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Mandates and Lack of Transparency on COVID-19 Vaccine Safety has Fueled Distrust – An Apology to Patients is Long Overdue

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Introduction

Public health developed as a discipline to investigate the determinants of health at the population level. Winslow's classic definition frames it as "the science and art of preventing disease, prolonging life, and promoting physical health and efficiency through organized community efforts."[1] That vision positioned public health as a science in service of the people. The COVID-19 pandemic exposed how far the field has drifted from these roots of a science in service of the people. Ethical dilemmas, coercive policies, and a lack of transparency undermined public trust, while corporate and political interests increasingly shaped decisions at the expense of open science. The result has been an erosion of legitimacy and a widening gap between public health authorities and the people they serve. In this commentary, we call for a return to core values of science and professional behavior; and offer direct, practical solutions to restore trust in public health.

The Ethical Tension Between Informed Consent and Paternalism in Public Health

In medicine and public health, where there is risk (however small) there must be choice. Coercion and mandates undermine medical ethics, informed consent, and trust. In 2020, the United Kingdom's General Medical Council affirmed that doctors have a duty to engage in shared decision-making grounded in informed consent.[2] Consent is both a fundamental legal and ethical principle, essential to clinical decision making. A failure to listen to patients or to engage in meaningful information exchange can place patients at risk of serious harm. Guidance outlines six components of informed decision-making: (1) describe the nature of the decision; (2) discuss alternatives; (3) outline risks and benefits; (4) address uncertainties; (5) assess the patient's understanding; (6) elicit patient preferences. Good decision-making requires the patient as an active participant, not a passive recipient of expert authority. In individualized medicine, informed consent is non-

negotiable.

When it comes to public health, however, the dynamic shifts: citizens are positioned less as active stakeholders and more as subjects of collective decision-making. Ethical guidance takes a more paternalistic approach, permitting interventions without consent under expert authority.[3–7] Paternalism raises moral concern by presuming authorities may override individual judgment and define the "right" behavior for others. Contrary to the assumption that public health rests on clear ethical standards, tensions between paternalism and consent remain unresolved, leaving the field vulnerable to ethically questionable practices.

The Nuffield Council on Bioethics proposed the Stewardship Model to align collective health with individual liberty.[3] While acknowledging that individual consent is central in clinical medicine, the Council argues that public health measures may proceed without consent if they are proportionate, necessary, and implemented with fairness and transparency.[3] To illustrate this, Nuffield introduced an intervention ladder ranking different interventions by their level of coerciveness: the higher the rung, the stronger the justification required. Collective measures that protect shared resources, such as water safety or seat belt laws, may not require consent, but the ethical stakes rise when interventions extend into personal medical decisions such as vaccination. In these cases, individual clinical decision-making and public health demands may diverge, creating risks of coercive or ethically problematic policies.

The Council distinguishes between two perspectives of risk: 1) a 'statistical view', in which risk is defined in terms of the probability of an event occurring, multiplied by the severity of its impact; and 2) 'social construct view', in which risk is framed by personal biases that result in certain kinds of risks being more relevant than others, and by what is accepted in particular social groups or society as a whole.[3] These perspectives may not always align. In such cases, paternalism becomes especially concerning when moral authority is concentrated in a few hands. If regulatory agencies prioritize statistical risk while individuals respond primarily to socially constructed risk, the justification for any particular level of intervention is undermined. Paternalism therefore raises fundamental questions about how interventions, grounded in contested notions of risk, are imposed on entire populations.

In the absence of a clear ethical framework, we contend that science must remain the foundation of public health, with its core processes—debate, testing, and falsification—driving all decision-making. The pandemic demonstrated that when scientific integrity is lacking and dissent is suppressed, unethical decision-making can become legitimized. When this happens, public confidence in health authorities erodes.

This is precisely what we observed in official public confidence data during the pandemic.[4–7] Trust in the CDC fell from 73% in December 2020 to 64% in April 2022,[7] and further to 61% by 2025.[6] The decline was most pronounced among Republicans, with confidence in public health institutions dropping by 25 percentage points between April and September 2020.[7] By 2022, only 54% of Americans trusted their state officials to provide accurate vaccine information.[7] A *BMJ Global Health* analysis concluded that mandatory COVID-19 vaccine policies (including passports and restrictions) damaged public trust, vaccine confidence, political polarization, human rights, inequities, and social wellbeing.[8] Data show that transparency about vaccine risks strengthens trust, whereas withholding information fosters distrust

and fuels conspiracy beliefs.[8,9] After widespread coercion into COVID-19 vaccines and other non-evidence-based policies, trust in physicians and hospitals has fallen sharply—from 71.5% in April 2020 to 40.1% in January 2024.[10]

To rebuild legitimacy, institutions must recommit to ethical principles that serve the people—not political or corporate interests. This does not require reinventing the field but returning to the roots of public health and applying what has long worked in advocacy and systems change. In 2015, Chapman distilled lessons from his 38-year career in public health advocacy.[11] Three stand out as a path forward in this post-pandemic era: (1) respect the evidence, (2) "grow rhinoceros hide (develop a thick skin to endure criticism without being deterred), and (3) be clear about what you want to change.[11] The purpose of this commentary is to reframe the problem of trust in public health through these lessons, and to show how they can guide efforts to rebuild legitimacy. While the mistakes of the pandemic cannot be erased, solutions exist to address the deeper gaps that fueled the erosion of trust. Rebuilding legitimacy will depend not on new slogans or strategies, but on reviving the core ethical and scientific commitments that once made public health credible.

Lesson #1: Always Respect Evidence, and If The Evidence Changes, So Should You

Evidence is the foundation of sound public health policy. Science advances through observation, testing, and self-correction; its only absolute truth is that truth can never be absolute. However, in recent years, a dogmatic tendency in science emerged: single studies are treated as settled "truth," and experts elevated as final authorities, even amid conflicts of interest. Dogma is fundamentally inconsistent with science, which exists to challenge consensus, not entrench it. Theories evolve. Evidence develops from early hypotheses to large trials to implementation. No single study tells the whole story. Questioning is not hostility to science; it is fidelity to it.

In public health, where decisions affect entire populations, policy must be anchored in cumulative evidence that adapts as knowledge evolves. Outcomes vary by context, so "truth" is rarely uniform; heterogeneity across studies demands continual refinement. Public health policies especially those that overlap with individualized medicine (such as vaccination), should never take precedence over the fundamental ethics of individualized healthcare. A primary role of public health is to synthesize research in unbiased ways and translate it in ways that people understand.[12] The role of public health is not to override individual clinical judgment or the ethics that govern medical decision-making. This is essential because what once appeared self-evident can, on further testing, prove false – and what may appear to be "safe and effective" for one individual may be harmful to another.[12,13]

During the pandemic, however, preliminary findings (often industry-sponsored) were presented as settled fact, embedded in mandates, and left uncorrected when later data contradicted them. Policy did not adapt as science evolved. This failure to follow science's own principles—i.e., adapting when the evidence changes—lies at the heart of public health's loss of credibility. This section highlights examples of where public health failed to follow its own evidence-based processes and adapt policy when the evidence changed.

Faulty Measurement Foundations

Sound public policy requires valid, reliable measurement of the problem; without it, a research program is compromised. In the case of COVID-19, accurate detection of SARS-COV-2 was essential for the validity of all subsequent research. Yet during the rapid pandemic response, authorities bypassed this step and built expansive vaccination policy on inadequate metrics. Much evidence underpinning vaccine efficacy claims relied on PCR counts.[13–15] PCR detects fragments of viral RNA rather than infectious virus, may stay positive beyond contagiousness, and yields cycle threshold (Ct) values that are inconsistently standardized across platforms.[16–20] Although these limitations were documented as early as 2020, policy tethered to PCR case counts largely persisted.[20–25]

Similarly, in May 2021 the FDA cautioned that "antibody tests should not be used at this time to determine immunity or protection against COVID-19 at any time, and especially after a person has received a COVID-19 vaccination".[26,27] Policy papers in the UK echoed this warning, stating "it is not possible to give individuals a binary answer as to whether they are fully protected from COVID-19, merely that they are better protected than if they had no antibodies," and further advised that antibody results should not guide clinical care or determine protection from subsequent infection.[28,29] Nonetheless, antibody testing continued to influence clinical practice and policy.[26,30,31] Failure to recalibrate in light of known measurement limitations constituted a departure from evidence-based practice and undermined policy effectiveness.

Transparency in Risk Communication Abandoned

Evidence-based public health practice would make evolving evidence—e.g., heterogeneity, subgroup effects, and uncertainties—transparent so citizens can make informed choices. This is not what we saw during the pandemic. Official communications often overstated benefits and minimized risks.[32,33] A prominent example of overstating benefits was the widely publicized "95% efficacy" claim from the 2020 Pfizer and Moderna trials,[14,15] which became a headline to drive uptake. [34–39] This statistic was commonly interpreted as a 95% reduction in an individual's infection risk.[39]

In reality, the 95% reflected relative risk reduction (RRR)—the proportional decrease between vaccine and placebo groups in symptomatic cases within 2 months of vaccination during the Phase 2/3 trial.[14,15,39,40] It did not mean the probability that an individual was 95% protected from infection in the broader population. In fact, the absolute risk reduction was 0.84% (number needed to vaccinate, NNV=119 to prevent one symptomatic case over ~2 months in the phase 2/3 trials).

The problem of misleading statistics becomes even more striking when broken down by age groups, particularly the elderly who were promoted as most at risk. UKHSA estimated that among adults ≥90 years, about 7,000 people would need to be vaccinated to prevent one severe hospitalization over six months; for many under-70 groups, the number needed to vaccinate for severe hospitalization or death is in the hundreds of thousands to millions.[41]

The WHO has long communicated absolute benefits and harms as an "ethical imperative,"[42] and methodologists warned early in the pandemic against emphasizing relative measures without

context.[39,40] Still, the persuasive power of the 95% RRR dominated the public narrative during vaccine roll-out.

Safety Signals Ignored

Perhaps the most egregious failure to learn from emerging evidence concerned vaccine safety signals. The original trials characterized the vaccines as safe, with mostly short-term, mild-to-moderate reactions.[14,15] Within six months of roll-out, safety signals emerged,[43,44] yet policies and recommendations largely persisted.

In 2022, Fraiman et al. independently re-analyzed the Pfizer and Moderna's RCTs and found an excess of serious adverse events– specifically, about 1 in 800 over 2 months.[45] Even more striking, the authors found serious harms from vaccination were two to four times greater than the risk of being hospitalized with COVID-19.[45] Skidmore, in 2023, further identified that in the first year of roll-out of the COVID-19 vaccine, the total number of fatalities officially reported may be underestimated, estimating 289,789 deaths (95% CI: 229,319 – 344,319) from a national survey.[46] New data suggests adverse effects may persist: early work (preprint) from Yale's LISTEN Study reported detectable spike protein in some individuals >700 days post-vaccination.[47] Taken together, these findings underscore an urgent need for systematic re-evaluation of vaccine safety. It is a profound failure of scientific and ethical responsibility to overlook these safety concerns.

Summary

These data illustrate the central lesson: evidence evolves. It is understandable that, in the early days of the pandemic, decisions were made under uncertainty—guided by the best evidence available at the time; however, such justification cannot extend indefinitely. Once new evidence emerged that challenged initial assumptions about the benefits and risks, the ethical obligation was to reassess policy accordingly. We did not see this happen.

Fortunately, the United States Department of Health and Human Services (HHS), under the guidance of Robert F. Kennedy, Jr, recently dropped $500 million investments in mRNA vaccine technology.[48] This decision came after intense advocacy including thousands of doctors, including the now Director of the National Institutes of Health, Dr Jay Bhattacharya, and the authors of this manuscript, signed a petition calling for a moratorium of the vaccines.[49] After reviewing the totality of the evidence, including hundreds of peer reviewed published studies of harm Dr Steven Hatfill (now a senior adviser at HHS's Administration for Strategic Preparedness and Response, ASPR) stated on the on Steve Bannon's *War Room*: "the side effects of this gene therapy was so enormous and progressive it was difficult to fathom… it is disrupting protein metabolism, it is interfering with tumor-suppressor genes… it had to be stopped."[50(21:30)] At least five potential mechanisms have been proposed by which mRNA COVID-19 vaccines could precipitate cancer and preliminary evidence showing linkages with increased cancer rates.[51–53] These developments mark a critical shift: evidence can no longer be ignored, and policy must finally adapt to it. If science is truly to guide public health, then policies and mandates must change as the evidence changes, especially as risks stack up. To ignore this is not only anti-scientific, but ethically indefensible.

Lesson #2: Grow A Rhinoceros Hide

Science rests on observation and falsifiability;

challenging consensus is essential, not heresy. Knowledge advances by testing hypotheses derived from observation. Voices that push the mainstream should be encouraged, not silenced. Yet, contemporary public health often substitutes condemnation for curiosity, marginalizing dissent even when data warrant debate. Suppression may quiet critics, but it suffocates science.

One of the ways corporations and regulatory bodies exert their power is through a process known as opposition fragmentation, which we define as deliberate or induced division of adversarial actors, weakening their capacity to mobilize collective action. A central tactic is the systematic discrediting of critics through character assassinations. This strategy reflects classic propaganda techniques such as ad hominem attacks, name-calling, and smear campaigns. By stigmatizing dissenters with derogatory labels (e.g., "anti-vaxxer", "anti-science," "conspiracy theorist," "fringe"), those in power can weaken opposition, isolate individuals, and deter others from speaking out. In this way, the focus shifts from evidence to identity, silencing dissent not through debate but through intimidation and reputational destruction.

The first author has experienced this firsthand over the course of his career. Most recently, after remarks at the Reform UK conference (a political event), he was misrepresented in the media and publicly censured by senior officials—including the UK Prime Minister and the chair of the BMA, who labelled his lecture "dangerous, irresponsible, and pseudoscience."[54] Rather than engaging the data, critics resorted to reputational attack and professional sanctioning. They opted for silence over science. Such tactics are not isolated. They reflect a systemic pattern in public health of silencing opposition rather than engaging evidence.

Perhaps the most striking example of silencing opposition comes from a recently exposed concerted effort to take down dissent at the highest level of leadership in the US HHS. A purported internal memorandum summarizing an April 3 meeting of a vaccine policy committee for the Biotechnology Innovation Organization (BIO) outlined strategies to influence media narratives, engage political allies, and frame Robert F. Kennedy, Jr.'s leadership as a public-health threat.[55] The memo refers to specific budgetary allocations, coalition partners, and messaging tactics. BIO has publicly stated that the document is not theirs and does not reflect their views.[56] If the BIO memorandum reflects the trade association's true agenda, then the policies advocated therein would exemplify industry-led narrative management that undermines independent risk–benefit communication and informed consent standards, and prevent society, especially the medical community and patients, from moving forward toward resolution and reconciliation.

Such unethical behavior doesn't just silence voices—it reshapes what is accepted as truth. When debate is punished, hypotheses go untested, errors persist longer, and patients are denied transparent risk–benefit discussion. Silencing contestation is not a neutral choice; it is contrary to the methods by which science corrects itself. The remedy for disagreement is better evidence and open debate—not censorship or character assassination. Robust science requires robust dissent.

A Message for Those Being Disparaged

We encourage colleagues facing disparagement to resist anger or retaliation—neither serves patients nor the public. Hostility is not public health. The pressures are real, but those who challenge

prevailing views should meet criticism with composure and evidence. As the GMC reminds UK doctors, "you must treat colleagues with kindness and respect"; we should uphold that standard even in sharp disagreement. While it is easy to respond in kind with anger – especially when licensure is threatened and reputations are discredited – those challenging the mainstream narrative must remain steadfast. Science will approximate the truth. It is already happening. There is no need to become emotional – just *grow rhinoceros hide* and keep on fighting. Evidence spoken together is louder than any censure.

Lesson #3: Be Clear and Concrete About What You Want to Change or Support

Restoring legitimacy of our public health institutions requires more than rhetoric—it requires transparency and decisive action. There are signs that HHS is beginning to take steps toward restoring scientific integrity, fulfilling the MAHA promise of gold-standard science. In a recent interview with Fox News, the newly appointed US Food and Drug Administration (FDA) Commissioner, Marty Makary, said, "hundreds of thousands of people have claimed that they've been vaccine injured. I take those concerns very seriously… No one has really looked into it. We are going to start a big national study."[57]

Still, the broader public health system must confront the ways it has betrayed public trust. Repeated calls by BMJ editors for release of the raw trial data remain unanswered.[58,59] Independent evaluations by credible bodies such as Oxford's Centre for Evidence-Based Medicine[60] are urgently needed to provide a trustworthy foundation for reassessing the evidence base. Without such transparency and independent scrutiny, efforts to rebuild trust in public health will remain incomplete.

The evidence underpinning the "safe and effective" narrative has, within a few years, veered toward "unsafe and defective." If the full body of research ultimately shows a net harm from COVID-19 vaccination and pandemic-era policies, the greater barrier will be psychological, not scientific. Our social systems must therefore be prepared to manage the psychological fallout, responding with clarity and compassion. Cognitive dissonance—defined as the stress produced by holding conflicting beliefs[61] – often drives individuals to double down on prior convictions. For those still committed to the "safe and effective" narrative, denial can function as a coping mechanism. Physicians, in particular, may find it difficult to acknowledge mistakes, given their role in promoting policies not grounded in evidence. However, such acknowledgment is essential if public trust is to be rebuilt and anger diffused.[62–66]

We are currently facing what some call a "pandemic of the vaccine injured". The focus of the broader healthcare system should be on how to identify and intervene with those asymptomatic individuals who may be at risk of premature heart disease or cancer due to poor policy decisions. A contributing factor to the prevalence of injury has been the extent to which government officials and public health authorities overrode the doctor–patient relationship, taking precedence over the ethics of individualized medicine. In clinical care, the role of public health is to advise and provide evidence-based information, not to dictate individualized decisions. The reliance on coercive practices and mandates during the pandemic has led to observable harm. In order to restore trust, we must go back to the basic ethical principles of individualized medicine and reestablish systems that work together in ethical ways that serve the

people.

Until the most urgent questions are answered, nothing less than a **global moratorium on COVID-19 mRNA vaccines**—coupled with **formal, unequivocal apologies from governments and medical bodies for mandates and for silencing truth seekers**—will suffice. Restoring legitimacy requires three concrete commitments: full transparency of data, independent evaluation of evidence, and accountability through both policy change and public acknowledgment of harm. Only then can the long work of rebuilding public trust truly begin.

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