice

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ABSTRACT


When important public issues are debated, many options for government action should be subjected to serious reflection. Constrained discussions over policy options may hamper democratic legitimacy and accountability, and produce decisions that ignore relevant reasons and facts. Hence, constrained deliberation has important consequences for knowledge construction and utilization. We advance theory on ‘epistemic policy learning’ by showing mechanisms that promote expert consensus in external arenas, and that these can hamper deliberation on public policy. Government-appointed experts, in combination with mass media, can ‘freeze’ deliberation by presenting one unified front. Comparison of national print media coverage in Sweden and Denmark during the 2009 H1N1 influenza pandemic offers support. The similar polities enacted different policies: Sweden sought to vaccinate its full population while neighbouring Denmark targeted small groups. Yet experts dominated both public discourses and echoed each other’s support of national policy. In turn, public policy debates were scant in both contexts.

KEY WORDS Certified experts or expertise; epistemic communities; evidence-based policy; pandemic influenza; policy deliberation; policy risk or uncertainty; vaccination policy

Introduction

Expert judgments on advantages and pitfalls of alternative policies are often deemed appropriate to avoid policy failures (Haas 2004; Howlett and Wellstead 2011; Ingold and Gschwend 2014; Öberg *et al.* 2015). Recent decades have seen evidence-based policy take centre stage in recommendations for how to improve public policy effectiveness and efficiency. This prescription has been particularly pronounced for health, where randomized controlled trials and other scientific methods have a long history of enabling progress towards better outcomes. Hence, specialized scientific professionals (i.e.,

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experts) possess knowledge that can steer public deliberations about policy. Experts appointed by the government are particularly important. Such ‘certified’ experts (Dunlop 2014; Stallings 1995) are simultaneously experts and officials, and hence combine the authority, resources and trustworthiness of their professions and of the state.

Simultaneously, normative scholarship on democracy emphasizes that expertise should aid but not dominate policy formulation (Dahl 1989; Turner 2001). Existing information may be ambiguous (Jennings and Hall 2012: 248), experts may have biased agendas (Mahon and MacBride 2009; Montpetit 2011), and uses of expertise often depend on political context (Boswell 2009a; Weible 2008; Weible *et al.* 2010, 2012). Experts and policy-makers may be conscious of and adjust to such influences (Adler and Haas 1992; Dunlop 2009: 303; Lundin and Öberg 2014; Öberg *et al.* 2015). Hence, expertise is often needed in public policy deliberations but is neither value-free nor purely technical (Fisher and Gottweis 2012). Civil society, politicians and generalist bureaucrats are therefore wise to treat expert information judiciously (Christiano 2012; Hajer and Wagenaar 2003; Hoppe 2005: 207; Lundin and Öberg 2014; Turner 2001).

The present analysis focuses on a quintessential ‘transboundary’ crisis (Ansell *et al.* 2010). During the 2009 H1N1 influenza pandemic (2009 H1N1), European responses were interdependent. Human influenza (flu) spreads easily across open borders (flu is highly contagious and some carriers feel no symptoms). Hence, one country’s flu response policies affect what other countries must do. For instance, vaccination (though costly) reduces the likelihood of flu spread and, hence, of infections abroad. In turn, if countries dislike other countries’ responses, then conflicts may ensue (*cf.* Europe’s 2015 refugee crisis). Experts can mitigate conflicts by harmonizing policy advice through transnational epistemic communities (Haas 1992). But expert voices that publicly legitimize policy differences between interdependent states risk exacerbating conflicts.

This article addresses whether experts in mature democracies facilitate or discourage (‘freeze’) *public deliberation* about policy alternatives. Given dilemmas posed by expertise, tracing experts’ impacts on policy deliberations must be important to any democratic or European agenda. Two opposing theoretical expectations are weighed. Experts might encourage public deliberation with knowledge that can help citizens form their own opinions about important policy options. Conversely, consensus-seeking within domestic epistemic communities might lead experts to disseminate little information that could spur public debate or aid deliberation on policy options (Cross 2013; Dunlop 2013; Haas 1989).

The article analyses public discourses in two most-similar European cases. Swedish and Danish policy on how many and who to vaccinate against 2009 H1N1 was different (see below). Yet Sweden and Denmark both faced 2009

H1N1 simultaneously, and used the same vaccine (Amato-Gauci *et al.* 2011; Mereckiene *et al.* 2012). They have similar public health conditions and health care institutions (e.g., Esping-Andersen 1990). Both populations tend to trust their public officials (e.g., Van de Walle *et al.* 2008). They are close neighbours with similar languages, so one's public discourse can easily affect the other's. Hence, the cases are suitable for exploring theories that link expert information and public policy deliberation. The article answers two research questions:

- Did nationally certified and other experts explain alternative 2009 H1N1 vaccination options in the public arena?
- To what extent was more than one option publicly debated?

We first review literature on the relationship between expertise and public deliberation. We then use the review's conclusions to develop theory on logics that may lead experts to communicate a common position in the public discourse, even if they privately disagree. The methods used in our content analyses of national newspaper coverage on 2009 H1N1 vaccination in Sweden and Denmark are described and quantitative and qualitative analyses of the coverage presented with a focus on answering the two research questions.

Theory linking expert information and public deliberation

Why theorize public deliberation on policy alternatives?

Inappropriate policy instruments affect the implementation and outcome of political decisions negatively and may worsen problems that policy-makers aim to solve (e.g., May 2003). Uncertainty in public policy-making exacerbates policy failure risk. When policy-makers respond to crises, the risk is further increased because uncertainty coincides with critical threats and urgency (Rosenthal *et al.* 1989). Hence, expertise can reduce the risk of policy failure by reducing uncertainty; that is, by providing critical information on policy options.

In turn, policy failure risk may be reduced by public discourse on a wide range of policy options (Linder and Peters 1988: 740, 748). Even if scientific support for one option is overwhelming, evaluating alternatives can be the best course (Jordan *et al.* 2013). Weighing options publicly can make social problems and solutions better understood and make adequately informed decisions more likely (Barabas 2004; Hajer and Wagenaar 2003; Lundin and Öberg 2014; Mansbridge 2003: 524; Öberg *et al.* 2015; Parkinson and Mansbridge 2012: 11). Deliberation adds democratic legitimacy by increasing the chance of including different perspectives (Parkinson and Mansbridge 2012: 10). Hence, gains from public policy deliberations can outweigh burdens of

marshalling more information, and considering just one policy option publicly is generally problematic (Öberg *et al.* 2015).

Despite such arguments for generating and reflecting publicly on multiple policy options, few studies have focused on alternatives considered in public discourse on policy (Howlett and Lejano, 2012; James and Jorgensen, 2009; Öberg *et al.* 2015). In turn, while scholarly interest in expert policy advice (e.g., autonomous government agencies, evidence-based policy) has recently been strong, experts' impact on the range of policy options considered in public deliberation is under-researched.

Experts, unified public stances and 'epistemic learning'

Reasoned discussion of policy options requires relevant information. Available information may be contested (Boswell 2009a; Fisher and Gottweis 2012; Lundin and Öberg 2014). But use of expert information (expertise) generally reduces policy failure risk (Christiano 2012; Howlett and Wellstead 2011; Lindblom and Woodhouse 1993: 22).

The 'expertise' concept is contested and often under-specified (Turner 2001). This article refers to systematically gathered information that meets standards of coherence and honesty and uses generally accepted research methods (Lundin and Öberg 2014: 26; Weible *et al.* 2012: 11). Expertise can be produced at universities, research institutes, consultancies, think tanks, public authorities or other organizations (Weible *et al.* 2010).

Experts require legitimation to advise an audience (Turner 2001). 'Experts' here are specialized professionals who primarily base their legitimacy on university training coupled with advanced research in virology, epidemiology or other public health fields. 'Certified' experts may have additional status in public deliberation. The polity appoints (certifies) some individual experts as particularly qualified to guide policy (Dunlop 2014; Stallings 1995). Certified experts carry the authority of a science and of the state, and may use state resources such as those for media relations (Weingart 1999). They hold official title as 'the' experts, and are sometimes even government's official spokespeople on specialized issues (Dunlop 2014: 212). Conversely, uncertified experts can be prevented from participating by their lack of official status and resources (Dunlop 2014: 216; Ferretti and Pavone 2009). Particularly in polities where governments enjoy high public trust (such as the Nordic), 'the' (certified) experts are likely to be trusted sources in public deliberation.

Consensus among experts adds power to expertise. Experts commonly belong to epistemic communities of professionals with recognized competences in particular domains and authoritative claims to policy-relevant knowledge (Cross 2013: 142; Dunlop 2013; Haas 1992). In addition, epistemic communities are 'a main vehicle for authoritative consensual knowledge' (Dunlop 2013: 230) and for coping with complex issues. Through experts,

such 'consensual knowledge' can 'inform policy choices' (Dunlop 2013: 230). In 'epistemic learning' policy processes (Dunlop 2014), epistemic community members use consensual knowledge to 'teach' political leaders and the general public about how to solve a collective problem.

Two conditions facilitate epistemic learning. First, overlap between epistemic communities and bureaucratic machineries; for example, in certified experts (Dunlop 2013). Second, that the community appears consensual because 'when a group of professionals with recognized expertise is able to speak with one voice, that voice is often seen as more legitimate because it is based on a well-reasoned consensus among those in the best position to know' (Cross 2013: 147; Dunlop 2013; Haas 1992). Hence, epistemic learning is likely when 'the' experts convey compatible information: consensus gives the information status as knowledge. Epistemic learning becomes significantly less likely when legitimate experts convey incompatible information: one expert's information becomes mere opinion.

Epistemic community dynamics encourage public consensus among experts. Professionalization pushes community members to share basic understandings of the world (Cross 2013: 149). In addition, experts can find consensus strategically important (Ingold and Gschwend 2014). Developing consensus may include adjustments to political context (Adler and Haas 1992; Dunlop 2009). Indeed, national institutions can shape epistemic communities' policy preferences (Baldwin 2005; Baekkeskov 2016; Dunlop 2013: 232; Vallgård 2007). Hence, epistemic communities may generate true consensus, or may appear consensual because real debates are confined to expert forums (experts then pre-emptively adjust their public message).

Finally, crises impose pressure to appear consensual on participants in response-related debates. Crises tend to combine critical threats, uncertainty and urgency (Rosenthal *et al.* 1989). Urgency means that response delays increase risks that such policy will fail. Debate on how to respond can take time. Apparent consensus among experts may cut debates short because experts proffer one ('the') solution. Hence, crises can encourage experts to 'rally to the flag' to make responses timely; objections are kept silent for fear of delays. Conceivably, even mass media may 'rally to the flag' by reporting expert views that agree while ignoring dissenters (i.e., biased media selection).

In sum, experts who convey consensus can occupy asymmetrical positions as 'social instructors' supporting epistemic learning, rather than as debaters symmetrical to other actors in public discourses (Dunlop 2014; Hoppe 2005). Although experts may actually disagree, epistemic dynamics and crisis conditions increase the likelihood of one unified expert front; unified stances could also reflect true expert consensus or biased media selection.

How unified expert fronts play to media logics

Unified fronts among experts are likely to keep general populations ignorant of real expert disagreements because apparent consensus plays to mass media dynamics. Mass media provide crucial public policy deliberation arenas (e.g., Boswell 2009b). Hence, mass media coverage enables citizens to consider policy options and debate solutions. For instance, during 2009 H1N1, most Swedes received their pandemic flu information from television (64 per cent) or newspapers (63 per cent), rather than workplaces or schools (9 per cent), family or friends (4 per cent), or the internet (7 per cent) (*Rapport till Socialstyrelsen* 2009).

Experts are frequently sources in media reports. They communicate research; but they also comment on information produced elsewhere or on policy options presented by government (Albäck *et al.* 2003). Despite experts' strong voices in mass media, communication forms and logics in experts' own forums differ from mass media's. Weingart *et al.* (2000) have argued that multiple policy-relevant discourses happen in parallel and overlap little. General public discourses occur through mass media reporting and opinion coverage. Professional discourses occur between experts in specialized conferences and journals. These dissimilar discourse dynamics complicate transmission between discourses of arguments and conclusions. Successful transmission depends on 'playing by the rules' of each discourse. Hence, effectively publicizing expertise depends on mass media dynamics (indeed, some expert bodies have developed media strategies [Albäck *et al.* 2003: 939]).

Mass media dynamics are shaped by 'physical limits, organizational features and news values' (Parkinson 2006: 177). Experts' public messages may fail if incompatible with these fundamentals. Conversely, experts can communicate successfully by adjusting to typical mass media's short column spaces or time-frames (physical limits), focusing on person-centred narratives and emphasizing attention-grabbing developments (organizational priorities and news value).

Parallel discourses mean that real expert disagreements can stay beneath public view. Open conflict or disagreement attracts media searching for attention-grabbing 'news'. Conversely, public unity among credible experts leaves disagreement less detectable. Non-experts (such as journalists) are unlikely to follow complex or exclusive expert debates (Weingart *et al.* 2009). Hence, when experts present unified public fronts, real disagreements are unlikely to become general public knowledge. In turn, apparent consensus allows experts to maintain asymmetries of knowledge on which epistemic learning depends.

In addition, expert policy advisors can access government's media resources (Dunlop 2014; Ferretti and Pavone 2009). For instance, certified

experts are sometimes summoned to government press conferences that shape agendas for local, national or even international media. In particular, these means give certified experts further capacity to project one message as the expert consensus.

To summarize, mass media frequently use experts to give claims greater credence. But mass media and science follow different discursive rules. Experts can adapt to media dynamics and may prevent disagreements from reaching the public discourse. Certified experts have advantages over others in this regard because of government communication resources. Hence, epistemic learning can be predicated on successful attempts by certified experts to project unity.

In the next section, we use the reviews above to outline an improved understanding of how experts can enable or constrain public deliberation over policy options.

Towards a theory on freezing deliberation through expert advice

Policy options discussed in the public discourse enable citizens to debate or evaluate them (Parkinson and Mansbridge 2012: 15). But experts appearing consensual 'freeze' public deliberation, and apparent (rather than true) consensus may emerge through epistemic mechanisms that play to medias' discursive dynamics. Crisis conditions further encourage experts and others to join one front, rather than debate policy options publicly (Ansell *et al.* 2010; Rosenthal *et al.* 1989).

These considerations support two opposing expectations about how expertise affected public deliberation on 2009 H1N1 pandemic vaccination. High degrees of public deliberation on response policy are reasonable to expect in mature democracies. H1N1 was worldwide front page news for many months. In addition, 2009 H1N1 vaccination policies depended on public funding, re-oriented global medicines production on an unprecedented and massive scale, mobilized multitudes of health professionals to administer vaccines and, not least, required citizens' active acceptance and participation. Hence, liberal mass media could be expected to comprehensively explicate and debate all H1N1 vaccination policy options.

During crises, however, certified and other high-status experts may monopolize the related public discourse (Dunlop 2013; Haas 1989). Experts rallying to the flag or media focusing on certified experts can dampen dissenting voices. The resulting appearance of consensus permits experts to instruct policy-makers and the public (Dunlop 2014), rather than providing comprehensive public information. Mass media's tendency to simplify stories rather than offering nuance may strengthen such epistemic learning (Boswell 2009b; Parkinson 2006). The expected result is little or no explication of

2009 H1N1 vaccination policy alternatives; that is, an effective freezing of public deliberation.

The remainder of the article aims to advance theory on public expert advice by investigating whether one of these two expectations was fulfilled in Sweden and Denmark. To repeat the research questions: what role did the experts have in the public discourse? And did certified experts explain alternative policy options in the public arena, and was more than one policy option publicly deliberated? Descriptions of the context, cases and data follow next, then quantitative and qualitative analyses.

2009 H1N1 flu vaccination policies as cases of public deliberation

Different countries responded differently to the 2009 H1N1 flu outbreak (Baekkeskov 2015). Public deliberation thus had potential to inform policy choices in any polity.

During March and April 2009, United States (US) and Mexican health authorities discovered people infected by a novel H1N1 'swine' flu. The simultaneous discovery of the same disease in different locations indicated spread beyond H1N1's origin. In addition, hospitalized H1N1 patients in Mexico tended to sicken and die at an alarming rate. Mexican authorities alerted the World Health Organization (WHO) on 24 April. On 25 April, the WHO declared H1N1 a 'public health emergency of international concern'.

The WHO declaration triggered policy responses lasting through the following winter (Baekkeskov 2015). All European Union (EU) member states and many other countries responded. Some governments initially sought to stop H1N1 at borders by screening travellers from Mexico and isolating identified cases. These 'containment' measures proved futile, however, making other policies necessary.

The core response in most EU countries became vaccination (Mereckiene *et al.* 2012). Vaccination campaigns mostly began in late October and early November. National policies on whom and how many to offer vaccination were decided during the summer and fall of 2009; but they differed substantially.

Among countries with different policies were Denmark and Sweden (otherwise 'most similar systems' [Peters 1998]). Sweden offered vaccination to everyone (100 per cent of the population). Denmark offered vaccination only to specified medical risk groups, health care workers and people in critical positions (totalling 20 per cent of the population). Hence, dissimilar policy outcomes for public health, health care systems and government finances could be anticipated.

Experts are often important in crisis response-making (Rosenthal and 't Hart 1991). An emerging literature documents that certified experts – virologists,

epidemiologists and infectious disease specialists who were policy advisors – were pivotal to countries' 2009 H1N1 responses (Baekkeskov 2016; Keller *et al.* 2012; MacPhail 2014). One author's interviews with 2009 H1N1 policy-makers in Sweden and Denmark indicate that government experts' advice was generally turned directly into response policy (Linde 2014; Nielsen 2014; Pedersen 2013; Smith 2013; Tegnell 2014). Written evidence further supports that certified experts' advice steered 2009 H1N1 vaccination policies (Baekkeskov 2016).

The prospect of expert-led 2009 H1N1 policies with different outcomes for otherwise similar countries made public deliberations potential means to policy improvement, explication and legitimacy. To assess whether experts supported or 'froze' public deliberation, the analyses that follow consider who participated and with what claims in the public discourses on 2009 H1N1 vaccination in Denmark and Sweden.

Public deliberation can be operationalized using numbers and types of claims from different sources in Swedish and Danish mass media during 2009 pandemic response. Absence in mass media of reason-giving and counter-arguments for several policy options indicates limited public deliberation. Conversely, more reasons and mentions for multiple policy options indicate more public deliberation. Rich public deliberation would be indicated by approximately equal public mention and treatment of multiple policy options.

The analysis uses data on 2009 H1N1 vaccination policy options mentioned in national print media¹ and related indicators. Print media constitute one of several important arenas for public deliberation; ideally, all such arenas should be investigated. As emphasized above, however, newspapers and magazines were a principal source of H1N1 information for citizens, and hence conveyed key inputs to potential public deliberations.

We selected texts using print media databases (*Retriever Research* in Sweden; *Infomedia* in Denmark). The online addendum details the search frame, search terms, search results and coding.

Content quantitative analyses

As described, Sweden and Denmark adopted significantly different H1N1 vaccination policies in 2009 (100 per cent of Swedes, 20 per cent of Danes). Was national policy uniformly supported or justified by nationally certified experts? Did these experts present and give arguments for available policy alternatives? To what extent did national print media cover policy alternatives? To answer these questions, we analysed the number of claims about vaccination policy made in each discourse, what the claims were, who made them and how they were presented in print media.

Rather than having equal mention of vaccination alternatives, each country's print media were dominated by one claim (Figure 1 in the online

supplemental data). In addition, the dominant claim was consistent with national policy. In Sweden, most attributable claims (74 per cent) supported the general mass vaccination policy ('all'). In Denmark, a similar proportion of claims (73 per cent) supported the targeted vaccination policy ('some').

The 107 claims in Swedish print media were mostly expert opinions on both sides of the argument. The sources for 58 per cent of these were certified experts; 15 per cent were attributed to other experts, 10 per cent each to journalists and civil society, 6 per cent to politicians, and 1 per cent to other civil servants.

The Danish data show a wider range of sources. Experts were the plurality but significant contributions came from politicians, citizens and the media itself. In all, 127 claims were identified. Twenty-eight per cent were from certified experts and 9 per cent from other experts. Civil society contributed 27 per cent, politicians 19 per cent, journalists 9 per cent and other civil servants 7 per cent.

Not all sources made compatible claims; but most supported national policy (Figure 2 in the online supplemental data). Rather than giving equal weight to alternatives, 89 per cent of claims from certified experts in Sweden and 92 per cent in Denmark were consistent with national policy. Media might be expected to call on other (non-certified) experts to counter public authority positions. Even so, 31 per cent of claims by other experts in Sweden and 67 per cent in Denmark were consistent with policy. In both countries, all claims by civil servants supported policy. One hundred per cent of claims by Swedish politicians and 71 per cent of Danish supported policy. Swedish journalists were supportive in 73 per cent of their claims, while Danish journalists were more divided at 50 per cent in support. Finally, with 36 per cent of claims in support, Swedish civil society expressed criticism. Danish civil society claims were more favourable at 59 per cent supportive. Hence, each public discourse drew heavily on experts inside and outside of government and, moreover, mostly contained claims that supported national policy. Alternatives were much less mentioned, and then mostly by non-expert or non-certified sources.

The above analyses aggregate claims across a seven-month period and do not show whether public discourses changed. One-sidedness could thus be an artefact of aggregation rather than indicating limited deliberation. For instance, public deliberation could have been substantial early on and opinion could have coalesced. Or public deliberation could have occurred in advance of the key policy decisions in the period. With the available indicators, this would mean cacophonies of claims in early periods or leading up to policy choices, changing to a 'harmony' in later periods or as choices were made. There should also be considerably more discourse volume early on, while the public's attention to the issue was needed for effective deliberation.

The timing of claims made by various sources in print media indicates how each discourse actually progressed (Figure 3 in the online supplemental data; data are presented semi-monthly). The time series do *not* contradict earlier indications of limited public deliberation. Few claims about vaccination were made in either country during the first three months of the pandemic. Claims were skewed heavily toward one position in *all* periods. Finally, modes did not generally coincide with key policy choices; vaccines were ordered in late June 2009 (determining how many people each country could vaccinate), and recipients and priority groups chosen between August and October (MSB 2011; SST 2011). A great deal more discourse activity occurred as these last policy choices were finalized. But claims were mostly on one side of the argument in both countries. Debate took place, but each public discourse contained one unwavering and dominant message.

Conceivably, dissenting claims could have gained equal public attention or respect through better placements in the news. Were dissenting claims presented more prominently or more respectably than pro-policy claims? To assess placement, the analysis considered four text types in which claims appeared: articles in a print medium or wire service (article/wire), op-eds or columns (op-ed/column), editorials and letters to the editor (Figure 4 in the online addendum).

Rather than counterbalancing sheer claim numbers, placement may have further favoured the pro-policy positions. All claims tended to be conveyed through journalistic reporting rather than as opinion; that is, in articles rather than alternatives. Articles conveyed 73 per cent of claims in Sweden and 78 per cent in Denmark. But dissenting claims appeared relatively less in reporting. Articles conveyed 57 per cent of Swedish and 50 per cent of Danish counter-policy claims, while they conveyed 78 per cent and 88 per cent of pro-policy claims respectively. Of all claims in articles, 79 per cent in Sweden and 88 per cent in Denmark supported national policy.

Consequently, opinion pieces (i.e., letters, op-eds and editorials) contributed significantly more to counter-policy than to pro-policy claims. Of nine letters to the editor in Sweden, three supported and six opposed policy. Of 21 letters in Denmark, nine supported and twelve opposed policy. Less dramatically, of eleven claims in Swedish op-eds or columns, six supported and five opposed policy. Of five such claims in Denmark, one supported and four opposed policy. Bucking the opinion trend, editorials tended to support policy. Of nine claims conveyed in Swedish editorials in the period, just one opposed the national H1N1 vaccination policy. Of two claims in Danish editorials, one supported and one opposed national policy.

Counting claims by text type shows that all newspaper coverage tended to convey pro-policy claims. Dissenting claims were more common in opinion pieces than in journalistic reporting. Hence, Danish and Swedish print media tended to frame pro-policy claims as fair reporting. In contrast,

counter-policy claims were more frequently framed as mere opinion. In addition, counter-policy claims were disproportionately expressed in letters to editors (21 per cent in Sweden, 35 per cent in Denmark) rather than in presumably more authoritative editorials and op-eds.

Content qualitative analyses and discussion

Though claims in each country were evidently skewed quantitatively toward respective national policies (Figure 1 in the online supplemental data), debate was not *absent*. Though opinion pages were relatively more important for counter-policy claims (Figure 2 in the online supplemental data), appreciable minorities of all claims supported alternatives to national policies. Given that claims in both countries tended to be compatible and supportive of national policy, and given that dissenting claims were in more marginal positions in print media, might dissenters' status have balanced out quantitative disadvantages and thus have informed public deliberation?

To answer, this section presents qualitative analyses of the same data analysed quantitatively in the previous section. Could quality balance out the quantity of pro-policy messages? Certified and other experts were primary contributors to response-making and to both countries' debates (admittedly less so in Denmark). What follows focuses on experts voicing claims.

As stated, nearly three-quarters of identified claims supported while one-quarter opposed government policy. In stylized terms, to balance out 'weights' of pro-policy fronts, counter-policy claims would need to be on average three times 'better' than pro-policy claims.

The analysis used the relative professional or social status of claim-makers (i.e., sources). All texts identified in the search presented their sources' formal titles or other credentials. Hence, the strength of each claim's legitimacy (public acceptance) was likely to hinge on these reported markers of professional or social status. This made credentials relevant as gauges of the relative status of the claims.

Sweden

As described, certified experts made 62 of the 107 Swedish claims; an overwhelming 55 of these were pro-policy. The largest contributors were Anders Tegnell (the head of the infectious diseases division at *Socialstyrelsen* – the National Board of Health and Welfare) and Annika Linde (the state epidemiologist). Other certified expert sources included the director-general of *Socialstyrelsen*, regional public health heads from Stockholm and Gothenburg (i.e., Sweden's major cities), and two leading EU agency health officials who were Swedish nationals (a chief scientist and a director). Certified experts also made seven counter-policy claims. Six of these were made by district medical

officers (*distriktsläkare*) from far to the north of major population and administrative centres. The seventh was a claim by a mathematical modeller at *Smittskyddsinstitutet* (SMI), who argued that there was no difference between the immunizing effects of vaccinating 70 per cent and 90 per cent of a population. While this critiqued Sweden's hard push to vaccinate everyone, it was no condemnation of mass vaccination as such. Hence, counter-policy claims by certified experts were not made by individuals whose status could counterbalance the prevailing claim in national print media coverage.

Other experts in Sweden contributed 16 identified claims. Eleven claims opposed national policy. One professor at Uppsala's University Hospital made three of these claims, arguing that mass vaccination was unnecessary and too expensive. However, he later *supported* national policy, calling on people to seek vaccination for themselves and their children. Two counter-policy claims were attributed to a physician that one newspaper (derogatorily?) labelled 'the doctor of fat' (*fettdoktorn*; *Aftonbladet*, 5 September 2009: 12). She argued against any vaccination implicitly by claiming that fatty diets would protect people against H1N1. She added that vaccines contained too much mercury, and that pharmaceutical companies were influencing the government. A former Karolinska Institute professor of infectious diseases contributed one counter-policy claim by advocating more targeted vaccination. Sources for remaining counter-policy claims included an unnamed group of American scientists, a pediatrician, a psychiatrist and a molecular biologist. As in the case of certified experts, the counter-policy claims of other experts did not credibly balance out the pro-policy expert claims. The most cited specialist changed or nuanced his opinion to favour policy, and hence may have neutralized his own impact. Other specialists were cited just once. Remaining experts opposing policy were clearly fringe members of the medical establishment or non-specialist, and hence relatively marginal.

These factors render implausible that the relative 'weight' of experts' counter-policy claims made up for the number of pro-policy expert claims. Moreover, opponents of national policy were divided between favouring targeted and no vaccination. Relative status and unity suggest that Sweden's pro-policy expert front was weightier than indicated by sheer claim quantities, rather than less. That is, qualitative analysis does not contradict that Sweden's most legitimate experts were portrayed as agreeing that everyone should receive H1N1 vaccination. This makes credible that citizens received the impression that mass vaccination was the only serious option.

Finally, what did Swedish experts tend to say? SMI expert Johan Struwe summarized:

The recommendation is that as many [people] as possible be vaccinated, in part to reduce the strain on society, but also to reduce the total number of cases and,

hence, the risk that you or someone else experiences a more severe illness. There is sufficient information on the vaccine's safety so that you do not need to have any general 'fear' of the vaccine unless you have strictly medical reasons [for it]. (*Expressen* 2009)

Hence, Sweden's certified experts justified general vaccination as broad societal in addition to public health protection, with little risk of adverse effects.

Denmark

Of Danish certified experts' 36 identified claims, 33 were pro-policy. Most (25 out of 33) were from Else Smith, Anders Tegnell's Danish counterpart (head of the infectious diseases unit at *Sundhedsstyrelsen* – the National Board of Health). Kåre Mølbak, head of the infectious diseases epidemiology section at *Statens Seruminstitut* (SSI), was a distant second. The WHO's World Influenza Centre, unnamed Centers for Disease Control and Prevention (CDC) experts, the SSI director and another senior SSI specialist made the remaining pro-policy claims. Interestingly, two of the three counter-claims in Danish media came from *Swedish* government experts. These justified the Swedish policy but refused explicitly to criticize the Danish policy of targeted vaccination. A MD at an institute under *Sundhedsstyrelsen*, who was junior to all the pro-policy experts cited, made the only counter-claim by a Danish certified expert. He claimed that the targeted policy aimed to vaccinate *too many* people. Hence, counter-policy claims by certified experts in Denmark cannot credibly have balanced out pro-policy claims.

Other Danish experts contributed 12 claims. Several leading national specialists argued for the national policy, including professors of influenza epidemiology, children's diseases, experimental virology and internal medicine. In return, four claims were made against policy. Of these, two came from one health economics professor who argued for economic benefits of general mass vaccination. The remaining two came from a Swedish expert (a medical doctor (MD) who headed the Swedish local government association's health care division), and a domestic MD who voiced opposition to any vaccination.

Recall that counter-policy claims were prevalent in letters to the editor and other opinion pieces rather than in reporting. In addition, the relative status of claim-makers renders implausible that counter-policy claims by experts in Danish print media outweighed the number and placement of pro-policy expert claims. As described, three of the seven counter-policy claims were sourced to experts authorized in Sweden rather than Denmark. The more outright and domestic critics were relatively non-specialist or junior to the pro-policy experts. Finally, as in Sweden, opponents of policy were divided. The cited Swedes and the economics professor favoured general

vaccination, while the others favoured even more limited or no vaccination. Like their Swedish counterparts, residents in Denmark were likely to receive the impression that only one policy option was reasonable.

Finally, what did Danish experts tend to say? Else Smith:

we have an influenza that has proven to be relatively peaceful and moderate for the great majority [of cases]. It strongly resembles the ordinary winter flu, where we also do not recommend that everyone be vaccinated, but rather target a risk group. In addition, we can expect a few more side effects with this vaccine than with the normal one. And the vaccine should not cause more damage than the illness. (Politiken 2009)

Hence, Danish experts' public justifications included mild disease and potential adverse vaccination effects.

In line with media dynamics described previously, experts' justifications and recommendations were seldom questioned publicly. Hence, numbers, placement and status of claims suggest that print media in Sweden and Denmark during 2009 H1N1 presented opposition to national vaccination policies as marginal. The significant difference between Denmark and Sweden was that policies supported by certified and other high-status experts in the respective public discourses were opposites.

True consensus, rally to the flag, or biased media selection?

The first section presented biased media selection and pre-emptive message adjustments by certain experts (i.e., rallying to the flag) as plausible explanations for experts' unified fronts. Alternatively, national experts may actually have consensus. Fully tracing the origins of the unified expert fronts evident for 2009 H1N1 vaccination is beyond this article's scope. However, primary evidence and secondary literature offer strong suggestions.

First, evidence points to media selection in favour of national unified fronts. As shown, media in each country could find dissenting expert opinions simply by looking to media coverage across the border. Media could and did find dissenting experts domestically; but as shown, these experts were given far less exposure than certified and other high-status experts. However, current evidence does not reveal whether media selected based on ignorance, convenience or strategic concerns.

Second, primary interview evidence indicates dominant views among and even self-censorship by certified experts. The most-cited Danish expert asserts that she consistently sought to publicly portray 2009 H1N1 as a low-level threat requiring modest responses: 'when a pandemic hits, the point is not to prevent that people become ill ... it's about saving lives'; and for 2009 H1N1, it quickly became 'very clear that the mortality was going to be very, very, very low' (Smith 2013). Denmark's minister of health in 2009 recalled that he had 'tried to follow a communication strategy that allayed public

fears, but at the same time led to the result that [the experts] could decide what was right to do' (Nielsen 2014).

Sweden's certified experts agreed that 2009 H1N1 led to few fatalities. But other issues mattered, including 'interrupting transmission' for the sake of 'protecting society' and securing 'business continuity' (Tegnell 2014). In addition, vaccinating everyone was 'based on that the vaccine was available, the very realistically presented excess risk of severe disease in young people outside the risk-groups and the lack of signals on severe side-effects from the vaccine', and finally, that 'very few in official Sweden were against [general mass] vaccination and many [of] those that in the aftermath say that they were did not speak up before or during the pandemic' (Linde 2014). Indeed, at least one Swedish expert recalls wanting to 'avoid upsetting the process', and so deliberately kept reservations about general mass vaccination publicly quiet (Anonymous 2014).

Third, available evidence disproves genuine national epistemic consensus. Newspapers in each country *were* able to find domestic (admittedly marginal) dissenters. In addition, as described, some senior experts withheld their objections from the public. Rather, relatively small certified expert groups centered at national public health agencies developed policy advice; key policy advisors also dominated public discourses, as described previously.

Hence, media selection and rallies to the flag are likely origins of unified expert fronts in Swedish and Danish public discourses during 2009 about H1N1 vaccination, rather than true domestic expert consensus.

Conclusions

Our research questions can now be answered. First, did nationally certified and other experts explain alternative policy options in the public arena? Certified and other experts with high status made little public mention of policy alternatives. Nearly all their claims supported policy. Experts making other claims tended to be marginal in terms of specialization or position. Second, to what extent was more than one policy option publicly deliberated? Public debate on policy options was skewed. National media gave many mentions, respectable placements and high status to claims supporting national policy. Alternatives were marginalized. The expectation that apparent consensus among credible experts can freeze public deliberation during crises is thus supported.

The public appearance of consensus is likely to matter (*cf.* Kahan *et al.* 2011). Selection and presentation of information (i.e., framing) are known to shape how citizens think about issues. Framing studies have shown that people who are exposed only to arguments for one position tend to endorse it, while more balanced discussions and information can limit political manipulation and have beneficial effects for opinion formation and change (Chong and Druckman 2013; Gerber *et al.* 2014). Since Swedish and Danish

citizens were exposed to frames dominated by apparent consensus, past research would suggest that most would adopt the dominant stance.

Although politicians can access more information than citizens in general, the logic of blame-avoidance complicates policy without strong expert backing (Boin *et al.* 2008; Hood 2011; Weaver 1986). High likelihoods of doing too little, too late or too much, too wrong exist in all crises. Politicians who are publicly responsible for crisis response risk blame for poor management that endangers their future electability. Using the shield of publicized expert advice and judgment enables leaders to mitigate this risk (i.e., avoid blame). Hence, political leaders could be reluctant to support flu response policy that deviated from advice endorsed by certified experts (Baekkeskov 2016).

Policy advice publicized as experts' consensus may then lock in policy. The experts brief politicians and journalists. In turn, citizens mostly support the publicized policy option, based on consistent media messages. This popular legitimation of one position feeds back into the advisory and political systems, severely constraining policy options because changing course can threaten public faith in responsible officials. Certified expertise and rallying to the flag during crisis are useful tools of governance. The former promises evidence-based rather than interest-based policy; the latter promises timely action. But combined, the two factors may freeze public deliberation and lock in policy, regardless of best available options for public action.

Note

1. Other Swedish and Danish media are not currently amenable to textual content analyses.

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