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EUROPEAN JUDICIAL STANDARDS ON ROUTINE IMMUNISATION FOR MINORS COMPARED: PROTECTION OF HUMAN RIGHTS AND PUBLIC HEALTH THROUGH SCRUTINY OF INTERNATIONAL SCIENTIFIC KNOWLEDGE AND EPIDEMIOLOGICAL EVIDENCE**

Abstract: *This article uses comparative method to explore national case law in Europe which adjudicates on challenges to legal frameworks for public health and vaccination based on human rights claims. It recognises that courts have become important actors in multi-level health governance where judicial scrutiny is needed to manage misinformation, populism and vaccine hesitancy at the state–society interface. It argues that judicial decisions ensure the protection of both public health and human rights values through a construction of lawful limitations of rights that is based on the proportionality assessment, which recognises the authority of domestic/international scientific evidence and medical expert knowledge, and which considers local and societal factors. The article also shows that courts are faced with a need to possess extensive epidemiological knowledge and an understanding of vaccine hesitancy and the social determinants of health in order to assess national laws on vaccine mandates*

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and to ensure that the outcomes of judgments are fair and justified. Finally, the text posits that courts contribute to a process of legitimation of international scientific evidence in domestic legal orders while creating judicial standards of review on routine immunisation policies for minors.

Keywords: judicial review of epidemiological evidence, comparative immunisation policies, children's right to health, public health and human rights, World Health Organisation

1. BACKGROUND AND RESEARCH AIMS: PUBLIC HEALTH, HUMAN RIGHTS, THE WORLD HEALTH ORGANIZATION AND JUDICIAL REVIEW OF IMMUNISATION POLICIES

The immunisation of children through vaccines is a major achievement of modern public health and also one of the most successful and cost-effective measures for preventing diseases.[1] Routine immunisation policies at state level constitute a critical tool for ensuring a population's health, and they fulfil the children's right to health by guaranteeing minors access to free vaccines.[2] Historically, vaccines have built adequate levels of community immunity in societies, have eliminated some lethal/disabling diseases – at least in some regions – and have introduced preventive shields against others.[3]

Although the importance of routine vaccination is widely accepted, especially for children, Europe had long been known for a strong scepticism of vaccine safety (so-called vaccine hesitancy[4]), at least for the past two decades and before the

[1] *See* W.K. Mariner, *Law and Public Health: Beyond Emergency Preparedness*, 38 Journal of Health Law 247 (2005). *See also* Y.T. Yang, D.R. Reiss, *Vaccine Law and Policy*, Springer, Cham: 2023 (particularly Chapter 7: *Vaccine Regulation in Global Comparison*).

[2] *See generally* R. Pierik, M. Verweij, *Inducing Immunity: Justifying Immunization Policies in Times of Vaccine Hesitancy*, MIT Press, Cambridge, MA: 2024.

[3] *See* S.A. Plotkin (ed.), *History of Vaccine Development*, Springer, New York: 2011. *Cf. also* I. Milne, *Stacking the coffins: Influenza, war and revolution in Ireland, 1918–19*, Manchester University Press, Manchester: 2018.

[4] Vaccine hesitancy means a "delay in acceptance or refusal of vaccines, despite availability of immunisation services", see for a full definition *Summary WHO Strategic Advisory Group of Experts on Immunization conclusions and recommendations on Vaccine Hesitancy*, January 2015, available at: https://www.who.int/docs/default-source/immunization/demand/summary-of-sage-vaccinehesitancy-en.pdf. *Cf. also* European Commission, *Special Eurobarometer Survey 488 Report Europeans' attitudes towards vaccination*, April 2019, available at: https://tinyurl.com/4w4nujfw, and ECDC Report, *Threat of outbreaks in EU/EEA countries due to persistent gaps in vaccination coverage*, 24 April 2023, available at: https://tinyurl.com/mufv27z6 (all accessed 30 June 2026).

COVID-19 pandemic.[5] The consequences of the phenomenon for public health were lower rates of routine vaccination (insufficient vaccine coverage), leading to lower herd immunity thresholds (less societal immunity) and outbreaks of vaccine-preventable diseases (e.g. measles).

The World Health Organization (WHO) classified vaccine hesitancy among the top health threats even in 2019, and since then huge efforts have been undertaken at state, regional and global levels to reverse a tendency of lowering rates of scheduled and emergency vaccination.[6] The COVID-19 pandemic catalysed the phenomenon, but also demonstrated the critical importance of equitable, free and rapid access to vaccines.[7] The WHO continues to support states in scaling up their routine vaccine agendas.[8]

In Europe, similar efforts were undertaken by the European Centre for Disease Prevention and Control (ECDC, an EU agency) in cooperation with the WHO Europe (a regional office), while vaccine coverage gaps remain for diseases as dangerous as measles and polio.[9] In short, the role of international and regional organisations has been two-fold. They offer support in networking, co-ordinating and exchanging information among national contact points, and they assemble and produce expert knowledge and recommendations in the form of soft law.[10] The latter role corresponds with the fact that the specific realisation of routine immunisation policies both for minors and adults typically take place through domestic legal orders and differ across public health regulation and health care systems.[11]

Thus, at national level, the avoidance of childhood vaccination brought about two principal trends which can be identified from a legal standpoint. Firstly, a trend towards more coercive public health regulations on vaccination for minors can be

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[5] The reasons behind this fact vary, *see e.g.* D.A. Salmon, et al., *Vaccine Hesitancy: Causes, Consequences, and a Call to Action*, 49(6 Suppl 4) American Journal of Preventive Medicine S391 (2015). *See also* M. Frischhut, *Communicable and Other Infectious Diseases: The EU Perspective*, in: D. Orentlicher, T.K. Hervey (eds.), *The Oxford Handbook of Comparative Health Law*, Oxford University Press, Oxford: 2020, pp. 89-91.

[6] WHO, *Ten threats to global health in 2019*, 10 January 2019, available at: https://www.who.int/news-room/spotlight/ten-threats-to-global-health-in-2019 (accessed 31 March 2026).

[7] *Cf.* J. King et al., *Mandatory Covid-19 vaccination and human rights*, 399 Lancet 220 (2022).

[8] WHO, *Stronger together: milestones that mattered in 2025, Continued scale-up of vaccination programmes*, 23 December 2025, available at: https://www.who.int/news-room/spotlight/stronger-together-milestones-that-mattered-in-2025 (accessed 31 March 2026).

[9] ECDC, *European Immunization Week 2025: Closing vaccination gaps, reaching every community*, 25 April 2025, available at: https://tinyurl.com/53wra43d; ECDC, *Measles in Europe*, 28 April 2025, available at: https://www.ecdc.europa.eu/en/publications-data/measles-europe (both accessed 31 March 2026).

[10] *Cf. e.g.* C. Jarrett et al., *SAGE Working Group on Vaccine Hesitancy, Strategies for addressing vaccine hesitancy – A systematic review*, 33(34) Vaccine 4180 (2015).

[11] R. Martin, A.L. Dak Wai, *Comparative national public health legislation*, in: D. Roger et al. (eds.), *Oxford Textbook of Public Health*, 5th ed., Oxford University Press, Oxford: 2011, section 4.2.

seen in Europe. While vaccination for children had traditionally been mandatory in the post-communist states of Central and Eastern Europe, some states have modified voluntary schemes into obligatory ones (e.g. Germany and France) while others have introduced a requirement for proof of vaccination before admission to childcare institutions.[12] As of 2026, 13 European states maintain obligatory children immunisation schemes and 17 states have voluntary ones which in some states are based on strict recommendations (e.g. Austria).[13]

Secondly, the scepticism of some people towards immunising minors has led to parallel processes of challenging vaccination mandates through national judicial proceedings.[14] Those lawsuits concerned either public health laws where the immunisation of children had been and/or has recently become mandatory before constitutional/administrative courts, or parental conflicts over immunisation through civil/family courts in those states where vaccination is optional and where constitutional disputes rarely appear because laws do not prescribe obligatory vaccination. The legal actions involved human rights-based arguments referring to parental and children's rights, the rights to privacy and bodily integrity and the rights to education and religious freedom.[15] National judicial claims in Europe seem to have intensified since the beginning of the 21st century, which corresponds to the publication of falsified studies about the safety of a vaccine against mumps, measles and rubella in the late 1990s.[16]

I became interested in the judicial reasoning behind those cases because I wanted to examine how judges approach the protection of human rights *and* public health objectives. Then, I noticed that justifications of human rights limitations in distinct jurisdictions by various courts are similar and quite consistently refer to international scientific knowledge and recommendations of the WHO. Thus, I became

[12] S. Farina et al., *Childhood Mandatory Vaccinations: Current Situation in European Countries and Changes Occurred from 2014 to 2024*, 12(11) Vaccines 1296 (2024). *Cf.* for the U.S. context, W.E. Parmet, *Shifting Vaccination Politics — The End of Personal-Belief Exemptions in California*, 373 The New England Journal of Medicine 785 (2015).

[13] *Cf.* ECDC, *Vaccine Scheduler*, available at: https://vaccine-schedule.ecdc.europa.eu/ (accessed 31 March 2026).

[14] R. Pierik, *On Religious and Secular Exemptions. A Case Study of Childhood Vaccination Waivers*, 17(2) Ethnicities 220 (2017). *Cf. e.g.* for the Polish context, A. Fiutak, *Odpowiedzialność przedstawiciela ustawowego za niewykonanie szczepienia obowiązkowego* [Liability of a legal representative for failure to perform mandatory vaccination], 9 Medyczna Wokanda 160 (2017), pp. 160-164; J. Kosonoga-Zygmunt, *Glosa do wyroku Sądu Najwyższego z dnia 8 stycznia 2016 r., sygn. V KK 306/15* [Commentary on the Supreme Court judgment of 8 January 2016, Case No. V KK 306/15], 11 Prokuratura i Prawo 170 (2016).

[15] *See* for the US context, W.E. Parmet, *Informed Consent and Public Health: Are They Compatible When It Comes to Vaccines*, 8(1) Journal of Health Care Law & Policy 71 (2005); D.R. Reiss, N. Karako-Eyal, *Informed Consent to Vaccination: Theoretical, Legal, and Empirical Insights*, 45(4) American Journal of Law & Medicine 357 (2019).

[16] In 1998, *see* H.J. Larson, *The biggest pandemic risk? Viral misinformation*, 562 Nature 309 (2018).

intrigued in comparing the state-level case law and its link to international health governance, drawing upon Kathryn Sikking's powerful arguments albeit in a different context that global governance often happens in domestic courts and that comparative law methodology is necessary to study the roles of those courts in transnational realities.[17]

I asked the following research questions: What are the justifications for courts' deference to national public health policies on immunisation for minors? What type of evidence do courts rely on to build lawful human rights limitations when they consider rights claims? What is the nature of review towards evidentiary bases?

Some previous research in the field has argued that courts may be central actors in fostering access to essential medicines, particularly in low- and middle-income countries, e.g. in Latin America.[18] The relevant scholarship addressed primarily judicial opinions concerning free access to vaccines for children to be guaranteed by a given state as an individual entitlement under the right to health.[19] There has been less scholarly work on comparative case law, including in the European context, settling refusals of routine vaccination (denying medical care) and the respective role of judicial review in relation to the lawful limitations of human rights in case of legitimate public health objectives and the collective right to health underpinned by international scientific evidence and epidemiological knowledge.[20]

I also aimed to provide a fuller picture of comparative European judicial standards on child immunisation mandates and to expose the roots of the 2021 *Vavřička*

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[17] K. Sikking, *Memo for the Workshop on The Object and Methodology of Global Governance*, European University Institute, Florence, Italy, January 2013, on file with the author. *See also* K. Sikkink, *The Justice Cascade: How Human Rights Prosecutions are Changing World Politics*, W.W. Norton and Company, New York: 2011.

[18] *See e.g.* A.E. Yamin, O. Parra-Vera, *Judicial Protection of the Right to Health in Colombia: From Social Demands to Individual Claims to Public Debates*, 33(2) Hastings International and Comparative Law Review 101 (2010); L. London, *What is a human-rights based approach to health and does it matter?*, 10(1) Health and Human Rights Journal 65 (2008).

[19] *Cf.* H. Hogerzeil et al., *Is access to essential medicines as part of the fulfilment of the right to health enforceable through the courts?*, 368 The Lancet 305 (2006); E. Žiobienė, *Challenges to the Protection of the Child's Right to Health*, in: A. Limantė, R. Vaičiūnienė, (eds.), *Children's Rights in Central and Eastern Europe. European Union and its Neighbours in a Globalized World*, Springer, Cham: 2025.

[20] On judicial review of scientific evidence, *see generally, e.g.* R. van Gestel et al., *Judicial Policy Making, Empirical Data and Scientific Evidence Can Courts Manage the Twenty-First Century?*, Edward Elgar Publishing, Cheltenham: 2026; N. de Sadeleer (ed.), *Implementing the Precautionary Principle*, 2nd ed., Earthscan: 2018. For the older accounts *see e.g.* A. Alemanno, *EU Risk Regulation and Science: The Role of Experts in Decision-making and Judicial Review*, in: E. Vos (ed.), *European Risk Governance: Its Science, Its Inclusiveness and Its Effectiveness*, Connex, Mannheim: 2008, pp. 59-63; A. Biondi, K. Harmer, *Scientific Evidence and the European Judiciary*, in: A. Biondi et al. (eds.), *Scientific Evidence in European Environmental Rule-Making*, Kluwer Law International, Alphen aan den Rijn: 2009, pp. 51-60; E. Barbier de la Serre, A.-L. Sibony, *Expert Evidence before the EC Courts*, 45(4) Common Market Law Review 941 (2008).

judgment of the European Court of Human Rights (ECtHR),[21] because before that decision the human rights protection standards of the ECtHR in this area were fragmented and incomplete.[22] The research design also considered the fact that earlier European scholarly studies on the legal aspects of vaccinating minors typically concentrated either on regulatory public health law, philosophical issues, national tort law analysis or powers and values under EU law,[23] as well as on examining the proportionality of the above-mentioned ECtHR judgment.[24]

Importantly, the comparative findings about case law from various domestic normative systems also fill a knowledge gap in the EU context regarding the judicial standards in the field of public health, immunisation polices and related legal disputes based on human rights claims – given that the EU lacks legal competence in the matter of children vaccine mandates pursuant to Art. 168 of the Treaty on the Functioning of the European Union[25] and that there have been no precisely related rulings from the EU Court of Justice.[26] Only some claims concerning mandatory immunisation during the COVID-19 pandemic have actually been litigated in EU courts: either directly against EU institutions[27] or through the preliminary

[21] ECtHR, *Vavřička and Others v. the Czech Republic* (App. Nos. 47621/13 and 3867/14, 73094/14, 19298/15, 19306/15 and 43883/15), Judgment, 8 April 2021, para. 277.

[22] See the HR Committee Decision, *Boffa and 13 Others v. San Marino* (App. No. 26536/95); and the ECtHR judgments in *Solomakhin v. Ukraine* (App. No. 24429/03) and *Jehovah's Witnesses of Moscow and Others v. Russia* (App. No. 302/02).

[23] *See e.g.* D. Orentlicher, T.K. Hervey (eds.), *The Oxford Handbook of Comparative Health Law*, Oxford University Press, Oxford: 2020; R. Pierik, *Vaccination Policies: Between Best and Basic Interests of the Child, between Precaution and Proportionality*, 13(2) Public Health Ethics 201 (2020); A. Milon, R. Bouvet, *Scientific Uncertainty in Courts. A France-Germany Comparative Perspective on Litigation surrounding Hepatitis B Vaccination*, 26(1) European Journal of Health Law 5 (2019); A. de Ruijter, *EU Health Law & Policy The Expansion of EU Power in Public Health and Health Care*, Oxford University Press, Oxford: 2019; E.M. Speakman, S. Burris, R. Coker, *Pandemic legislation in the European Union: Fit for purpose? The need for a systematic comparison of national laws*, 121(10) Health Policy 1021 (2017).

[24] *Cf.* R. McWhirter, M. Clark, *Expertise, Public Health and the European Convention on Human Rights: Vavřička v Czech Republic*, 86(4) Modern Law Review 1035 (2023); A. Alekseenko, *Implications for Covid-19 vaccination following the European Court of Human Right's decision in Vavřička and others v. Czech Republic*, 22(1) Medical Law International 75 (2022), pp. 79–84; I.Y. Nugraha et al., *Vavřička and Others v. the Czech Republic*, 116(3) American Journal of International Law 579 (2022); A. Krasser, *Compulsory Vaccination in a Fundamental Rights Perspective: Lessons from the ECtHR*, 15(2) ICL Journal 207 (2021); A. Nilsson, *Is Compulsory Vaccination Compatible with the Right to Respect for Private Life? A Comment on Vavřička and Others v. the Czech Republic*, 28 European Journal of Health Law 323 (2021).

[25] *See generally*, S. Garben, *Article 168 TFEU*, in M. Kellerbauer et al. (eds.), *The EU Treaties and the Charter of Fundamental Rights: A Commentary*, online ed., Oxford Academic, New York: 2019.

[26] See the inadmissibility order in case C-459/13 *Milica Široká v. Slovakia*, ECLI:EU:C:2014:2120; and also a case declared inadmissible: C-765/21 *Azienda Ospedale-Università di Padova*, EU:C:2023:566, para. 44; and C-161/21 *Comune di Camerota*, EU:C:2021:833.

[27] *Cf.* T-710/21 *Robert Roos and Others v. European Parliament*, EU:T:2022:262; C-458/22 P *Robert Roos and Others v. European Parliament*, EU:C:2023:871.

ruling procedure with regard to national mandates to vaccinate, discrimination and equal treatment in employment and occupation.[28] Those cases also bring to the fore broader questions of protecting both individual human rights and public health from transboundary epidemics and health threats in the European Union.

Finally, this research is vital in the times of a multilateralism crisis coupled with decreasing societal trust in public institutions and democratic deficit in global governance more generally.[29] It touches upon significant challenges faced by international organisations, including the need to maintain the credibility of scientific knowledge produced by collaborative expert groups within those organisations, as well as the securitisation and privatisation of public health.[30]

In order to pursue its aims, the article links legal analysis with an interdisciplinary conceptual lens. The novelty of the text is its particular multi-discipline analytical framing, which links fields that are usually treated separately (judicial review of human rights claims; public health regulation and epidemiological evidence; vaccine hesitancy; and legitimacy of international organisations) despite being closely interlinked. This phenomenon is easily overlooked. It shifts attention to a comparative examination of domestic judicial decisions across European jurisdictions and courts' engagement with epidemiological reasoning regarding the immunisation of children and international scientific evidence produced by national/WHO expert bodies.

Thus, the paper moves beyond typical analyses of the limits of individual human rights versus compulsory vaccination and the application of the proportionality principle by national courts or international tribunals, and discusses the role of diverse judicial bodies within a broader context of multi-level health governance. It shows that those courts became important actors in interpreting and enforcing justified human rights limitations and public health normative frameworks within governance structures. The interdisciplinary lens is also vital to expose the relationship between the role of national courts and their human rights-based review versus the non-binding nature of scientific evidence (e.g. soft law) generated by specialised international bodies.

The originality of the paper also lies in its focus on the field of *public health human rights*, exposing an often unspoken mutual reinforcement between protecting public health and protecting human rights, as well as theorising relations

[28] See the judgment of 18 June 2026 in C-522/24 *Ministero della Difesa I*, ECLI:EU:C:2026:498, and pending C-386/25 *Ministero della Difesa II*. *See also* C-219/24 *A and Others v. Tallinna linn*, paras. 51–54 in the context of COVID-19, anti-discrimination, health and safety at work.

[29] *See* L. Gruszczynski et al. (eds.), *The Crisis of Multilateral Legal Order: Causes, Dynamics and Implications*, Routledge, Abingdon: 2022.

[30] *See* A. Müller, S. Behrendt (eds.), *Emergency Regimes for Global Health Law, Policy, and Institutions*, Edward Elgar, Cheltenham: 2026.

between various interdependent human rights in the context of protecting collective health and children's right to health.

The text comparatively appraises the judicial standards applicable in Europe, as defined by the boundaries of the Council of Europe and including domestic courts and the ECtHR (see Table 1).

The paper proceeds as follows. Section 2 explains in detail the conceptual framework and methodology employed in the text. Section 3 contains the appraisal and discussion of the comparative judicial standards in Europe on routine immunisation policies for minors public health and human rights protection. Section 4 concludes the article.

2. CONCEPTS AND METHOD

The text is grounded in the comparative method with an interdisciplinary lens; both of these are unavoidable to demonstrate the role of courts in protecting both human rights and public health in multi-level public health governance.[31] The lens is also helpful to present the complexity of issues which are involved in domestic immunisation policies, the protection of individual rights and constitutional state powers. This section describes the applicable concepts, the comparative method and reasons for its use (section 2.1.); and clarifies how comparators and court cases were selected and analysed (section 2.2.)

2.1. Conceptual framework and methodology

The article employs concepts from fields which are critical to the understanding of its aims and arguments: public health regulation and epidemiology in constitutional analysis,[32] vaccine hesitancy[33] and a human rights-based approach to health.[34] The text links those concepts with the legal conceptualisation of a standard of review[35] in order to examine judicial reasoning and the intensity of scrutiny of state/

[31] *Cf.* the justification for interdisciplinary conceptual framework in P. Dąbrowska-Kłosińska, *Electronic Systems of Information Exchange as a Key Tool in EU Health Crisis and Disaster Management*, 10(4) European Journal of Risk Regulation 652 (2019). *See also* note 17 above.

[32] *See* W.E. Parmet, *Public Health and Constitutional Law: Recognizing the Relationship*, 10(1) Journal of Healthcare Law and Policy 13 (2007), pp. 19–24; G.J. Annas, W.K. Mariner, *(Public) Health and Human Rights in Practice*, 41(1) Journal of Health Politics, Policy and Law 129 (2016).

[33] *See* Editorial in B. Hickler et al., *Special Issue on Vaccine Hesitancy*, 33 Vaccine 4155 (2015).

[34] For an historical-interpretive account, *cf.* P. Hunt, *Interpreting the International Right to Health in a Human Rights-Based Approach to Health*, 18(2) Health and Human Rights Journal 109 (2016).

[35] *See* L. Gruszczynski, W. Werner, *Introduction*, in: L. Gruszczynski, W. Werner (eds.), *Deference in International Courts and Tribunals: Standard of Review and Margin of Appreciation*, Oxford University Press, Oxford: 2014, pp. 4–5.

governmental public health policy/action which has been applied by various courts to assess the conformity of public health measures (immunisation) with national constitutions and laws and legally binding international norms.[36] The text refers to typical understandings of judicial review. That is, it is differentiated into deferential (i.e. deferring to state powers) and restrictive (i.e. intruding over state powers) according to its scope, intensity and the type of court or jurisdiction.[37]

In the area of research (judicial claims challenging routine immunisation for minors), the experience from non-European jurisdictions suggests that courts defer to state public health measures while taking into account both domestic constitutional limits (individual rights) and scientific factors.[38] At the same time, some authors in the field of public health and human rights have presented contrasting claims that judges either misunderstand or scrutinise epidemiological evidence, health risk and science.[39] Accordingly, the text tests those hypotheses through comparison in order to build a theoretical and normative arguments based on the findings.[40]

With regard to a specific comparative method, the article additionally draws upon the legal methodology of the comparative interpretive approach (CIA), developed by Scheinin and colleagues,[41] and a qualitative analysis of judicial reasoning and institutional documents of international (WHO) and regional (EU-ECDC) organisations. CIA insists that an effective comparison of human rights case law requires a comparison of decisions, an interpretation of the reasoning therein and the contextualisation of the measures and human rights instruments in question in order to expand knowledge thereof and predict future outcomes of judicial

[36] *Cf.* R. Grote, *Judicial Review*, in: R. Grote et al. (eds.), *Max Planck Encyclopaedia of Comparative Constitutional Law*, Oxford University Press, Oxford: 2017, pp. 16–19.

[37] *See* W.K. Mariner, *Shifting Standards of Judicial Review During the Coronavirus Pandemic in the United States*, 22(6) German Law Journal 1039 (2021).

[38] *See* W.K. Mariner, G.J. Annas, L.H. Glantz, *Jacobson v Massachusetts: It's not your great-great-grandfather's public health law*, 95(4) American Journal of Public Health 581 (2005); *cf.* B. Toebes, *Human Rights and Public Health: Towards a Balanced Relationship*, 19(4) International Journal of Human Rights 488 (2015).

[39] *Cf.* W.E. Parmet, P.D. Jacobson, *The Courts and Public Health: Caught in a Pincer Movement*; 104(3) American Journal of Public Health 392 (2014); S. Galea, G.J. Annas, *Aspirations and Strategies for Public Health*, 315(7) JAMA 655 (2016).

[40] *See* the taxonomy of reasons for the use of a comparative method by C. McCrudden, *What Does it Mean to "Compare", and What Should It Mean?*, in: S. Besson, L.H. Urscheler, S. Jubé (eds.), *Comparing Comparative Law,* Publications of the Swiss Institute of Comparative Law, Schulthess Éditions Romandes, Geneva/Zurich: 2017, pp. 72–78.

[41] T. Orlin, M. Scheinin, *Introduction*, in: T. Orlin, A. Rosas, M. Scheinin (eds.), *The Jurisprudence of Human Rights Law: A comparative interpretative approach*, Syracuse University Press, Syracuse: 2000, pp. 1–18.

decisions. The approach presupposes a comparison from a multitude of sources and a possibility that pluralist legal interpretations will be revealed by an analysis.[42]

Finally, the article refers to the notions of a legitimacy and legitimation of international organisations in the context of adjudication based on international scientific evidence.[43] It does so to consider the significance of references to expert knowledge of international organisations in the national judicial reasoning under analysis, especially to the WHO's recommendations on routine immunisation, and also in the context of EU/ECDC strategies for national health authorities to increase vaccination uptake.[44] Accordingly, I follow Tallberg and Zürn[45] in their sociological understanding of "political legitimacy as beliefs within a given constituency or other relevant audience that a political institution's exercise of authority is appropriate. [...]" (p. 585). They claim that a *process* is referred to as *legitimation* "[w]here actors deliberately seek to make a political institution more legitimate, by boosting beliefs that its rule is exercised appropriately" (p. 585). Further, in their conceptualisation, "legitimacy is distinct from authority. While authority refers to the recognition that an institution has the right to make decisions and interpretations within a particular area, legitimacy refers to the perception that these rights are appropriately exercised" (p. 586). Moreover, conformance to procedural ideals influence legitimacy beliefs, and so "procedure" is one of the institutional standards of legitimacy for international organisations.[46]

2.2. Selecting Comparators and Analysing Cases

In accordance with the above conceptual frames and aims of the article, the comparators (a choice of legal systems) and court cases (a choice of judgments within those legal systems) were picked with consideration (see Table 1).[47] Firstly, the comparators and court cases were selected using different sampling strategies and the most

[42] *Ibidem*, pp. 17–19.

[43] *See* J. Tallberg, M. Zürn, *The legitimacy and legitimation of international organizations: introduction and framework*, 14(4) Review of International Organization 581 (2019).

[44] *See* WHO, *Table 2: Summary of WHO Position Papers – Recommended Routine Immunizations for Children*, 1 December 2025, available at: https://www.who.int/publications/m/item/table-2-who-recommendations-for-routine-immunization; WHO, *Guidance for the Development of Evidence-Based Vaccination-Related Recommendations*, version 8, 31 January 2017, available at: https://tinyurl.com/5a93m-rkx, pp. 38-43; ECDC, *Let's talk about protection: enhancing childhood vaccination uptake*, April 2016, updated April 2026, available at: https://tinyurl.com/37hn5832 (all accessed 30 June 2026).

[45] Tallberg & Zürn, *supra* note 43, pp. 583–594.

[46] *Ibidem*, pp. 593–594.

[47] For the comparison, selection and research design I referred to K. Linos, M. Carlson, *Qualitative Methods for Law Review Writing*, 84(1) The University of Chicago Law Review 213 (2017), pp. 220–230; and also V.C. Jackson, *Comparative Constitutional Law: Methodologies*, in: M. Rosenfeld, A. Sajó (eds.), *The Oxford Handbook of Comparative Constitutional Law*, Oxford University Press, Oxford: 2012, p. 64; R. Hirschl, *The Question of Case Selection in Comparative Constitutional Law*, 53(1) American Journal of Comparative Law 125 (2005).

different case design technique in order to be able to establish generality/causation and minimise bias.[48] The selection involved both systematic and randomised sampling and theoretically informed sampling which were theorised through material, personal and temporal features.[49] Secondly, the case law was selected through searches of electronic databases, both academic and institutional, including websites of constitutional/supreme courts which were available in or convertible to English.[50]

Ratione materiae. The scope of selection was initially identified through a regional criterion (Europe). The regional dimension was defined by the international health and human rights framework (WHO Europe and Council of Europe). It included EU and non-EU states, both former and aspiring, and varying in size, public health culture, legislation (mandatory/optional vaccination), geographic location, courts/claims systems and types of proceedings (e.g. continental/common law). However, all the states shared the characteristic of experiencing claims against legal mandates and courts deferring to policies on the immunisation of children.

The scope of the sample was demarcated by the characteristic of the contestation of routine schedules, i.e. public-law mandates or individual decisions regarding immunisation, and human rights-based claims. The material scope was further defined by the following qualities: public health prevention from health threats, including transborder health threats, and normal conditions. This is why the examination, in principle, did not include judgments related to COVID-19,[51] patient injuries or tort jurisprudence.[52]

The sampling process included those states from the European continent where the routine vaccination of children is mandatory in general or for admission to school[53] and where I was able to find relevant judgments of constitutional tribunals/courts, which typically consider rights claims in domestic systems.[54] As

[48] Linos & Carlson, *supra* note 47, pp. 222–225 and 230–231.

[49] *Ibidem*, *supra* note 47, pp. 220–230. *See also* Jackson, *supra* note 47, p. 64 and Hirschl, *supra* note 47, pp. 139–142.

[50] *See also* B.M. Meier et al., *Bridging International Law and Rights-based Litigation: Mapping Health-related Rights through the Development of the Global Health and Human Rights Database*, 14 Health and Human Rights: An International Journal 1 (2012).

[51] *Cf.* D. Greco, *Commentary: COVID-19 compulsory vaccination for certain worker categories and the socio-economic consequences of non-compliance before Italy's Constitutional Court: a public health and human rights analysis*, 1(1) Journal of Global Health Law 106 (2024).

[52] *See generally*, A. Kirkland, *Vaccine Court, The Law and Politics of Injury*, NYU Press, New York: 2016.

[53] Bulgaria, Croatia, Czechia, France, Hungary, Italy, Latvia, Poland, Slovakia, Slovenia, Bulgaria, non-EU Balkan States, Ukraine, plus Belgium (only polio vaccine is mandatory) and Germany (only measles vaccine is mandatory for school entry since 2020), *see* https://ourworldindata.org/childhood-vaccination-policies (accessed 30 June 2026).

[54] Some decisions were not included in the analysis due to an inaccessibility of full text, but the merits of those decisions did not essentially differ from the here-considered case-law, see: the Lithuanian Supreme Administrative Court ruling of 5 July 2016, Administrative Case No. I-6-662/2016, where the

a result, I selected six judgments of constitutional tribunals as adequate for the comparison (from Czechia, Slovenia, Italy, Moldova, Serbia and France; see the first page of Table 1).

While carrying out the systematic search, I came across judicial decisions from states where the vaccination of children is only recommended, and the decisions resulted from proceedings in civil/family courts between parents who disagreed on the issue. I found a number of judgments of national high/supreme courts (Ireland, Germany, UK/Northern Ireland and UK/England) and randomly selected additional decisions (one per state).

I also decided to include a peculiar decision of the Granada Tribunal from Spain, a state with optional childhood immunisation but where an autonomous government (Andalusia) requested a vaccination mandate accepted by the court. This administrative court decision was paired with a decision by a Polish administrative court. The choice of Poland where vaccines are mandatory was justified by the fact that there is a considerable administrative case-law on vaccination refusals in this country while I could not include its constitutional case-law in the sample.[55]

This allowed me to include the next six rulings from diverse states and courts including administrative, civil and common-law courts, from both unitary and federal jurisdictions, and those with devolved public health powers (e.g. the UK or Spain; see the second page of Table 1).

However, judicial decisions from states where the immunisation of children is not mandatory, and where health-related litigation is culturally unusual and relatively rare – for example, the Netherlands[56] and Nordic/Scandinavian states – were not included.[57]

Ministerial Order stating exclusion of non-vaccinated children from pre-schools was annulled, but on formal grounds – because it was not a parliamentary law, p. 21 (available at: https://www.lvat.lt/data/public/uploads/2018/01/lvat-annual-report-en.pdf); the Constitutional Court of Croatia decision of 30 January 2014 rejected the proposals to institute proceedings against state law which realises the constitutional right to health in form of positive obligation to vaccinate, Case No. U-I-5418/2008, Official Gazette No. 22/14; available at: https://tinyurl.com/2aj94z98; the Constitutional Court of the Slovak Republic judgment of 14.12.2014, in case PL. ÚS 10/13, where state compulsory vaccination was uphold, available at: https://tinyurl.com/mwfntrp3 (all accessed 30 June 2026).

[55] I did not include the Polish Constitutional Tribunal in the comparative constitutional research because of the doubts with its independence and legality of procedures which has existed since end-2015.

[56] E. Lampera et al., *Structural Reform Litigation, Regulation and the Right to Health in Colombia*, in: F. Bignami, D. Zaring (eds.), *Comparative Law and Regulation: Understanding the Global Regulatory Process*, Edward Elgar, Cheltenham: 2016, p. 342.

[57] *See* A. Bårdsen, *The Nordic Supreme Courts as Constitutional Courts; main features as seen from the Norwegian perspective*, Joint seminar between the Constitutional Court of Austria and the Supreme Court of Norway, Vienna, 29-30 October 2015, available at: https://tinyurl.com/5yayh25. A search of the Norwegian Supreme Court website revealed tort-related case-law only, *see* https://tinyurl.com/2zknpzmv (both accessed 30 June 2026).

Ratione temporis. The temporal scope of the sample was delimited by the 20-year period preceding the ECtHR judgment[58] which interpreted the European human right standards in routine immunisation (2021), and so comprised the period from 2001 to 2021. The time-frame was also connected with the fact that the falsified study which highly contributed to vaccine hesitancy in Europe was published in 1998, and so the beginning of the study period is three years later, when the study was already widely known.[59]

Ratione personae. The personal scope was designed to include cases which had been initiated through a variety of claims and by different actors invoking human rights-based claims (individual, NGO-based, MEP-based or federal/regional).

In summary, the decisions analysed in the paper relate to vaccination mandates and policies, financial and criminal sanctions, the exclusion of unvaccinated children from schools or day care centres and parental disagreements over routine immunisation of their children. It encompasses the case law from 12 European jurisdictions and one international court (ECtHR).

Next, the comparisons across cases was performed in the following way. The analytical categories employed to examine and appraise the reasoning of the judicial decisions were informed by the hypotheses and research questions (see Section 1). Accordingly, the reasonings were scrutinised against four principal criteria: (i) the justification employed for limitations on individual rights; (ii) references to scientific evidence and/or expert knowledge; (iii) the courts' approach to epidemiological evidence; and (iv) the intensity of judicial review (see Table 1, columns III–VI). The analysis also included the categorisation of types of legal claims and proceedings and modes of national policy towards vaccines and public health regulation in all the jurisdictions under study (Table 1, columns I–II).

To explain further, I used the qualitative criteria to analyse whether the courts support vaccination policies and what justification they use, including the type of review, references to policy documents and the evidence behind the contested vaccination measures. By doing so, I also explored how judicial reasoning can be located in the context of recommendations/ strategies addressing vaccine hesitancy and whether it somehow relates to its psychosocial determinants. The analysis of both the international institutional documents (WHO/ECDC) and judicial reasoning was thus qualitative, transdisciplinary and critical in light of the relevant scholarship as well as contextual, i.e. taking into account social and environmental factors. The next section proceeds to detail those findings.

[58] *See supra* note 21.

[59] Lancet retracted the text in 2010 only, *see* L. Eggertson, *Lancet retracts 12-year-old article linking autism to MMR vaccines*, 182(4) Canadian Medical Association Journal E199 (2010). *See also supra* note 16.

3. JUDICIAL REVIEW OF POLICIES FOR ROUTINE IMMUNISATION OF CHILDREN IN EUROPE: PROTECTING PUBLIC HEALTH AND HUMAN RIGHTS

A comparative analysis of judgments offers an interesting picture (see Table 1),[60] which prompted the observations presented in the subsequent three subsections.

3.1. Comparative Analysis of Judicial Reasoning: National Laws, Human Rights Claims and Public Health Justification

A result of all the judicial opinions under consideration was a decision in favour of the routine immunisation of minors enforcing national vaccination programmes and laws. In that sense, all courts deferred to policy-makers, medical knowledge and scientific expertise regarding the design and implementation of the policy for the routine immunisation of children (mandatory/optional). In principle, judicial bodies prioritised public health justification and interventions mandating vaccines, and enforced sanctions that were prescribed in a national legal system (e.g. France, Poland or Spain). In two states, the cases also concerned the governmental policies to exclude non-vaccinated children from schools (Czechia and Moldova), and in two other states they concerned severe sanctions applied for refusing vaccination (emergency, forced vaccination during a regional measles epidemic in the Spanish region of Andalusia and a criminal sanction for parents refusing vaccines in France).

Moreover, all the examined judicial decisions decided in favour of domestic immunisation policies, seeing them as necessary strategies to address a decrease in vaccine uptake and to reach a desired vaccination coverage among populations (immunity threshold). The justifications (column III) for the lawful limitation of human rights (e.g. the right to privacy or the right to bodily integrity) in those decisions recognised as relevant grounds the values that are inherent in national health systems: the health, welfare and life of minors (e.g. Czechia, Ireland and the UK) and preventing the spread of infectious/serious/fatal diseases which endanger populations (e.g. Slovenia, Italy, Serbia, France, Poland and the UK).

All the judicial rulings reviewed the rights-based claims and accepted compulsory vaccination as lawful and necessary (column III). Almost all the courts assessed and accepted the limitation of parental rights through the explicit application of the proportionality principle in view of the need to protect the life of children and the health of society from threats.

Additionally, the proportionality for mandating vaccination was also justified through the right to health framing: the protection of public/societal and children's health from the threat of infectious, vaccine-preventable diseases. In three cases,

[60] Any further references to the analysis of judicial reasoning concern Table 1.

the protection of vulnerable groups was also emphasised explicitly (e.g. Moldova, Spain and the ECtHR). However, the legal bases for invoking the right to health varied. That is, the courts referred to a number of national/international norms: either international human rights treaties or obligations of national governments to protect health stemming from domestic constitutional laws (columns II–III).

The decisions of family courts also mandated vaccination when resolving parental disputes under optional schemes of national public health law. Those courts also followed a proportionality review in light of protecting the best interests of children and their welfare. In two cases (Germany and Ireland) the courts simply accepted that there was no evidence of risk for a child according to expert knowledge (columns IV–V), while in two others (UK/England and UK/Northern Ireland), they intensely scrutinised the available vaccine types and their suitability for a given child (age, health conditions and social determinants of health).

Finally, the proportionality analysis in the judicial decisions linked the assessment of individual welfare/best interests of children and collective/societal interests with epidemiological evidence, medical/scientific knowledge and risk/benefit analyses of vaccines, as well as non-scientific factors in a given local context (columns III–V). Those issues are considered in the next section.

3.2. Adjudication on Expert Knowledge, Epidemiological Evidence and Authority of International Scientific Evidence

A further appraisal of the comparative judicial standards under consideration reveals that the deference of courts to immunisation policies/public health laws was accompanied by either reference to or scrutiny of existing medical and epidemiological evidence and expert knowledge supporting vaccination, both national and international, namely of the WHO (within a broader assessment of the proportionality of vaccination mandates and obligations).

The majority of judgments referred to WHO documents in their reasonings: in six cases they were direct references (Czechia, Italy, Slovenia, Poland, UK/England and the ECtHR), while in another two cases they were indirect (Moldova and Serbia) (column IV). The former included references to WHO documents explaining the benefits of vaccines and general immunisation goals, the recommended vaccination coverage or statistics of decreased coverage (e.g. WHO "Seven Key Reasons of Immunisation", WHO Europe objectives, WHO Immunisation Policy, WHO bulletins or the Global Vaccine Action Plan). The indirect references cited Recommendation 1317 (1997) of the Parliamentary Assembly of the Council of Europe on Vaccination in Europe, which refers to the WHO's role in international co-ordination of vaccination.

In addition, the judicial reasonings of the selected judgments contained thorough reviews of state-specific situations and the epidemiological evidence (columns IV–V). The vast majority of courts had a clear understanding of either a correlation between the desired level of vaccination in society that would ensure herd immunity for specific diseases (e.g. measles) and would lessen the incidence of diseases and morbidity or a cause–effect relationship between low vaccination coverage and the outbreak and spread of diseases (the courts usually referred to an exact percentage of coverage). For example, the Italian Constitutional Court discussed both the difference between optimal (90%) and critical (95%) thresholds to achieve herd immunity for measles, as well as trends in vaccination coverage in Italy. Similar understanding, awareness of epidemiological knowledge and discussion can be traced in the reasonings of courts in Czechia, Slovenia, Moldova, Serbia, Spain, Poland and the UK.[61]

Accordingly, all judicial decisions proved a general understanding of macro-level reasons for vaccination (achieving herd immunity) and well-defined benefits of immunisation versus the possible risk of side effects (columns IV–V). Clearly, as stated by all the judgments, the courts could not find any definitive evidence which would deny benefits of vaccination as a public health measure. The majority of courts recognised that in the case of routine child immunisation, the current state of medical knowledge evidently justifies vaccination. In the latter context, they referred to the development of medical research and the possibility of policy reviews (France, Italy and the ECtHR) and cited peer-reviewed studies (Slovenia, the UK and Czechia). Some courts highlighted the widespread/undisputed medical consensus and standards of evidence with regard to vaccines' preventive effect and efficacy (e.g. Germany, Moldova, the UK and the ECtHR) (columns IV–V).

The above comparative analysis indicated that judicial decisions on immunisation policies recognised the authority of scientific evidence, expert knowledge and medical consensus in their reasoning on the lawful limitations of human rights. Moreover, the courts who referred to the recommendations of WHO and national bodies/experts can be said to contribute to the legitimation of international scientific evidence in domestic legal orders. In other words, through references to those documents, they consider the WHO to be a legitimate source of scientific knowledge on vaccination mandates and immunity thresholds. At the same time, although the examined judicial reasonings clearly endorsed immunisation goals as recommended by the WHO, there were no explicit references to be found in judgments to more concrete, WHO-adopted documents of either disease-specific position papers or

[61] *See also* an extensive discussion by the German Constitutional Court in cases 1 BvR 469/20, 1 BvR 472/20, 1 BvR 471/20, and 1 BvR 470/20, *see infra* note 88.

specific recommendations from the Strategic Advisory Group of Experts on Immunization (SAGE) (columns IV–V).

Consequently, it should be said that the courts' reasonings in litigation of routine immunisation in European jurisdictions also offer an opportunity to contribute further to the legitimation of both national and international scientific/expert knowledge.

Two additional points should be raised here. Firstly, judicial bodies need to possess reflexive epidemiological knowledge in order to be able to critically interpret evidence provided by state authorities in specific circumstances and contexts. For example, courts should be capable of acknowledging uncertainty in case of any limitations in the evidence, including for at-risk groups which may be affected by routine immunisation (e.g. pregnant women, newborns or different age groups).

This can prove especially necessary in the adjudication of claims regarding either new or experimental medical products. When faced with litigation regarding different types of novel vaccines, courts may be required to read inconclusive scientific evidence with underlying requirements for more extensive research and revised evidence following new scientific discoveries and data; on such basis they may be compelled to demand sound, up-to-date evidence from national authorities. The reasoning of the Italian and Slovenian Constitutional Courts can illustrate this: those courts emphasised the necessity of confronting mandatory vaccination with new, dynamically developing, medical research and a review of the evidence concerning risks/benefits versus the side effects of vaccines. The ECtHR judgment also emphasised the dynamism in medical science. The UK courts, on the other hand, openly discussed false evidence and consequently rejected retracted scientific studies based on falsified research while admitting that there was no possibility of a scientific negative knowledge dynamic, i.e. zero-risk proof (column V).

The second point is that recognising the authority of scientific/expert knowledge and judicial participation in processes of their legitimation through rendering reasoned judgments on the immunisation of minors would benefit from stronger procedural requirements for scientific evidence in proceedings. That is, courts could carry out a restrictive review of the features of institutional processes and expert bodies who provide the evidence.[62] In this sense, courts could be more demanding against a procedure which offers one of the institutional standards for legitimate activity of international organisations.

[62] *Cf.* K. Sulyok, *Science, Legitimacy and the Judicial Function - A Need for More Intrusive Standards of Review, in: G. Kajtár*, B. Çali, M. Milanovic (eds.), *Secondary Rules of Primary Importance in International Law: Attribution, Causality, Evidence, and Standards of Review in the Practice of International Courts and Tribunals*, Oxford University Press, Oxford: 2022.

This would also require a better awareness of the institutional structure and processes of the WHO, where immunisation recommendations are made. The yardstick of the EU standards requiring transparency, independence and excellence of scientific evidence and expert bodies could perhaps be useful and inspiring[63] – particularly given the very long tradition of co-operation between national/regional/international experts within the WHO and WHO Europe in generating knowledge about the effectiveness and safety of vaccines, which may in some sense resemble the EU system of expert bodies.

For example, SAGE is a consultative body of the WHO which adopts policy recommendations on vaccines and immunisation.[64] SAGE members (up to 20) are experts from diverse fields, nationalities and regions (e.g. epidemiology, public health, vaccinology, paediatrics, internal medicine, infectious diseases, immunology, drug regulation and vaccine safety) who are selected and appointed by the WHO following an open call for experts.[65]

SAGE Working Groups develop their policy recommendations (strong and conditional) through a meta-analysis of existing research. The resulting document can be adopted as a WHO position paper to provide normative guidance to Member States for use by national public health officials and immunisation programme managers.[66] The SAGE reports endorsed by the WHO are disease-specific and indicate the levels of desired vaccination coverage to ensure herd immunity.[67] SAGE can also establish working groups on dedicated tasks which can appoint and collaborate with external experts. The declarations of independence and disclosure of conflicts of interests are published on the WHO's website.[68]

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[63] *See* P. Dabrowska-Klosinska, *Risk, Precaution and Scientific Complexity before the Court of Justice of the European Union*, in: Gruszczynski & Werner, *supra* note 35, especially pp. 202-208. *Cf. also* L. Knuth, E. Vos, *When EU Courts meet science: Judicial review of science-based measures post-Pfizer*, in M. Dawson et al. (eds.), *Revisiting Judicial Politics in the EU*, Edward Elgar, Cheltenham: 2024, pp. 191–228; C. Sobotta, *How the Court of Justice of the European Union deals with scientific knowledge and what this means for Member State court practice*, European Expertise & Expert Institute, 7 January 2020, available at: https://tinyurl.com/4mrjw527 (accessed 30 June 2026).

[64] WHO, *Strategic Advisory Group of Experts on Immunisation (SAGE)*, available at: https://www.who.int/groups/strategic-advisory-group-of-experts-on-immunization; *SAGE Terms of reference*, June 2022, available at: https://tinyurl.com/43p38tv2 (both accessed on 30 June 2026).

[65] *Ibidem*. WHO, *Development of WHO immunization policy and strategic guidance: methods and processes applied by the Strategic Advisory Group of Experts on Immunization (SAGE) to develop evidence-based recommendations*, 2024, available at: https://iris.who.int/server/api/core/bitstreams/8d534089-f6b2-4771-9568-66b4aaab62e4/content (accessed 30 June 2026).

[66] *See* WHO, *supra* note 44.

[67] *See also* Z. Jakab, *Better Health for Europe: more equitable and sustainable*, WHO, Geneve: 2019, available at: https://tinyurl.com/mshj73ze (accessed 30 June 2026).

[68] P. Duclos et al., *Establishing global policy recommendations: the role of the Strategic Advisory Group of Experts on immunization*, 10(2) Expert Review of Vaccines 163 (2011).

3.3. Role of Judicial Review in Case Law on Routine Immunisation for Minors and Beyond

The preceding sections showed that the courts deferred to state policies on vaccination and national/international scientific evidence in the analysed case law. Yet, at the same time, a thorough appraisal of the judicial reasonings demonstrated that the judicial bodies exercised a quite strict review towards the evidentiary basis of routine immunisation policies for minors, including a review of societal and non-scientific factors (columns V–VI). It was evident that the legal challenges to routine vaccination forced the courts to also indirectly respond to vaccine hesitancy. This leads to the consideration of the role of judicial review in times of misinformation and societal fears. This section considers such issues.

The analysis of judicial reasoning for the purpose of this text revealed that most of the courts recognised the existence of disinformation surrounding the immunisation of children and the reality of anti-vaccination views. Two courts dismissed fears and objections as irrelevant (Germany and Poland), two courts discussed parental objections resulting from morality, fears or private research (UK/England and UK/Northern Ireland), two courts recognised ethical issues in the disputes (Czechia and Moldova) and one of these last two sought an opinion from the Committee on Human Rights and Biomedicine (Czechia). Relatedly, two dissenting opinions (Czech Constitutional Court and the ECtHR) emphasised the need for broader debates about the safety of vaccination, including for pregnant women, the accessibility of suitable vaccines and paternalism in health care.

Next, four courts considered no-fault state liability for vaccine injuries in their assessment. In the reasoning of the Italian Constitutional Court, the existing compensation scheme was part of the justification for limiting rights. The Czech Constitutional Court emphasised the need for such scheme, as did the ECtHR; only the Slovenian court mandated the law be revised to establish a no-fault state liability scheme for injuries. It was decided in order to adequately protect the right to judicial review for individuals who wish to establish contraindications to vaccination (column VI) – at the time of the judgment, the court perceived legal procedures for individuals to be unclear.

Further, the equal participation of interested parties in proceedings was generally ensured, which can be seen as a means of presenting differing views in proceedings. In all but one constitutional case, non-governmental organisations submitted their views, and in all cases other branches of government participated in the proceedings, depending on the state system. Yet, there is no clear indication of the practice of courts towards requiring governments to fulfil positive obligations of the children's right to health and consider various means of achieving the recommended coverage (apart from mandates). While many of the judgments acknowledged fears

of vaccines and sociopolitical discussions, it is much less easy to identify a common trend in the reasonings about those issues or about the possibility/need to include the views of other relevant actors. This is likely due to national procedural and constitutional constraints regarding judicial review, but also other, non-legal limitations.

For example, no evidence was found in the analysed case law of any consultation with or participation of ombudsmen representing children's interests, although in many rulings the best interests of the child were at the centre of the proportionality analysis. Moreover, there were examples of courts acknowledging non-medical views, sometimes based on the participation of various actors (political representatives or civil society), but it was difficult to trace a consistent trend in their consideration/acceptance/dismissal, and various courts responded differently to manifestations of vaccine hesitancy (column VI; Czechia, Slovenia, Italy, Moldova, the UK and the ECtHR).[69]

Furthermore, the examination of the case law offered little guidance of potential procedural means and existing legal remedies for courts to oblige governments to organise comprehensive education/training systems for those refusing routine vaccination.[70] Arguably, judicial bodies protecting the right to health, including children's right to health, should be able to impose positive obligations on governments to ensure that they implement adequate strategies tailored to national and local contexts to intervene against hesitancy, e.g. training for health care workers or education and awareness-raising about vaccination and compensation schemes for injuries.[71] In the difficult era of populism and digital fake news, it is regrettably insufficient to protect children's right to health through references to scientific knowledge and medical evidence supporting vaccine safety, and to enforce immunisation policies through mandates and sanctions for non-vaccination. In other words, the reality of disinformation may demand a better addressing of societal factors that impact the effectiveness of immunisation polices and a better understanding of the social determinants of health from the judiciary (e.g. education or access to vaccines).

Simultaneously, the details of references to epidemiological, scientific and public health risk factors in the case law (columns IV–VI) suggest that judicial reasoning

[69] *Cf.* N. MacDonald, *SAGE Working Group on Vaccine Hesitancy. Vaccine hesitancy: Definition, scope and determinants*, 33 Vaccine 4163 (2015). See also e.g. *Summary of SAGE conclusions and recommendations on Vaccine Hesitancy, WHO 2015 (SAGE Report 2015)*, available at: https://tinyurl.com/j7x7rbjy (accessed 30 June 2026).

[70] *See* F. Godlee, *What should we do about vaccine hesitancy?*, 365 BMJ 4044 (2019); *cf.* WHO, *Report of the SAGE Working Group on Vaccine Hesitancy*, 1 October 2014, pp. 44–45.

[71] *Cf.* ECDC, *Catalogue of interventions addressing vaccine hesitancy*, 2017, 1; ECDC, *Let's talk about hesitancy*, Stockholm: 2016, pp. 3, 6, 9.

indeed played some role in transferring knowledge among litigants about vaccines by clarifying disinformation about immunisation for children.

Although it may sound very demanding for the judiciary and entailing an expansive scope of review considering the limits of traditional institutional and democratic standards, the pressures and stresses of the 21st century resulting from populism and the spread of fake news necessitate reflection about adjusting those roles. Judicial bodies might play an important role not only in assessing the conformity of vaccination policies with rights-based claims, but also in recommending normative strategies aimed at increasing vaccination rates along with legal interpretations, especially in times of disinformation about the safety of vaccines and the populist actions of some governments.[72]

Those considerations also prompt a need to better understand the actual capability of courts to respond to vaccination challenges by generating more trust in public authorities.[73] This is crucial because targeting disinformation on vaccine safety, side effects and effectiveness (individual hesitancy determinants) is a trust-building intervention against hesitancy.[74] Further research is needed for a better transdisciplinary translation between the concepts and terminology employed in psychology, law, human rights and public health to develop more comprehensive postulates and opinions.

CONCLUSIONS

The article shows that vaccination has become a highly litigated public policy issue. Across numerous European jurisdictions, judicial opinions have been issued with regard to refusals and disagreements over the immunisation of children. Consequently, vaccination as a part of public health policy becomes additionally legally visible through courts' litigation of rights-based claims and hesitancy about vaccination mandates. This visibility can have positive and negative effects: on the one hand, multi-dimensional judicial standards are created under conditions of pluralist

[72] *See e.g.* a recent example of the judicial intervention in the process of much criticised changes in national vaccination policy in the United States: M. Halpert, *Judge blocks RFK Jr's changes to US childhood vaccine schedule*, BBC News, 17 March 2026, available at: https://www.bbc.com/news/articles/cj4zrrx-lqq4o; K.L. Wallace, *Federal judge temporarily blocks RFK Jr.'s vaccine agenda – an epidemiologist answers questions parents may have*, The Conversation, 20 March 2026, available at: https://tinyurl.com/h3wvavyf (both accessed 30 June 2026).

[73] *See also* the dissenting opinion of the judge K. Wojtyczek to the ECtHR judgment, *supra* note 92, para. 16.

[74] *See* ECDC, *Let's talk about hesitancy*, op. cit., pp. 6, 9.

human rights interpretations;[75] on the other hand, the amount of proceedings at national level may prompt the mistaken impression among the public that routine vaccines for children are not safe and may undermine trust in public health systems. This is why it is crucial to analyse and explain those standards and judicial reasonings.

The comparative case law showed that courts always deferred to public health measures. While doing so, they constructed lawful limitations of individual rights (e.g. the right to privacy and bodily integrity, the right to education or parental rights) of the persons concerned (minor patients and parents) based on a proportionality assessment of state interference, its appropriateness and necessity and the protected interests. As a justification for the interference, they typically cited references to international expert scientific knowledge (the WHO and national immunisation programmes), epidemiological and medical evidence and often the safety and benefits of vaccines, which are crucial for ensuring children the right to health and their best interests and welfare. By doing so, the courts contribute to the protection of both public health and human rights values.[76]

Accordingly, the article argues that misinformation about the safety of vaccines and the resulting refusals of vaccination among society, which became legally visible through litigation, led to judicial bodies becoming important actors in multi-level health governance, ensuring that both public health objectives and the human rights of individuals are protected and fulfilled.

The text also claims that judicial reasoning which considers the proportionality of lawful limitations of human/constitutional rights clearly recognises, and thus reinforces, the authority of domestic/international scientific evidence at national level. Judicial bodies contribute to a process of legitimation of such evidence and knowledge through their reasonings in domestic legal orders, which may be said to even have the potential of increasing the legitimacy of scientific evidence produced by international organisations and expert bodies within societies.

This can happen on the condition that judicial bodies engage more in enforcing the institutional standards of legitimacy through procedural requirements: a more detailed inquiry into the character of expert bodies providing evidence (independence and excellence) and a continuous review of the evidence (medical and epidemiological). This would also mean a more restrictive review of governmental policies against transparency and burden of proof. The EU standards for the quality of

[75] *Cf.* C. McCrudden, *The Pluralism of Human Rights Adjudication*, in: L. Lazarus et al. (eds.), *Reasoning Rights Comparative Judicial Engagement*, Hart Publishing, Oxford: 2014, p. 3.

[76] *Cf. also* M. Frischhut, *The Ethical Spirit of EU Values*, Springer, Cham: 2022, p. 34.

scientific evidence which the courts and the executive branch rely on in food safety and medical product case law could provide a useful yardstick in that context.[77]

Finally, the text posits that courts are faced with a requirement for extensive knowledge about epidemiology and vaccine hesitancy and a clear understanding of the social determinants of health in order to assess national laws on vaccine mandates and to ensure that the outcomes of judgments are fair and justified.

ANNEX: TABLE 1[78]

Comparative case law regarding judicial review of public health, routine immunisation and human rights in Europe[79]

I – state court & claim	**II – national law and policy**	**III – justification for limiting rights**	**IV – scientific / expert knowledge**	**V – epidemiology**	**VI – judicial review**
1. Czech Constitutional Court[80] individual claim	compulsory, routine vaccination of minors	health and life of children as a prioritised value in the rights system (art. 12 ICESCR, art. 11 ESC art. 32, 35 CFR) + proportional limitation of parental rights'	interprets vaccination coverage: "the desired level of approx. 95%", WHO document "Seven Key Reasons" of Immunisation + PACoE	interprets herd immunity and statistic of decreased morbidity after vaccination in proportionality test	deference to experts and policy regarding mandates; acceptance of state-of-the-art knowledge in medicine and pharmacology

[77] *See supra* note 63 and the works cited therein.

[78] The original research data result from the project Themis (EU Horizon 2020 MSCA grant agreement No 746014) and from the separate research in 2024 and 2025.

[79] Legal references and abbreviations: Parliamentary Assembly Council of Europe 1997 Recommendation 1317 (PACoE); International Covenant of Economic, Social and Cultural Rights (ICESCR); European Social Charter (ESC); EU Charter of Fundamental Rights (CFR); United Nations Convention on the Rights of the Child (UNCRC).

[80] Judgment Pl. US 19/14, 27.01.2015, paras. 46, 57, 59, 79, 81, 86.

I – state court & claim	II – national law and policy	III – justification for limiting rights	IV – scientific / expert knowledge	V – epidemiology	VI – judicial review
2. Italian Constitutional Court[81] Veneto Region claim against central government	compulsory, routine vaccination of minors; constitutional right of children to health and their interests + Senate Commission interaction with WHO regional office to discuss mandatory vaccines	threats to public health from vaccine-preventable illnesses: individual and societal health; children's right to health and their interests+ proportional limitation of parental rights	National Vaccination plan, WHO statistics 2017 of vaccine coverage for Italy (93%); WHO concerns about regress in vaccination coverage in Italy, WHO Europe objectives and plans	analysis of trends in vaccine coverage & decrease vs measles outbreaks in time; discusses if 95% herd immunity threshold is "optimal" or "critical"	deference to policy, refers to vaccine safety current state of scientific knowledge, possible suspension of mandates in view of new science; dynamic medical research; state compensation scheme
3. Slovenian Constitutional Court[82] NGO claim	compulsory, routine vaccination of minors; restrictive review constitutional right to health	prevent spread of infectious diseases & epidemics; art. 24 UNCRC right to health, health of minors + proportional limitation of parental rights	WHO Immunisation policy, programmes, goals and strategies; national plans align with international obligations	refers to desired 90%–95% level of vaccination coverage to ensure herd immunity, highlights decrease in diseases thanks to vaccination + need for revision as lack of state compensation scheme	deference to medicine on types & mandates of vaccines, restrictive review of evidence, safety and benefits vs side effects; unclear procedures for individuals

[81] Judgment No. 5/2018, 22.11.2017, paras. 3.4–3.8, 4.1, 6.2–6.3, 8.2.

[82] Decision in Case No. U-I-127/01, 12.02.2004, paras. 14–16, 19–25, 26–27.

I – state court & claim	**II – national law and policy**	**III – justification for limiting rights**	**IV – scientific / expert knowledge**	**V – epidemiology**	**VI – judicial review**
4. Moldovan Constitutional Court[83] Member of Parliament claim	compulsory, routine vaccination of minors as a condition for school admission	protection of public health from infectious diseases; protection of vulnerable groups, low risk of vaccines; art. 12 ICESCR art. 11 ESC children's health + proportional limitation of parental rights	National Immunisation programme aims at 95% vaccination coverage; refers to PACoE Recommendation 1317 (indirectly WHO)	accepts university expert opinion: 95% as aim of vaccination coverage; recognises the link between lower vaccination rates and spread of disease	deference to experts and policy regarding mandates; vaccination benefits, recognises "widespread consensus in the medical scientific community" + sociopolitical debate on vaccination and ethical dilemma
5. Serbian Constitutional Court[84] a number of individual claims	compulsory, routine vaccination of minors; constitutional right to health	prevention of infectious diseases which endanger population; art. 24 UNCRC + proportional limitation of parental rights	refers to PACoE Recommendation 1317 (indirectly WHO) "reactivate comprehensive public vaccination programme"	refers to need for herd immunity (95%) and recognises the link between lowest vaccination coverage in ten years to risk of disease outbreaks	defers to policy choice to mandate vaccination and to medicine, Institute of Public Health experts

[83] Decision No. 26, Session No. 136a / 2018, 30.10.2018, paras. 27–30, 49–53, 60–65.
[84] Decision IУз-48/2016, 26.10.2017, paras. II–III.

I – state court & claim	II – national law and policy	III – justification for limiting rights	IV – scientific / expert knowledge	V – epidemiology	VI – judicial review
6. French Constitutional Council[85] court's referral of individual claim	compulsory routine vaccination of minors, criminal and financial sanctions; constitutional obligation to protect health of all; incl. children & mothers	combating extremely serious and contagious diseases; + proportional limitation of parental rights	constitutional obligation to protect health of all, incl. children & mothers		deference to experts and policy obliged to take account of developments in epidemiological, medical and scientific knowledge
7. Spanish Regional Administrative Court (Granada) [86] Andalusian Government request for a judicial order	compulsory, emergency vaccination for measles (35 minors); power of administration to control transmissible diseases constitutional right to health	urgent sanitary reasons & to prevent threats to vulnerable populations (infants & adults); right to health + proportional limitation of parental rights	national vaccination programme	accepts governmental evidence about preventive effect of measles vaccine provided adequate age and coverage is ensured + action must be subject to judicial review	refers to risk–benefit analysis: statistical data regarding side effects of measles vaccine vs measles complications or deaths + sets human rights conditions for vaccination
8. Polish Regional Administrative Court (Warsaw)[87] individual claim	compulsory, routine vaccination of minors, financial sanctions, constitutional obligation to protect health of all	need to fight epidemic diseases	national vaccination programme based on WHO recommendations	deference to policy based on epidemiological data on illnesses + safeguards: obligatory medical check before vaccination	deference to policy based on current scientific and medical knowledge, but dismisses parental fears as irrelevant

[85] Decision No. 2015-458 QPC, 20.03.2015, paras. 8–10.
[86] Decision No. 362/2010, 24.11.2010, paras. 1–4.
[87] Judgment VII SA/Wa 665/15, paras. 17–47.

I – state court & claim	**II – national law and policy**	**III – justification for limiting rights**	**IV – scientific / expert knowledge**	**V – epidemiology**	**VI – judicial review**
9. German Federal Court of Justice[88] individual claim	disagreement between parents over routine, optional vaccination of minors	assessment of best interests of a child	national vaccination recommendation of the Robert Koch Institute recognised as "medical standard"	refers to risk-benefit analysis, risk of infection of disease vs side effects	recognises "existing scientific knowledge", no specific risk for a child, refers to mother's fears as not requiring analysis
10. Irish Supreme Court[89] individual claim	disagreement between parents over routine, optional vaccination of minors	right to life, children's welfare principle; best interests of a child	Health & Safety Executive booklet national programme	no risk-to-child evidence	accepts expert views and GP recommendations
11. UK/ Northern Ireland High Court[90] individual claim	disagreement between parents over routine, optional vaccination of minors	risk of fatal diseases; children's health and welfare, best interests of a child and public good, art. 24 UNCRC + proportional limitation of parental rights	UK universal immunisation schedule ("green book") opinion of NI Chief medical officer, deference to policy	reviews expert opinion on reasons for vaccines (herd immunity) and avoiding disease, "undisputed expert & medical evidence"	recognises medical consensus on vaccine necessity & safety; reviews expert evidence on vaccines offered in the UK and their suitability for a child in question, incl. risks and benefits; rejects retracted study; recognises mother's fears of side effects

[88] Decision No. 82/207, XII ZB 157/16, 03.05.2017, paras. 1–3. See also the Order of the German Constitutional Court of 21 July 2022 in cases 1 BvR 469/20, 1 BvR 472/20, 1 BvR 471/20, and 1 BvR 470/20, Press Release No. 72/2022, *Unsuccessful constitutional complaints challenging statutory obligations to provide proof of measles vaccination in day care settings*, 18.08.2022.

[89] Appeal No. 274/2013, 19.12.2013, paras. 16–19, 30–36, 41–42.

[90] Judgment [2020] NIFam 12, KEE11292, 30.07.2020, paras. 10, 14–19, 24–26, 31, 33–46.

I – state court & claim	II – national law and policy	III – justification for limiting rights	IV – scientific / expert knowledge	V – epidemiology	VI – judicial review
12. UK/ England High Court[91] individual claim	disagreement between parents over routine, optional vaccination of minors	children's health and welfare, best interests of children + proportional limitation of parental rights (reasonable carer test)	refers to WHO findings on the safety of the diphtheria vaccine and to the 2008 WHO Bulletin on benefits of vaccines	review of viral infections & their incidence; evidence on vaccine efficacy to prevent diseases & side effects of vaccines; reviews expert opinion on reasons for vaccines (herd immunity); accepts scientific consensus	reviews knowledge & research as conclusive, admits failures, e.g. narcolepsy reviews, retracted studies, impossibility of proving scientific negative knowledge dynamic; recognises father's objections, preference for expert evidence
European Court of Human Rights[92] (5 joint individual claims from Czechia; no violation of human rights)	routine, compulsory vaccination of minors as a condition for school admission; right to privacy; right to education and freedom of religion (inadmissible)	protection against diseases posing serious risk to health & vulnerable groups, best interests of children + proportional limitation of parental rights	national law, WHO Global Vaccine Action Plan 2013 & Global Immunisation Vision and Strategy, public health policy; pressing social need for vaccination	consensus of ECHR parties and international bodies on vaccination advantages and highest coverage; no consensus on implementation model; risk of lower herd immunity	accepts national policy choice and medical evidence, flexibility & dynamism in medical science; vaccines for 9 diseases considered safe and effective by scientific community; compensation scheme

[91] Judgments: [2018] EWFC 56, 22.08.2018, paras. 8–40, 54–66, 89–92 and [2020] EWCA Civ 664: "the alleged link between MMR and autism has been definitely disapproved", para. 85.

[92] Judgment of 08.04.21, Vavřička and Others v. the Czech Republic, Applications nos. 47621/13 and 3867/14, 73094/14, 19298/15, 19306/15 and 43883/15.