



Can scientific evidence speak for itself? The challenges of communicating to policy makers

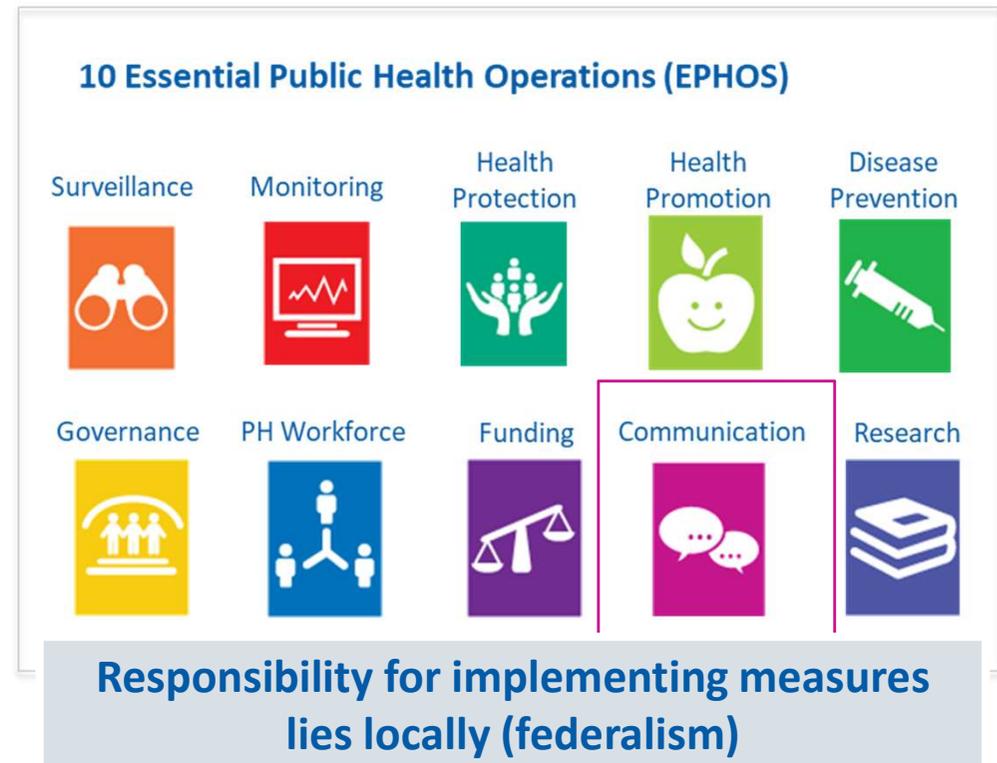
Lothar H. Wieler
14 September 2022

RKI – Germany’s National Public Health Institute

Public Health – Beyond just infectious diseases

Central requirements for expertise and tasks of a National Public Health Institute:

- **Collection and analysis of health-related data** (ongoing monitoring and assessment of the health status of the population);
- **Planning (and implementation) of measures** (prevention or mitigation of health risks and threats);
- **Communication with relevant target groups on public health aspects** (evidence-based and credible; policy, science, (professional) public, press);
- **Basic and applied research** (entire thematic spectrum of public health).



Principles of scientific policy advice

[...] **Four principles** [...] that form the ideal-typical framework to which the organisation and practice of policy advice should be oriented: Distance, plurality, transparency and publicity.

Distance ensures the independence of science from politics and prevents the mixing of interests and scientific judgements.

Plurality requires the appropriate involvement of disciplines and advisors.

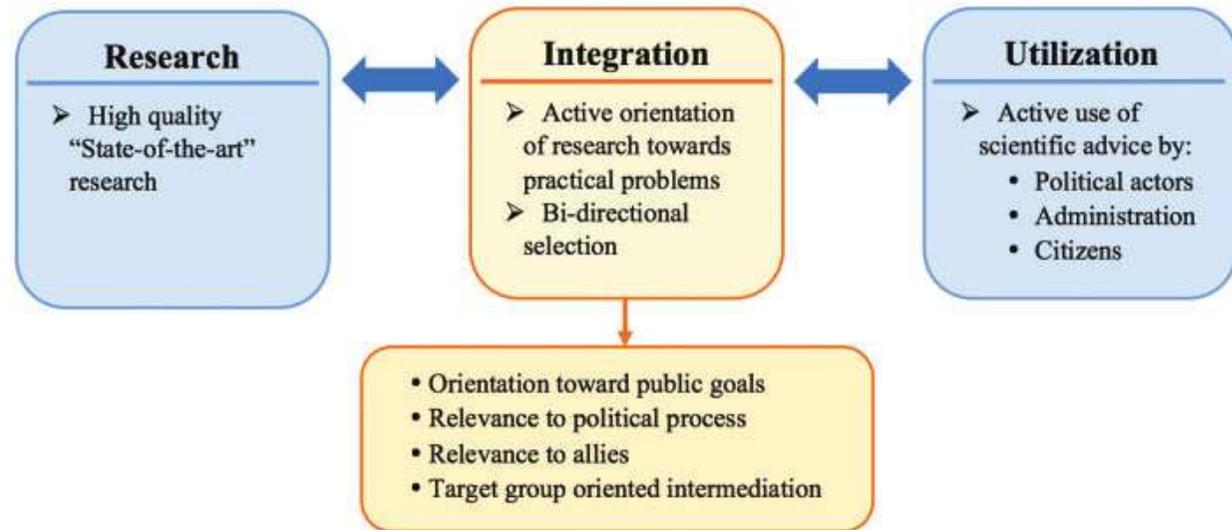
Transparency of advisory and decision-making processes ensures trust in them.

Publicity means access to relevant information and is the prerequisite for trust.

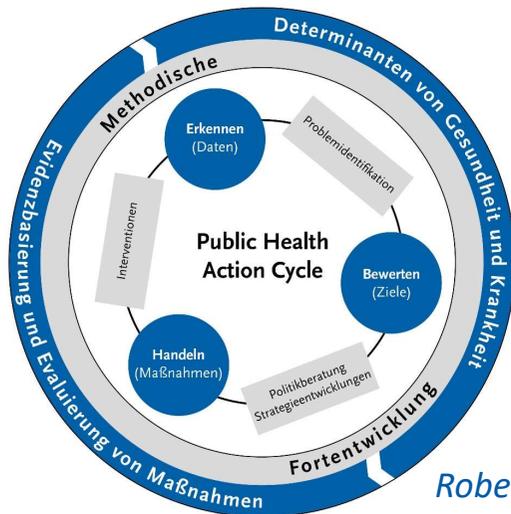
Peter Weingart für: Aus Politik und Zeitgeschichte/bpb.de; Creative Commons Lizenz CC BY-NC-ND 3.0 DE

Models of scientific policy advice

RIU-Modell



Public-Health-Cycle



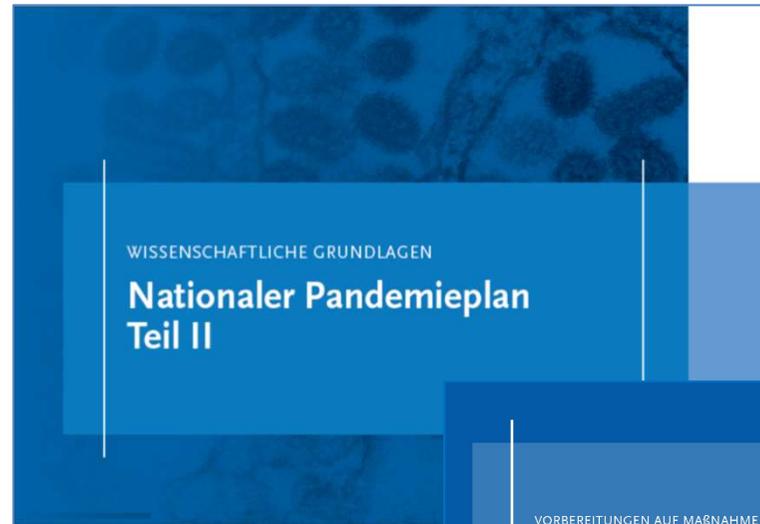
Robert Koch Institute 2018

Do H, Juerges N; Krott M, Böcher M (2019). Can landscape planning solve scale mismatches in environmental governance? A case study from Vietnam. Environment and Planning E: Nature and Space. 2. 251484861882251. 10.1177/2514848618822510.

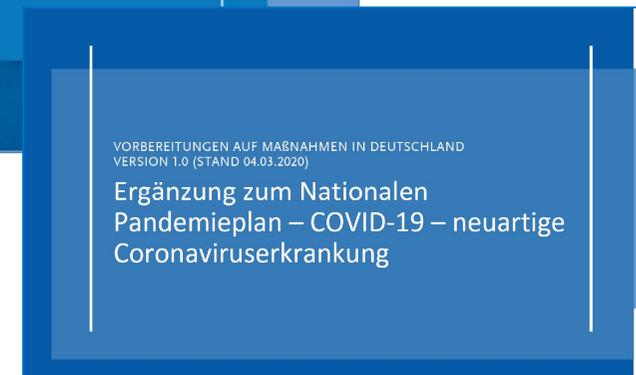
R - Research: *Pandemic preparedness*



2012:



2016:



2020:

Intensive preparations long before the crisis



U – Utilization: Scientific policy advice during the pandemic

Objective

"**Scientific policy** advice enjoyed [...] so much attention that some even complained about a "technocratisation" of politics [...]. The article analyses the question of whether the scientific policy advice of the Robert Koch Institute (RKI) actually gained so much weight. [...] **It becomes clear that the RKI, as the responsible departmental research institution, provided different integration services for a policy in crisis mode.** Nevertheless, politics was the dominant actor. It is shown that existing independent scientific expertise, the networking of scientific institutions, close exchange of information with political actors and the media increase the chance that scientific information is taken up by politics in the basis for action."

Aus: Michael Böcher, Max Krott, Ulrike Zeigermann: *Wissenschaftsbasierte Politikberatung in der Corona-Krise: Die Ressortforschung des Robert-Koch-Instituts zwischen wissenschaftlichem Standard und politischem Handlungsdruck.* dms – der moderne staat – Zeitschrift für Public Policy, Recht und Management, 14. Jg., Heft 2/2021, S. 351-372

- Initial tendency towards idealisation of scientific policy advice
- Instrumentalisation of science + shirking of responsibility by politics
- Disproportion between political expectations and scientific possibilities
- Ignoring of facts
- Discrediting of advisory services in interaction with the media

Example

- Die auf Grundlage der COVIMO-Daten berechneten Impfquoten stellen vermutlich eine Überschätzung dar, die nicht näher quantifiziert werden kann. Die im Digitalen Impfquoten-Monitoring (DIM) erfassten Impfquoten lagen im gleichen Zeitraum ca. 10-12 Prozentpunkte niedriger. Ergebnisse aus diesem Survey sowie weiterführende Überlegungen legen wiederum nahe, dass die im DIM berichtete Impfquote als Mindest-Impfquote zu verstehen ist und eine Unterschätzung von bis zu 5 Prozentpunkten für den Anteil mindestens einmal Geimpfter bzw. vollständig Geimpfter angenommen werden kann (s. hierzu auch S. 5, Vergleich der Impfquoten). Mit dieser Berücksichtigung kann derzeit von einer Impfquote in der Erwachsenenbevölkerung von bis zu 84 % mindestens einmal und bis zu 80 % vollständig Geimpfter ausgegangen werden.



COVID-19 Impfquoten-Monitoring in Deutschland (COVIMO)

Robert Koch-Institut
06. Oktober 2021



14.09.22

Subjective

7

Effective communication during a pandemic

Why:

- Inform
- Trust-building measure
- Prevent and fight „Infodemics“
- Promote dialogue
- Arouse understanding

How:

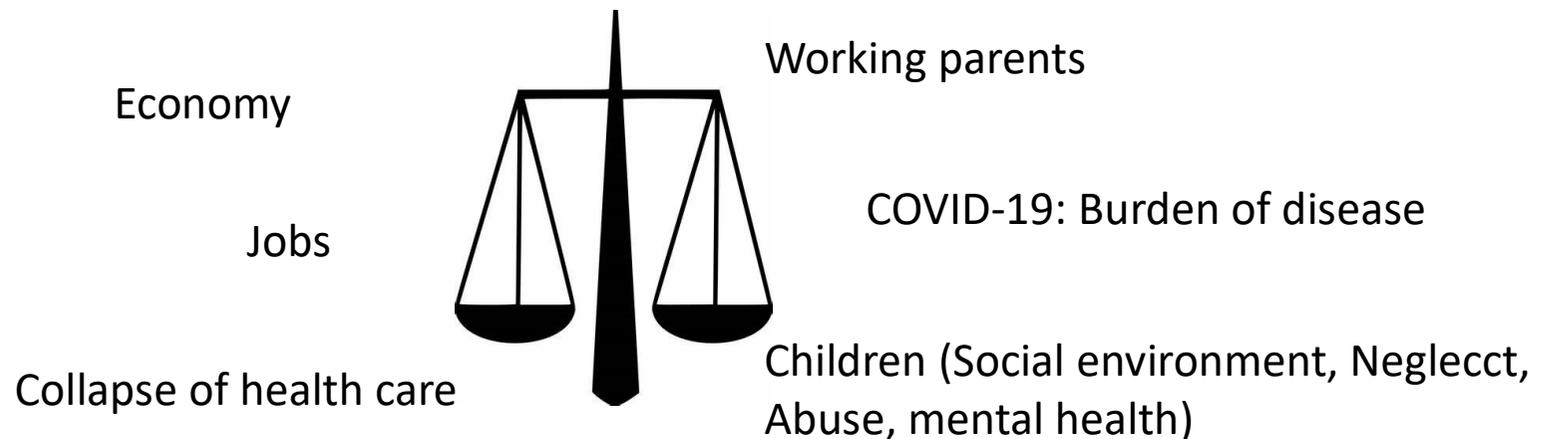
- Current assessment of the situation (situation reports, press, social media).
- Answer questions, practice self-criticism, self-evaluation/optimisation of processes/methods
- Proactive dissemination of information on specific topics (e.g. vaccination/STIKO)
- Interviews, talks, panel discussions
- Science communication/risk communication



Can scientific evidence speak for itself?

Example: COVID-19-Lockdown

- Policy-makers must often deliberate what hangs in the balance. Excellent scientific evidence will help decision-making
- Sometimes the science may not always be understood by policy-makers. Evidence must be explained and communicated clearly.



Communicative challenges during the pandemic

Striking the right **balance** between scientific evidence, legal framework and implementability of recommendations (factual reports vs. opinions):

- Producing **evidence-based recommendations. Implementation of recommendations in laws / regulations is the responsibility of policy makers.**
- Dynamic data situation and limited resources
- Expectations of the press, data journalists, experts and, last but not least, the general public
- Power dynamics in the scientific community: "Expert" without technical expertise
- **Infodemics**
- **Communication triad** (Often a lack of coherence)

Infodemic Management

- COVID-19 is the first pandemic in history where various technologies and social media have been at the heart of communications
- But the same technology has amplified infodemics
- The term "**infodemic**" refers to the overabundance of information - including misinformation and false information.
- In September 2021, WHO published a competency framework for infodemic management

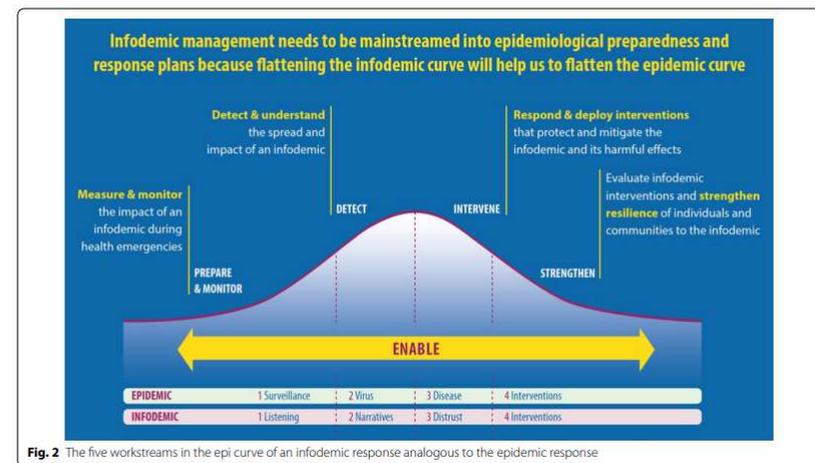


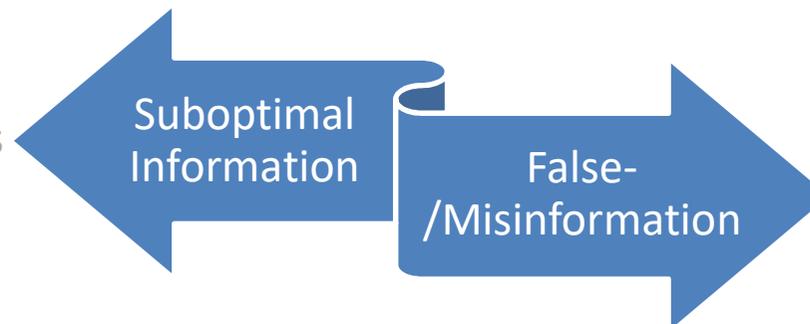
Fig. 2 The five workstreams in the epi curve of an infodemic response analogous to the epidemic response

<https://doi.org/10.1186/s12960-022-00733-0>



Suboptimal Information and Misinformation can also influence policy-makers

Suboptimal information undermines public health response to Pandemic, which negatively affects people's physical and mental health and hinders countries' responses to the pandemic



Disinformation can polarize public debate and promote hate speech, threatening human rights and social cohesion

<https://doi.org/10.1186/s12960-022-00733-0>

The communication triad

- If not coherent, this can be challenging for society



Who communicates the evidence? Other players in scientific policy advice in Germany

- Until December 2022:
 - Leopoldina – National Academy of Science: 10 *Ad-hoc*-position papers
 - acatech – Germany academy of technical science: 8 position papers about the COVID-19 pandemic, crises and resilience
 - German Ethics Council : 7 *Ad-hoc*-recommendations and position papers
 - Medical-scientific societies: various statements on individual topics in the context of the pandemic
 - Informal advisory bodies of the Federal Minister of Health and the Federal Chancellor with changing, occasion-related composition: no public statements
- Since December 2022:
 - **19 experts appointed by the Federal Chancellor from various disciplines: 11 position papers so far**
 - Medical-scientific societies: further statements about individual issues



Take home message

- Communication is an essential public health operation; however many challenges need to be overcome during a crisis (trust)
- The RIU model describes how advising politics works (responsibility, trust)
- Scientific independence goes hand in hand with scientific excellence and quality (trust)
- Communicating scientific evidence can be challenging if not coherent when coming from different sources (Communication triad, trust)
- Promoting dialogue with society (public engagement) and transparently communicating scientific evidence clearly and coherently (even if it isn't always good news) will increase the **trust** of the public



Thanks for listening



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