Reflections from Scholars and Practitioners

Walking on Tightrope: The Challenging Role of Science Advice in Managing the COVID-19 Pandemic in the Philippines¹

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Science advice is an exercise in funambulism. To effectively influence the grand spectacle of politics, science needs to constantly walk on a tightrope, as it carries the weight of objectivity on one hand and the complex, often subjective, demands of the government and public sector on the other. Lean too much on either side and it can easily lose either its credibility in the eyes of the public or its seat in the corridors of power. This struggle is no small feat given that scientists have to "muddle through"-to borrow the words of Charles Lindblom (1959)—a system that is highly bureaucratic and not easily malleable to scientific persuasions. This delicate balancing act is even more critical during major disasters such as the ongoing COVID-19 pandemic. The trail that SARS-COV-2 leaves behind has all the ingredients of a challenging crisis: its impacts are massive and unprecedented, it requires urgent action, and it comes with a good deal of uncertainty. While it is not exactly a black swan event, it is pretty much a major perturbation that makes a perfect ground for science to assert its authority as a provider and arbiter of scientific evidence.

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The Philippine government has taken the same tack: put science to task to guide decisions in managing the pandemic. In mid-March, when the government needed to decide whether or not to extend community lockdown in the whole Luzon island, the marching order then from President Rodrigo Duterte was to listen to what the experts had to say. A month later, it would reiterate the same stance as the government invited select external experts—medical doctors and scientists—to formally present their recommendations before the President. In the words of Harry Roque, the official government spokesperson: Ang magiging basehan ng ating Presidente ay ang rekomendasyon ng IATF, ang rekomendasyon ng mga dalubhasa, at ito po ay magiging base sa siyensiya. (The President's decision will be based on recommendations from the IATF and experts, and it will be based on science.) (Merez, 2020).

The IATF that Roque referred to is the Inter-Agency Task Force for Emerging Infectious Diseases (IATF-EID), the primary supra-body initially mobilized by the government to manage the pandemic. It is not a new organization; it was created in 2014 as a response to the Ebola episode, but it has not been activated until this year.

The IATF itself is headed by the Secretary of the Department of Health (DOH), a frontline science agency currently led by a medical doctor. It is a multiagency, multi-layered structure with a number of working groups charged with different aspects of the crisis. One such team is the Sub-Technical Working Group (Sub-TWG) on Data Analytics composed of volunteer scientists from the government, academe, and private sector tasked with analyzing epidemiological data.

However, the appropriation of scientific analysis for decisionmaking has not been seamless. The Sub-TWG would later develop a risk matrix that was supposed to guide the designation of areas under different levels of lockdown. Observers—experts and laypeople alike—would soon notice that some low-risk areas were placed under strict lockdown protocols (i.e., the enhanced community quarantine or ECQ). As it turned out, epidemiological trends were just one of the considerations of the IATF's classification. Security and social factors apparently weighed more than the Sub-TWG's risk-based recommendations, indicating how science advice is really just one of the many voices in the policy table.

The government has made other decisions that were clearly not grounded on science or scientific thinking. For instance, one government agency under the IATF has insisted on the installation of barriers for motorcycle riders in spite of transportation experts advising against it for health and safety reasons. At the local level, one governor fought tooth and nail on her refusal to wear face masks and actively promoted the use of steam inhalation locally called *"tuob"* or *"suob"* to prevent infection with nary an evidence to support such claims.

The gravitas of science advice, in spite of what the government claims in public, has been put under closer scrutiny when data-related issues have been discovered by external scientists. The government and its IATF-affiliated experts were quick to defend the errors, albeit not convincingly, rather than admitting a mistake and making the needed correction. This move seeded doubts on the accuracy and truthfulness of evidence being provided by the government and its scientists. The opprobrium reached its peak when the government and its allied medical experts started selling the narrative that the Philippines was already in the so-called second wave. The public, independent experts, and even other highranking members of the IATF quickly rebutted this assertion, pointing to the factual impossibility of three imported cases in January constituting an epidemic wave. In response, the DoH and its allied experts attempted to insist on their storyline by conjuring alternative scenarios and terms that further fanned the public's distrust in the government's overall management of the crisis.

The Philippine experience demonstrated the potential and limitations of science advice in crisis management. We have seen how science can easily fall into a "credibility trap" in crisis situations. This is especially so when scientists themselves become part of a body that calls the shots and would end up defending the position of that agency at all costs.

This situation is not unique to the Philippines. World Bank economist and Nobel Prize awardee Paul Romer cautioned of the same when he appeared before the US House Budget Committee Hearing on Federal Research and Development last 8 July 2020, to wit:

There is an inevitable tendency for an agency that has to make technical decisions to report to the public a version of the facts that supports its decisions. These agencies turn into advocates for specific positions. In the process, they lose their scientific objectivity. (Sec. 4.3)

Our experience also pointed to how science can be a useful tool for communicating risks and influencing behavior. However, the challenge is ensuring that it does not end up sacrificing established scientific facts just to advance a government narrative, especially an erroneous one.

It should be kept in mind that science advice is not etched in stone, as science itself is provisional and not infallible. It is acceptable for science to admit mistakes in light of new or more compelling evidence. Doing otherwise will be detrimental to the integrity of science advice provided to the government, and it will also jeopardize the legitimacy of government actions following such advice. Scientific facts cannot be twisted or bent just to support a particular storyline.

Romer (2020) put forward the need to separate the roles of decisionmaker and fact-finder to protect scientific integrity. He cited the current situation in the US "where agencies that were responsible for difficult real-time decisions that were central to our pandemic response... justified their decisions by presenting the public with a biased or misleading summary of the facts" (Romer, 2020, Sec. 4.3). Like what we have seen in the Philippines, this action can erode the trust of the people on both science and government. Lastly, we have witnessed the problems of an ad hoc yet closed government science advice structure in the Philippines' response to the pandemic. As per the government press release, members of the aforementioned Sub-TWG were volunteers, mostly scientists who have ongoing projects with the government prior to the pandemic and are constrained by non-disclosure agreements that preclude the open sharing of data, findings, and methodologies. The current system also excluded other experts, including social scientists, who could provide vital additional insights, such as in terms of influencing people's behavior and communicating key messages.

To deal with future perturbations, we need to institutionalize a platform that would allow experts from different disciplines to collectively and independently assess the situation and determine possible solutions. Correcting for the shortcomings of the current IATF Sub-TWG setup and the complete absence of science advice mechanisms in other agencies, including local government units, there is a need for a system that can be activated in times of compound disasters and other complex emergencies like COVID-19. Science advice, after all, must be called upon not only when the disaster is already unfolding, but long before it materializes.

By and large, crisis situations are dominated by competing values that need to be reconciled within a short period of time. Where time is not a luxury, the "paradox of scientific authority" can only be minimized if the mechanism for government science advice is transdisciplinary, transparent, and independent. Science loses its legitimacy the moment it forms a protective, exclusivist silo and becomes subservient to a political objective.

Endnotes

¹ Winner, INGSA-Asia Essay Contest 2020, https://www.ingsa.org/activities/

References

- Romer, P. (2020, July 8). What it takes to be a leader in both basic science and technological progress. Statement for House Budget Committee Hearing on Federal R&D. https://paulromer.net/ statement-for-house-budget-comittee/
- Merez, A. (2020). Duterte to be guided by science in deciding on Luzon lockdown: Palace. ABS-CBN News. https://news.abs-cbn.com/news/04/20/20/coronavirus-philippines-covid19-updateslockdown-duterte

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