

Ethical Issues in Vaccination: Balancing Public Health and Individual Autonomy

Ledia Qatipi¹, Albana Fico¹ & Gentian Vyshka¹

¹ Biomedical and Experimental Department, Faculty of Medicine, University of Medicine in Tirana, Albania

Correspondence: Ledia Qatipi, Biomedical and Experimental Department, Faculty of Medicine, University of Medicine in Tirana, Albania.

doi:10.56397/CRMS.2024.12.01

Abstract

Vaccination has been one of the most successful public health interventions, contributing significantly to the prevention of numerous infectious diseases and saving countless lives. However, its implementation has not been without ethical challenges. This paper examines key ethical issues related to vaccination, considering the tension between public health goals and individual autonomy. Through an exploration of informed consent, distribution equity, vaccine mandates, and misinformation, this paper aims to provide a comprehensive analysis of the complex ethical landscape in the realm of vaccination.

Keywords: vaccination ethics, public health, ethics

1. Introduction

Vaccination has played a pivotal role in reducing morbidity and mortality caused by infectious diseases worldwide. It has played a crucial role in eradicating diseases such as smallpox and has significantly controlled others like polio, measles, influenza and COVID-19 (McCullers JA & Dunn JD., 2008).

The everlasting human struggle for survival and wellbeing is mythical. *"From natural disasters; from disease and famine, Good Lord, deliver us"* — says the Great Litany. The fear of bugs is Biblical and maybe has become part of our genetic heritage: plague of lice or gnats, of flies, of pestilence (bubonic plague) say that long. Maybe contagious diseases were the only factor to deserve thrice a mentioning among the ten

plagues of Egypt.

The pioneering work of Edward Jenner with his smallpox vaccine in 1796 made believe the achieving of the miracle of overcoming (while not eradicating) the infections. More than two hundred years later from this historical discovery, we are still facing new infections, new strains, the need for new vaccines, and the unresolved fear of dying from mysterious bugs that we are unable to deal with.

However, the widespread implementation of vaccination programs also raises ethical dilemmas that require careful consideration. The ethical considerations surrounding vaccination are multifaceted, arising from the need to balance the collective benefit of disease prevention with individual rights and

autonomy. Restrictions on individual rights are justified for two reasons—for the benefit of the individual or the benefit of the community (Salmon DA & Omer SB., 2006). There are many articles in literature defending the use of coercion in public health, particularly infectious diseases. Mandatory vaccination is validated on Millian grounds: harm to others. According to John Stuart Mill, outside of preventing harm to others, the state has no legitimate reason to compel a person to act in the way the government wishes (Mill J. On Liberty, 2011). COVID-19 was a grave threat to public health with a death toll of 6,956,173 deaths (as of August 30, 2023) (World Health Organization, 2023). This pandemic justified mandatory vaccination as the best alternative possible to control this deadly disease, preventing harm to others. However, there was a lot of hesitancy in taking many variants of COVID-19 vaccines that were produced so rapidly. In many developed countries people refused to take the COVID-19 vaccines on grounds of fear from the new vaccines technology and their side effects. COVID-19 was a great example of the immense tension between public health goals and individual rights and autonomy (Fieselmann J, Annac K, Erdsiek F, Yilmaz-Aslan Y & Brzoska P., 2022).

This paper delves into the ethical dilemmas that emerge within this context, aiming to shed light on the challenges that policymakers, healthcare professionals, and society at large must navigate.

2. Methodology

We conducted a comprehensive literature review of peer-reviewed articles, reports, and guidelines related to vaccination ethics. This review served as the foundation for our understanding of the ethical issues surrounding vaccination.

Given the gross amount of data and published opinions on vaccination, particularly during COVID-19 pandemics, we focused on ethical perspectives. As such, a limitation of the present opinion paper might be the fact that ethical issues and dilemmas might not be straightforward related to this virus and the last pandemics it caused. The issue of vaccine hesitation and ancillary deterrents to have a jab might be clearly older.

3. Discussion

In this article, we will examine key ethical issues

related to vaccination, including informed consent, vaccine mandates, distribution equity, and vaccine hesitancy and suggest solutions and strategies that can help resolve them.

3.1 Informed Consent

Informed consent is a fundamental ethical principle in healthcare, emphasizing the importance of respecting individuals' autonomy and right to make informed decisions about their medical care (Little DT, Šeman EI & Walsh AL., 2021). Vaccination, like any medical procedure, involves potential risks, albeit generally small, and benefits that need to be communicated transparently to recipients or their legal guardians. Balancing the need for informed consent with the public health imperative to achieve high vaccination rates poses challenges, particularly in cases involving minors, those with cognitive impairments, or situations of imminent disease outbreaks. While it is essential to ensure that individuals have access to accurate and comprehensible information about vaccines, the challenge arises when misinformation and misconceptions cloud the decision-making process. Striking a balance between the need to protect public health and respecting an individual's right to refuse vaccination is an ongoing ethical dilemma (Zagaja A, Patryn R, Pawlikowski J & Sak J., 2018). In cases of disease outbreaks or epidemics such as COVID-19, public health authorities may face the challenge of achieving high vaccination rates quickly. There are some solutions and strategies that can help achieve this goal:

- 1) *Accessible Information*: Develop clear, concise, and accessible information about vaccines, their benefits, risks, and potential side effects. Utilize various communication channels to reach diverse populations effectively (Milo, C., 2023).
- 2) *Education and Empowerment*: Implement educational campaigns to enhance health literacy and empower individuals to make informed decisions. Provide resources that address common misconceptions and concerns (Ngo VM, Zimmermann KF, Nguyen PV, Huynh TLD & Nguyen HH., 2022).
- 3) *Shared Decision-Making*: Encourage a shared decision-making model where

healthcare providers engage in open dialogues with patients. This fosters mutual respect and collaboration while ensuring that patients have a platform to voice concerns (Scalia P, Durand MA & Elwyn G., 2022; Légaré F, Ratté S, Stacey D, Kryworuchko J, Gravel K, Graham ID & Turcotte S., 2010).

- 4) *Proxy Consent*: Develop guidelines for obtaining proxy consent for individuals who lack decision-making capacity. Engage legal guardians or representatives in the decision-making process, considering the best interests of the individual (Jonathan M. Fanaroff, 2017).

3.2 Equitable Distribution

Equitable distribution of vaccines refers to the just allocation of vaccines to ensure that all individuals, regardless of their socio-economic status, geographic location, or other demographic factors, have equal access to vaccination. This ethical principle aims to reduce health disparities and promote the overall well-being of communities. Equitable vaccine distribution upholds the principles of justice and human rights. It recognizes that every individual has a right to access preventive healthcare, regardless of their background. By prioritizing those who are most vulnerable or marginalized, equitable distribution addresses systemic health inequities and contributes to social cohesion. Ethical frameworks, such as utilitarianism and Rawlsian justice, guide discussions on how to prioritize vaccine distribution to maximize benefits for the most marginalized populations (World Health Organization, 2022).

There are some strategies for achieving equitable distribution:

Global Cooperation: Collaborative efforts among nations, international organizations, and pharmaceutical companies are crucial for ensuring the fair distribution of vaccines. Initiatives like COVAX aim to address global disparities by facilitating vaccine access for low-income countries. On March 2021, UN praised Albania's support for an equitable global distribution of vaccines: "The first 38,400 AstraZeneca COVID-19 vaccines arrived today in Albania through COVAX – the UN led global facility established to secure fair and equitable access to safe and effective COVID-19 vaccines

for every country in the world" (United Nations Albania, 2021).

Subsidized Pricing: Pharmaceutical companies can adopt tiered pricing models that make vaccines more affordable for low-income countries while sustaining research and development efforts (Guzman J, Hafner T, Maiga LA, et al., 2021).

Technology Transfer: Sharing vaccine manufacturing technology and knowledge can enable countries to produce their own vaccines, reducing dependency on a limited number of manufacturers (Holzer F, Roa TM, Germani F, Biller-Andorno N & Luna F., 2023).

Donations and Aid: High-income countries can donate excess vaccine doses to nations in need and provide financial support for vaccine distribution efforts in low-income regions. This approach ensures that the most vulnerable people around the world, including healthcare workers, elderly and those with significant comorbidities, can be vaccinated quickly during pandemics such as COVID-19 (United Nations Albania, 2021).

By prioritizing the principles of justice, solidarity, and human rights, stakeholders can work together to ensure that vaccines are accessible to all individuals, regardless of their socio-economic background or geographic location. This approach not only strengthens global health security but also reflects the shared responsibility of the global community to protect the well-being of all humanity.

3.3 Vaccine Mandates

Vaccine mandates are policies that compel individuals to receive specific vaccinations to access certain services, work in hospitals, attend schools, or participate in specific activities. According to the World Health Organization (WHO), at least 115,000 health care workers have died globally to COVID-19 as of May 2021. Health care professionals are at occupational risk for COVID-19, influenza, measles, mumps, rubella, varicella, pertussis, hepatitis A, hepatitis B, tuberculosis, and meningococcal disease (Maltezou HC, Dounias G, Rapisarda V, Ledda C., 2022). Vaccine mandates are necessary to protect this category of professionals and reduce morbidity and mortality caused by these deadly infectious diseases.

While aimed at preventing the spread of preventable diseases, vaccine mandates raise

ethical questions about the tension between public health goals and individual rights. The ethical rationale behind mandates is rooted in the concept of preventing harm to others through achieving herd immunity. Vaccine mandates are rooted in the ethical principle of promoting the greater good. They safeguard vulnerable populations unable to receive vaccines due to medical conditions and maintain herd immunity, protecting those who are immunocompromised or ineligible for vaccination. By preventing outbreaks, vaccine mandates uphold the moral obligation to prevent harm to individuals and communities (Michelle M Mello, Douglas J Opel, Regina M Benjamin, Timothy Callaghan, Renee DiResta, Jad A Elharake, at al., 2022).

However, opponents argue that such mandates infringe upon personal autonomy and bodily integrity. By emphasizing transparency, education, well-defined medical exemptions, and non-coercive strategies, policymakers can navigate these challenges while upholding the principles of public health and individual rights. Striking this balance ensures that vaccine mandates contribute to a healthier society while respecting the dignity and choices of individuals.

3.4 Misinformation and Public Health Messaging

The digital age has facilitated the rapid spread of misinformation and vaccine hesitancy. Addressing this ethical issue involves the responsibility of healthcare professionals, policymakers, and media outlets to provide accurate and evidence-based information. Misinformation about vaccines can erode public trust in healthcare systems and contribute to vaccine hesitancy. It raises ethical concerns as it can lead individuals to make uninformed decisions that not only affect their own health but also that of their communities (Shen SC & Dubey V., 2019).

The challenge lies in countering misinformation without undermining trust in the healthcare system or suppressing valid concerns. There are many challenges in addressing misinformation such as the rapid spread of misinformation through social media and online platforms that challenges public health authorities' ability to regulate and correct false information effectively. Individuals are more likely to believe and share information that aligns with their existing beliefs, making it difficult to change minds

through factual information alone. Misinformation can emerge from seemingly credible sources, blurring the line between accurate information and falsehoods. Over the past few decades, many studies have repeatedly disproven the claims associating MMR vaccination with increased incidence of autism (Gabis LV, Attia OL, Goldman M, Barak N, Tefera P, Shefer S, Shaham M & Lerman-Sagie T., 2022). However, the inaccurate and subsequently rejected paper of Andrew Wakefield from the Lancet journal, continues to negatively affect the public acceptance of all medical evidence for the last 23 years. For this reason, this paper still appears as the first mention among 58,600 publications on Google Scholar when searching for "vaccination and autism" (Rao TS & Andrade C., 2011).

The question being raised from the majority of public health care workers is "How to stop misinformation about vaccines?". In order to achieve this goal, we need to apply some strategies for more effective public health messaging such as:

- A. *Clear and Concise Communication*: Public health messages should be simple, clear, and easy to understand to counteract the complexity of misinformation. Public health authorities have an ethical duty to be transparent about the benefits, risks, and limitations of vaccines (David A. Broniatowski, Mark Dredze, & John W. Ayers, 2021).
- B. *Empathetic Engagement*: Engaging with concerns and questions empathetically can build trust and encourage open dialogue with individuals who have doubts about vaccines.
- C. *Corrective Information*: Rapidly provide accurate and credible information to counteract false claims and myths. While countering misinformation, it's essential to respect individuals' rights to make informed health decisions. Messages should aim to educate rather than coerce (Ecker UKH, Sharkey CXM & Swire-Thompson B., 2023).
- D. *Collaborative Efforts*: Collaborate with healthcare professionals, community leaders, and influencers to amplify accurate information (Soni GK, Seth S, Arora S, Singh K, Kumari A, Kanagat N

& Fields R., 2023).

Misinformation about vaccines is a complex challenge that requires a multi-pronged approach. By adopting strategies that prioritize clear communication, empathy, and accuracy, public health authorities can counteract misinformation effectively and contribute to higher vaccine acceptance rates. Upholding ethical principles throughout this process is vital to fostering trust, respecting autonomy, and ultimately safeguarding public health.

4. Conclusion

Ethical issues in vaccination are inherent due to the interplay between public health objectives and individual autonomy. Achieving a balance between these concerns requires a comprehensive and refined approach. Informed consent, equitable distribution, vaccine mandates, and addressing misinformation are integral aspects of the ethical discourse surrounding vaccination. As new vaccines emerge and public health challenges evolve, ongoing dialogue, research, and collaboration are essential to navigate these complex ethical considerations and ensure the promotion of both individual and collective well-being.

References

- David A. Broniatowski, Mark Dredze, and John W. Ayers. (2021). "First Do No Harm": Effective Communication About COVID-19 Vaccines. *American Journal of Public Health*, 111, 1055-1057.
- Ecker UKH, Sharkey CXM, Swire-Thompson B. (2023, April 12). Correcting vaccine misinformation: A failure to replicate familiarity or fear-driven backfire effects. *PLoS One*, 18(4), e0281140.
- Fieselmann J, Annac K, Erdsiek F, Yilmaz-Aslan Y, Brzoska P. (2022, April 27). What are the reasons for refusing a COVID-19 vaccine? A qualitative analysis of social media in Germany. *BMC Public Health*, 22(1), 846.
- Gabis LV, Attia OL, Goldman M, Barak N, Tefera P, Shefer S, Shaham M, Lerman-Sagie T. (2022, January). The myth of vaccination and autism spectrum. *Eur J Paediatr Neurol.*, 36, 151-158. doi: 10.1016/j.ejpn.2021.12.011. Epub 2021 Dec 22.
- Guzman J, Hafner T, Maiga LA, et al. (2021). COVID-19 vaccines pricing policy options for low-income and middle-income countries. *BMJ Global Health*, 6, e005347.
- Holzer F, Roa TM, Germani F, Biller-Andorno N, Luna F. (2023, March). Charity or empowerment? The role of COVAX for low and middle-income countries. *Dev World Bioeth*, 23(1), 59-66.
- Jonathan M. Fanaroff. (2017, February). COMMITTEE ON MEDICAL LIABILITY AND RISK MANAGEMENT, William M. McDonnell, Robin L. Altman, Steven A. Bondi, Sandeep K. Narang, MD JD, Richard L. Oken, John W. Rusher, Karen A. Santucci, James P. Scibilia, Susan M. Scott; Consent by Proxy for Nonurgent Pediatric Care. *Pediatrics*, 139(2), e20163911. 10.1542/peds.2016-3911.
- Légaré F, Ratté S, Stacey D, Kryworuchko J, Gravel K, Graham ID, Turcotte S. (2010, May 12). Interventions for improving the adoption of shared decision making by healthcare professionals. *Cochrane Database Syst Rev.*, (5), CD006732. doi: 10.1002/14651858.CD006732.pub2. Update in: *Cochrane Database Syst Rev*. 2014;9:CD006732.
- Little DT, Šeman EI, Walsh AL. (2021, Fall). COVID-19 Vaccination: Guidance for Ethical, Informed Consent in a National Context. *Issues Law Med*, 36(2), 127-162.
- Maltezou HC, Dounias G, Rapisarda V, Ledda C. (2022, May 31). Vaccination policies for healthcare personnel: Current challenges and future perspectives. *Vaccine X.*, 11, 100172.
- McCullers JA, Dunn JD. (2008, January). Advances in vaccine technology and their impact on managed care. *P T.*, 33(1), 35-41.
- Michelle M Mello, Douglas J Opel, Regina M Benjamin, Timothy Callaghan, Renee DiResta, Jad A Elharake, et al. (2022). Effectiveness of vaccination mandates in improving uptake of COVID-19 vaccines in the USA. *The Lancet*, 400(103051). [https://doi.org/10.1016/S0140-6736\(22\)00875-3](https://doi.org/10.1016/S0140-6736(22)00875-3).
- Mill J. On Liberty. (2011). *Cambridge Library Collection Philosophy*. Cambridge: Cambridge University Press.
- Milo, C. (2023). COVID-19 Vaccination and the Role of Informed Consent: England as a Case Study. *European Journal of Health Law*, 30(4), 428-448.
- Ngo VM, Zimmermann KF, Nguyen PV, Huynh

- TLD, Nguyen HH. (2022, July 18). How education and GDP drive the COVID-19 vaccination campaign. *Arch Public Health*, 80(1), 171.
- Rao TS, Andrade C. (2011, April). The MMR vaccine and autism: Sensation, refutation, retraction, and fraud. *Indian J Psychiatry*, 53(2), 95-6.
- Salmon DA, Omer SB. (2006, September 27). Individual freedoms versus collective responsibility: immunization decision-making in the face of occasionally competing values. *Emerg Themes Epidemiol*, 3, 13.
- Scalia P, Durand MA, Elwyn G. (2022, April). Shared decision-making interventions: An overview and a meta-analysis of their impact on vaccine uptake. *J Intern Med*, 291(4), 408-425. doi: 10.1111/joim.13405. Epub 2021 Nov 26.
- Shen SC, Dubey V. (2019, Mar). Addressing vaccine hesitancy: Clinical guidance for primary care physicians working with parents. *Can Fam Physician*, 65(3), 175-181.
- Soni GK, Seth S, Arora S, Singh K, Kumari A, Kanagat N, Fields R. (2023, May 24). Harnessing the Power of Collaboration to Expand the Coverage and Equity of COVID-19 Vaccinations in India: A Community Collaboration Model. *Vaccines (Basel)*, 11(6), 1022.
- United Nations Albania. (2021, August 31). COVID-19: Rich countries should donate at least 1 billion vaccine doses, says WHO panel. Retrieved from <https://news.un.org/en/story/2021/08/1098882>.
- United Nations Albania. (2021, March 12). First batch of COVAX-facilitated vaccines reach Albania. Retrieved from <https://albania.un.org/en/116043-first-batch-covax-facilitated-vaccines-reach-albania>.
- World Health Organization. (2022, April 20). Vaccine Equity. Retrieved from <https://www.who.int/campaigns/vaccine-equity>.
- World Health Organization. (2023, August 30). WHO Coronavirus (COVID-19) Dashboard. Retrieved from <https://covid19.who.int>.
- Zagaja A, Patryn R, Pawlikowski J, Sak J. (2018, Nov 25). Informed Consent in Obligatory Vaccinations? *Med Sci Monit*, 24, 8506-8509.