

VACCINE HESITANCY: THE FIGHT AGAINST MISINFORMATION IN THE DIGITAL SOCIETY / Valeria De Santis

Valeria De Santis, PhD.
Researcher of Public Law
Law Department
University of Naples 'Parthenope'
Via Generale Parisi n. 13,
80133 Napoli, Italy.
valeria.desantis@uniparthenope.it
ORCID: 0000-0003-2463-2507

Abstract: *The contestations arising from the introduction in various European countries of mandatory vaccination against Covid-19 for certain categories of workers are expressions of a profound malaise, not new and common to Western societies. Misinformation about vaccines is not a new phenomenon, but has been heightened due to the rise of social media, clearly evident during the Covid-19 emergency. These conflicts have a significant social impact and can hinder the struggle against the spread of the virus. This work analyses the origins and legal implications of this growing social mistrust in science, which jeopardises the stability of the constitutional order, founded on the principles of trust and solidarity.*

Key words: *vaccine hesitancy; mandatory vaccinations; constitutional legitimacy; personal freedom and self-determination; misinformation; algorithm society; fake news; populism; mistrust; constitutional law.*

Suggested citation:

De Santis, V. (2022). Vaccine Hesitancy: The Fight against Misinformation in the Digital Society. *Bratislava Law Review*, 6(1), 31-50. <https://doi.org/10.46282/blr.2022.6.1.280>

Submitted : 04 March 2022
Accepted : 15 April 2022
Published : 30 June 2022

1. THE PHENOMENON: WORK OBJECT

The disputes arising from the introduction of mandatory vaccination against Covid-19 for certain categories of citizens or workers in some European countries are expressions of a profound malaise, not new and common to these societies, which has a significant impact on countering the spread of the pandemic.

The phenomenon of vaccine hesitancy emerged well before the current pandemic crisis and is so alarming that in 2019 the WHO included vaccine hesitancy on its list of ten threats to global health.¹ Back in 2018, the European Commission and the Council were already expressing strong concern about the reduction in vaccination rates against some serious diseases such as measles and diphtheria.²

¹ WHO. *Ten threats to global health in 2019*. February 1, 2019. Available at: <https://www.who.int/news-room/spotlight/ten-threats-to-global-health-in-2019> (accessed on 31.05.2022).

² Communication from the Commission, to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Tackling online disinformation: a European Approach, Brussels, COM(2018) 236 final, 26 April 2018.

Despite the fact that vaccines in the EU are subject to a rigorous system of checks (before and after the authorisation),³ the safety fears emerged among both common citizens and also among healthcare professionals.

While until the end of the XX sec. the percentage of European minors vaccinated against exanthematic diseases was above the threshold of 95% of the population (indicated by the WHO as necessary to achieve herd immunity), since the 2000s the social context has progressively changed. In various countries of the Union, in a part of the population, distrust has emerged against vaccination practices, which are beginning to be considered superfluous, if not harmful to health.⁴ Moreover, due to some pseudo-scientific studies, which were retracted after publication and clearly denied by the scientific community, the idea has spread that there could be a correlation between the administration of some vaccines and the onset of very serious diseases, such as autism and encephalopathy (Kata, 2010). This worrying situation has prompted several states to change their policies by intensifying vaccination obligations for children in order to create a community of vaccinated adults.⁵ In Italy, for example, the legislator intervened with law No. 119 of 2017, which - with a clear inversion of the pre-existing discipline - introduced the compulsory vaccination in paediatric age.

The phenomenon of vaccine hesitancy appeared even more clearly during the 2009-2010 AH1-N1 flu epidemic. In this circumstance, despite an emergency situation, albeit not of pandemic type, vaccine hesitancy constituted a concrete obstacle to the fight against the spread of the epidemic (Mesch and Schwirian, 2015). Today, at the global level, apart from the very low number of vaccinated individuals in developing countries, the main obstacle in the struggle against Covid-19 and the spread of variants is constituted by vaccine hesitancy (Cascini et al., 2021; Sallam, 2021). In fact, in Western societies there is a growing and unmotivated distrust of health institutions and scientists, who are seen as bearers of specialised and undemocratic knowledge.

This essay does not intend to present a sociological analysis of vaccine hesitancy; however, a constitutional analysis cannot even ignore this "fact" which can prove to be one of the obstacles to overcoming the pandemic. In the text, the main references will be made to European legislation and case law, while attention will be focused on Italy for some concrete examples of judicial practice and state policies on vaccination prevention and the fight against Covid-19.

Hereafter, this work will address: first, the main reasons for the vaccine hesitancy, then the causes that contribute to its spread and, finally, the response of the judges to this dangerous phenomenon. The purpose of this analysis is to delimit the phenomenon of vaccine hesitancy and identify what tools can be employed to deal with it in a legal system based on the constitutional principles of solidarity, tolerance and pluralism.

³ According to Directive 2001/83/EC of the European Parliament and of the Council of 6 November 2001 on the Community code relating to medicinal products for human use, OJ L 311, 28 November 2001; and of Regulation (EC) No 726/2004 of the European Parliament and of the Council of 31 March 2004 laying down Community procedures for the authorisation and supervision of medicinal products for human and veterinary use and establishing a European Medicines Agency, OJ L 136, 30 April 2004.

⁴ European Centre for Disease Prevention and Control (ECDC). *ECDC launches the report "Countering online vaccine misinformation in the EU/EEA"*. June 29, 2021. Available at: <https://www.ecdc.europa.eu/en/news-events/ecdc-launches-report-countering-online-vaccine-misinformation-eueea> (accessed on 31.05.2022).

⁵ For example, in 2015, the coverage for measles and rubella reached 85.3%.

2. ANTI-VAX PROTESTS AND INDIVIDUALISM: THE DISSOLUTION OF THE PRINCIPLE OF SOLIDARITY IN THE SOCIETY OF INDIVIDUALS

Vaccine hesitancy is an old and elusive phenomenon, which has its roots in different and complex reasons. It is worth remembering that the first protest movement against mandatory vaccination was born in 1866 with the creation of the Anti-vaccination League in the United Kingdom, following the introduction, with the Vaccination Act of 1853, of the first compulsory vaccination against smallpox for all children in the first three months of life, sanctioning the breach with the payment of a fine and even with arrest.⁶

The introduction of mandatory vaccination in the United Kingdom is by far the first ever form of limitation of civil liberties imposed by a state due to the need to protect public health. However, the protests against the vaccine obligation were so pressing that they led to the amendment of the Vaccination Act in 1898 with the mitigation of penalties in case of non-compliance and with the introduction of the conscientious objection clause (Panagopoulou, 2021; Salmon, 2006).

Leaving aside the historical evolution, it is interesting to highlight that the reasons put forward in the anti-immunisation propaganda from the end of the 19th century to the present day are in essence very similar. In fact, motivations have a spiritual, ethical, philosophical and religious nature; they often are also expressions of conspiracy theories and pseudoscientific beliefs, linked to alternative and natural medicine. Moreover, apart from the aforementioned reasons, there is often a deep-seated opposition to the obligation itself because obligation imposition is essentially considered an infringement of personal freedom and self-determination. Thus, in the analysis conducted in June 2021 by the European Centre for Disease Prevention and Control (ECDC), among the various reasons given against the vaccination obligation, a *constant* over time comes clearly to light, namely, the resistance with respect to the limitation of freedom imposed by the state.⁷

No-vax movements are mainly driven by a general aversion towards the imposition of limitations and obligations by the state, an opposition dictated by the self-referential claim of their own rights. In the present days, the phenomenon of vaccine hesitancy is thus rooted in an absolutist view of self-determination and in dangerous claims to a personalised health treatment.

In the post-industrial age, with the disappearance of large social aggregates and groups, individualism has taken over reflection on the subject of rights. In addition, the juridical studies have been influenced by this need to define and broaden the subjective profile of rights and particularly the right to health. In the "society of singularities" the aggregation around beliefs, needs and identities has become pre-eminent over any other factor of political compromise (Reckwitz, 2020; Martuccelli, 2002). Moreover, as will be seen below, the pervading use of social media amplifies this phenomenon of *singularisation* of contemporary societies.

The pandemic emergency requires balancing the protection of individual health and the interest of community health for the survival of the community itself. Thus, the global health emergency touches more than one sensitive nerve of Western societies, which are withdrawn into themselves, victims of individualism and distrust towards institutions. This is the reason why the limitations imposed in the fight against Covid-19

⁶ Previously, the Vaccination Act of 1840 promoted free smallpox vaccination for all.

⁷ European Centre for Disease Prevention and Control (ECDC). *Countering online vaccine misinformation in the EU/EEA*. Stockholm: ECDC, 2021. Available at: <https://www.ecdc.europa.eu/en/publications-data/countering-online-vaccine-misinformation-eu-eea> (accessed on 31.05.2022).

for the protection of individual and collective health must be interpreted starting from the constitutional concept of *individual* and *community*. In a pluralist democratic system, individual identity is never separated from the relational dimension i.e., from a context in which the individual's personality can only be unfolded in the intertwining of rights and duties (Pinelli, 2021; Massa Pinto, 2020).

It is "recognizing oneself in the face of the other" the duty of solidarity that projects the individual into the dimension of the social community. On the constitutional horizon, subjectivity is not a singularity, it is not, to paraphrase Lévinas, a "being for itself", but it is instead a "being" in a relational dimension (1985, p. 89).

As the Italian Constitutional Court states, the solidarity pact is a "bond of active belonging", which links the individual to the community and regulates the "mutual" relationship existing between rights and duties.⁸ The free development of a human being is only meaningful in a relational and solidarity dimension. However, the hyper-individualism that is amplified by the increasingly fragmented and polarised digital public debate undermines this dimension of solidarity.

3. VACCINE HESITANCY IN THE ALGORITHM SOCIETY

Although the phenomenon of vaccine hesitancy has always been conditioned by poor information, today's digital information through the use of social media networks greatly exacerbates the spread of fake news and misinformation.

During the Covid-19 pandemic emergency, the Italian Regulatory Communications Authority (AGCOM) noted a very high increase in the impact of online disinformation sources, phishing sites and, in general, malicious domains related to Covid-19.⁹ As never before, digital communication tools allow false news and bad information to spread and travel extremely fast and widely, encountering a multitude of unprepared recipients. In this way, both false information and online misinformation affect the levels of acceptance of vaccination treatment, increasing the phenomenon of vaccine hesitancy. Indeed, many studies have verified the correlation between exposure to online misinformation and the increase in vaccine hesitancy rates (Van der Linden, Roozenbeek and Compton 2020; Saling et al. 2021).

Misinformation and the dissemination of false information appear all the more serious in the face of a new phenomenon, which is the subject of numerous studies and findings that are still evolving. Thus, the publication of scientific evidence is not enough because there is a wealth of information, some of it contradictory, among which it can be difficult for many web users to find their way around and distinguish between false and reliable information.

Misinformation is not certainly a new phenomenon, but social media have a disruptive capacity for its amplification. In this sense, the Covid-19 pandemic has done nothing but confirm how much bad information can quickly and easily spread. The greatest difficulty in tackling misinformation by public institutions and health authorities depends largely on how the platforms work, on how information circulates on the web.

Actually, the information's dissemination through platforms is horizontal and decentralised, that is, it does not originate from a specific and responsible professional (journalist, editor), but is carried out by each user who, regardless of skills, can convey

⁸ Italy, Constitutional Court, dec. No. 75 del 1992 (17 February 1992).

⁹ Italy is the first country in Europe and the second in the world, after the USA, for the number of malicious domains linked to Covid-19, for more details see Italian Regulatory Communications Authority (2020). *Report on online disinformation. Special Issue on Coronavirus*, No. 3. Available at: <https://www.agcom.it/osservatorio-sulla-disinformazione-online> (accessed on 31.05.2022).

and create information (Pitruzzella, 2018; Frosini, 2016). While traditional channels of thought expression are structurally limited and, therefore, prerogative of a few, the web is an unlimited resource that allows anyone to produce information. It is simple by creating a website, a blog, or by using social media, to comment, post and chat to express one's own thoughts and produce information, thus creating or contributing to the spread of fake news online.

The lack of intermediation makes it difficult to identify responsibilities because the social media user unintentionally disseminates misinformation or false information. Usually, misinformation occurs without fraud and, indeed, in the belief of spreading useful information for all.

The production of this enormous mass of information and data is organised by a few platform operators (such as Google, Facebook, YouTube, Yahoo! ...), operating in an oligopoly framework. In this manner, information on the web which was born structurally open and decentralised, is filtered by a few companies whose algorithms profit from connecting producers and users of information. In information capitalism, the Over the Top (OTT) platforms profit precisely by extracting information, namely, from the selection of a huge amount of data spontaneously produced by the users of a hyper-connected world (Byrnes and Collins, 2017, p. 95; Cohen, 2019).

Users, by expressing their thoughts, contribute to creating information - or fake news - that providers and platforms, spread virally, by means of their extraction process, because the algorithms are exactly devised to connect users who have the same interests, ideas and inclinations.

More specifically, without consent to the use of these algorithms, the access to the OTT platforms is denied. In order to employ a particular online service, the user assigns to the platforms the right to collect, store and process his personal data (Simoncini, 2019, p. 80).

In fact, by the means of the expression of preferences and the exchange of content, the transfer of one's private "space" is monetised through profiling for advertising or to offer other paid services.

To increase the permanence online and favour the content circulation, the algorithms used by Twitter, Facebook or YouTube create "filter bubbles" or "echo chambers", that is, spaces in which those who show a certain idea or preference are put in contact with groups or people who have the same inclinations (Pariser, 2011; Susser, Roessler and Nissenbaum, 2019). In this way, misinformation and false information not only circulate very quickly but also are amplified, creating polarisation and fragmentation of the public debate on the net.

The user is a consumer, a citizen and a voter; he receives services that are only apparently free. In fact, the user himself is "for sale"; the product for providers is the user's time (Harris, 2021; Morozov, 2013). The aim of the algorithm is to ensure that the users stay on social networks as long as possible, and that they share and make viral certain contents in order to give greater visibility to advertisements linked to the content posted. If user profiling can be considered a useful tool, for example when it concerns obtaining suggestions relating to purchases, it obviously appears very risky when it ends up closing the user within a cultural information bubble. This perilous closure to the confrontation risks making the user remain trapped within those groups with which he shares orientations, passions, fears and, finally, disinformation.

4. FREEDOM OF EXPRESSION ONLINE AND FAKE NEWS: FACT CHECKING, CODE OF PRACTICE ON DISINFORMATION, DIGITAL SERVICE ACT

Considering what has been briefly outlined so far, it is clear that fighting against vaccine hesitancy requires an effort by the states to monitor disinformation on social media, invest in information and carry out massive information campaigns.¹⁰

After all, the recent experience gained during the AH1-N1 flu emergency in 2009-2010 has indeed shown how the vaccine hesitancy rate varies, since it depends a great deal on how much the states and the local government invest in communication and in the implementation of a reliable information campaign. The more institutions work to build trust and combat disinformation and fear, the more the vaccine hesitancy rate decreases.

As part of monitoring actions and in the absence of a general regulation framework, an interesting tool consists of checking the truthfulness of the news by means of reports from users to teams of information professionals. These are public platforms used by the providers themselves to verify the facts; they are tools open to users, which allow them to enter statements to verify their truthfulness. There are already several fact-checking organisations (i.e., in Italy, LaVoce.info, Pagella Politics, Factanews, Open). Moreover, at a supranational level, in 2019, "FactCheckEu", a project that brings together nineteen fact-checking organisations from thirteen different EU countries for collecting fact-checking articles of European interest was launched.

Although fact-checking is undoubtedly useful for uncovering and correcting distorted information, it is a tool that comes at a time when misinformation or false information has already reached a plurality of recipients. Unmasking fake news takes time and fact-checking does not necessarily reach those who have been victims of misinformation or false information. Therefore, fact-checking is subsequent to the spread of bad information, which could have already conditioned certain behaviours or influenced the choices of citizens. Actually, fact-checking may not be so useful for improving the condition of those who tend to remain closed within their own cultural bubble. There is also a problem of neutrality and, above all, of pluralism because the control is entrusted to professional associations of communication experts that are chosen and financed by providers and platform managers (Franchi, 2021; Monti, 2017). Therefore, the provider and platform managers have an evident interest in not being accused of spreading bad information.

The need to clamp down on online misinformation is a major concern and has been addressed in the EU with the Code of Practice on Disinformation adopted on November 26, 2018. Leaving aside the aspects relating to its uncertain nature, the Code is essentially a self-regulatory tool to which the main major network operators have adhered.

The Code identifies some common principles and objectives that can reduce the harmfulness of misinformation. According to the Joint Communication Com 236 of 2018, the object of regulation is to contrast false or misleading information created or disseminated for profit or to intentionally deceive the public and likely to cause public harm, i.e. threats to democratic political and policy-making processes, to public goods

¹⁰ European Centre for Disease Prevention and Control (ECDC). *Countering online vaccine misinformation in the EU/EEA*. Stockholm: ECDC, 2021, p. 25. Available at: <https://www.ecdc.europa.eu/en/publications-data/countering-online-vaccine-misinformation-eu-eea> (accessed on 31.05.2022).

such as the protection of EU citizens' health, the environment or security.¹¹ Potentially harmful, but nonetheless legal content, protected by freedom of expression, should be handled differently than illegal content (such as hate speech, terroristic or child pornography), which can definitively be removed (Ó Fathaigh, Helberger and Appelman, 2021; Mchangama and Alkiviadou, 2021; Pollicino, 2020).

Albeit in a rather generic manner, the Code identifies some major objectives, namely, control, transparency, knowledge of the origin of the sponsored contents and accountability of users. Basically, the Code adopts a compromise solution, but following its adoption, Facebook introduced a fact-checking system and Google changed its algorithm to optimise the detection of fake news (Pagano, 2019; Monti, 2017).

The Code does have the merit of trying to delimit the concept of online misinformation in order to avoid the double danger of censoring and limiting the freedom of expression. Disinformation consists of the set of false and misleading content created and disseminated for economic or political reasons that may harm the democratic process or certain assets, including health. The harmful content can indeed be removed under certain conditions; it must be ascertained that the information is false and that those who deceive the public derive an economic profit disregarding any possible consequence on the democratic decision-making process, environment, safety and, finally, health.

In the absence of editorial responsibility and control by a public body (such as an independent authority), the Code aims to make responsible platforms, imposing a series of obligations on transparency and control of information.

Currently, the Covid-19 pandemic has revealed the need to strengthen the Code of Practice on Disinformation in order to promote a functioning digital public sphere based on the primacy of fundamental rights, freedom of expression and a more democratic public debate.¹² To this end, the EU Commission adopted the communication on 26 May 2021 to strengthen accountability and transparency in the fight against disinformation.¹³

The strengthening of the Code of Practice on Disinformation is part of an overall reform of the digital services market. The proposal of the European Parliament and of the Council for a regulation on a Single Market for Digital Services (Digital Service Act DSA) seeks to ensure the best conditions for the provisions of innovative digital services in the internal market. The DSA intends to protect the rights guaranteed by the Charter of fundamental rights of the EU,¹⁴ introducing a set of procedures to combat illegal content online, such as hate speech, incitement to violence, defamation and illegal activities, such as the sale of counterfeit products.

Apart from illegal content, however, the DSA faces the problem of content that is not illegal but that are still harmful, such as incorrect information. Without defining content as legal but harmful, the Commission points out in Recital no. 63 that the

¹¹ Communication from the Commission to the European Parliament, the Council, The European economic and social Committee and the Committee of Regions, Tackling online disinformation: a European Approach, COM (2018) 236 final, 26 April, 2018.

¹² Council of the European Union. *Conclusions on strengthening resilience and countering hybrid threats, including disinformation in the context of the COVID-19 pandemic*. Doc. No. 14064/20, 15 December 2020, § 4. Available at: <https://data.consilium.europa.eu/doc/document/ST-14064-2020-INIT/en/pdf> (accessed on 31.05.2022).

¹³ European Commission Guidance on Strengthening the Code of Practice on Disinformation, COM(2021) 262 final, 26 May 2021.

¹⁴ Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC, COM(2020) 825 final, 15 December 2020.

advertising systems used by large platforms can produce disinformation with a real and foreseeable negative impact on public health, public security, public debate, political participation and equality. In the context of the single market for digital services, the Commission, in Recital No. 68, shows the way to enhance self-regulatory and co-regulatory codes to address systemic risks to society and democracy, such as disinformation or manipulation and abuse. These are operations aimed at amplifying information, including disinformation, such as the use of bots or fake accounts to create false or misleading information, sometimes for profit, which are particularly harmful to vulnerable recipients of the service, such as minors.

In the same sense, the European Data Protection Board has also pointed out that strengthening the Code of Practice on Disinformation should increase transparency, avoiding both the risk of microtargeting of users, and the creation of algorithms that use their data to contribute to disinformation, polarisation and, finally, the ideological user manipulation.¹⁵ Platforms adhering to the enhanced Code must therefore ensure transparency by identifying criteria for prioritising or down-positioning certain contents. Ultimately, OTTs must prioritise authoritative sources on topics of public and social interest. In this sense, for example, Facebook already foresees that when the user is about to join a no-vax group, a notice appears that invites to connect to the WHO page in order to be aware of the reasons related to the need to get immunised (Ceccherini and Rodriguez, 2020, pp. 77-78). In addition, platforms must also agree to tag content identified as false or deceptive as a result of fact-checking.

The EU Commission emphasises the need for platforms to intensify monitoring by enhancing the role of fact-checkers. In particular, independence and adequate remuneration of fact-checking companies and organisations can be implemented through multilateral agreements with major platforms. The consensual method introduced by the Code of Practice on Disinformation can therefore contribute to generate policies and actions to counteract disinformation and create algorithms and business systems that mitigate the scarce pluralism of information and the tendency to polarise the online public debate.

In the long term, of course, the use of artificial intelligence could improve fact-checking, introducing forms of control automation. In this sense, ECDC also points out that through automated keyword search techniques and algorithms, but also with more complex systems using artificial intelligence and machine learning, a public authority could monitor and identify those elements of online discussion that may affect the willingness to vaccinate.¹⁶

In terms of monitoring activity, the action carried out in Italy by AGCOM is also of great interest. With the *Online Disinformation Observatory*, AGCOM has dedicated a special in-depth study to the analysis of information and disinformation in the media during the health emergency, identifying the main risks and false information as well as threats to cyber security and Covid-19. However, these tools used in this particular emergency should become structural in order to achieve constant monitoring.

The regulation, even in the form of soft law, or self-regulation, as indicated by the DSA, is necessary but it must be implemented in the algorithm design phase. The protection of constitutional rights and assets requires an anticipation of the design phase

¹⁵ European Data Protection Supervisor. *Opinion 3/2018 on online manipulation and personal data*. 19 March 2018. Available at: https://edps.europa.eu/sites/edp/files/publication/18-03-19_online_manipulation_en.pdf (accessed on 31.05.2022).

¹⁶ European Centre for Disease Prevention and Control (ECDC). *Countering online vaccine misinformation in the EU/EEA*. Stockholm: ECDC, 2021, p. 5 and 25. Available at: <https://www.ecdc.europa.eu/en/publications-data/countering-online-vaccine-misinformation-eu-eea> (accessed on 31.05.2022).

of the algorithms, because any *ex post* corrective intervention comes when it is too late, when an infringement to the right has already been perpetrated (Simoncini, 2019, p. 89).

5. THE JURISPRUDENCE ON COMPULSORY VACCINATION IN THE FIGHT AGAINST COVID-19

The phenomenon of vaccine hesitancy described above has produced a series of disputes that have ended up before various national and supranational courts. Although there are not many judgments on mandatory vaccination against Covid-19, national and supranational courts have given an unequivocal answer by stating that given the effectiveness and safety of prophylactic treatment, there is no room for any form of vaccine hesitancy.

From the supranational point of view, according to Article 8(1) ECHR, mandatory vaccination constitutes an interference by public authorities with physical integrity, which has an impact on the protection of private and family life. However, in a “democratic society” the restriction of self-determination freedom may be necessary when the national legislator pursues the goal of protecting health and preventing harm to others.¹⁷

Therefore, the decision to introduce compulsory vaccination if aimed at reducing the risk of contagion and the social and economic impact derived from the spread of the disease cannot be considered an infringement of fundamental rights.

Also, the International Covenant on Social, Economic and Cultural Rights, adopted by the UN General Assembly in 1966, recognizes that the prevention, treatment and control of epidemic diseases constitute an *obligation* that states parties undertake to protect the right to health (art. 12 c)). For its part, the WHO in The Global Vaccine Action Plan of 2013 stated that immunization is, and should be recognized as a “core component” of the human right to health and an “individual, community and governmental responsibility”.¹⁸

Regarding the vaccination obligation against Covid-19, the ECtHR has not ruled until now. However, the European judge, as a precautionary measure, with three decisions (taken between August and September 2021) rejected the request for interim measures against compulsory vaccination in France and Greece imposed by the national legislation (Vinceti, 2021).¹⁹ The ECtHR ruled that the imposition of the obligation does not produce irreversible damages and rejects the request for the application of interim measures, because it considered that there is no *fumus* of violation of the Convention provisions, namely, of articles 2 and 8 of ECHR protecting the right to life, and the right to private and family life, respectively.

On the same line, the US Supreme Court has upheld the constitutional legitimacy of compulsory vaccination for certain categories of workers, recognising that vaccination policies do not violate any fundamental rights.²⁰ The Brazilian Supreme Federal Tribunal also confirmed the legitimacy of compulsory vaccination, sanctioned by specific

¹⁷ ECtHR, *Vavřička and others v. The Czech Republic*, app. No. 47621/13, 8 April 2021, § 265 et seq.; ECtHR, *Solomakhin v. Ukraine*, app. No. 24429/03, 15 March 2012; ECtHR, *Hristozov and others v. Bulgaria*, app. No. 47039/11 and 358/12, 13 November 2012.

¹⁸ WHO. *Global Vaccine Action Plan of 2013*. Available at: <https://www.who.int/teams/immunization-vaccines-and-biologicals/strategies/global-vaccine-action-plan> (accessed on 31.05.2022).

¹⁹ ECtHR, *Abgrall and 671 others v. France*, app. No. 41950/21, 24 August 2021; ECtHR, *Kakaletri and others v. Greece*, app. No. 43375/21, 9 September 2021; ECtHR, *Theofanopoulou and others v. Greece*, app. No. 43910/21, 9 September 2021.

²⁰ USA, Supreme Court of the United States, *Dr. A, et al. v. Kathy Hochul, Governor of New York*, 595 U.S. (13 December 2021).

restrictions such as the exercise of certain activities or the ban on access to specific places (Canepa, 2021).²¹

Moreover, in France the Constitutional Council confirmed the legitimacy of the mandatory Covid-19 vaccination required by the legislator for certain categories and health personnel, military, caregivers and firefighters. The Constitutional Council stated that mandatory vaccination is legitimate because scientific findings show that treatment is effective in protecting the community and safe for individual health.²² The introduction of the obligation is also justified in order to pursue the objective of constitutional value of protecting collective health. The French Constitutional Council notes that neither the right to work nor the freedom of enterprise is infringed by the legislator who introduces an adequate deadline for complying with the mandatory vaccination introduced to safeguard the community.

Similarly, in Italy, the judges of the first instance and the Council of State have confirmed the legitimacy of compulsory Covid-19 vaccine for health and social workers. Indeed, the vaccine has been proven to be safe and effective and the obligation is legitimate because it is imposed to respond to the twofold public interest of mitigating the impact on the national health service and curbing the spread of Covid-19, being the health and social personnel naturally exposed to a greater extent than other citizens.²³

6. REFUSAL OF VACCINATION IN THE SOCIETY OF MISTRUST: THE JUDICIARY RESPONSE

According to what has been noted so far in the fight against Covid-19, both at national and supranational levels, the jurisprudence is convergent. When the legislator compresses the freedom of self-determination in order to pursue the objective of protecting health as an interest of the community, mandatory health treatment cannot be denied on the basis of religion, conscience issues or, in general, simply opposed in principle.

In this sense, most recently, on the matter of vaccination in paediatric age, the ECtHR in *Vavříčka and others v. The Czech Republic* case reiterates that the vaccination imposed by state regulation constitutes interference by the public authorities on physical integrity and has an impact on private and family life. Recalling its own jurisprudence, the ECtHR underlines that physical integrity concerning the most intimate aspects of an individual's life falls within the notion of "private life", protected by Article 8 of the ECHR. Therefore, mandatory medical intervention, even if of minor importance constitutes an interference with respect to private life, which includes the physical and mental integrity of the person.²⁴ However, in a democratic society, according to Article 8(1) ECHR, restriction of the freedom of self-determination may nevertheless be necessary to protect the community health and the rights of others. Religious and conscientious reasons do not permit in any way the refusal of compulsory health treatment (Krasser, 2021; Nilsson, 2021; Camilleri, 2019): the ECtHR observes that no European country admits conscientious objection to compulsory vaccination.²⁵

²¹ Brazil, Supreme Federal Tribunal, ADI 6.586 and 6.587 (17 December 2020).

²² France, Constitutional Council, Decision No. 2021-824 DC (5 August 2021).

²³ Italy, Council of State, III, sent. No. 7045 (20 October 2021).

²⁴ ECtHR, *Solomakhin v. Ukraine*, app. No. 24429/03, 15 March 2012, § 33; ECtHR, *Salvetti v. Italy*, app. No. 42197/98, 9 July 2002; ECtHR, *Matter v. Slovakia*, app. No. 31534/96, 5 July 1999.

²⁵ ECtHR, *Vavříčka and others v. The Czech Republic*, app. No. 47621/13, 8 April 2021, § 276, § 330 et seq.; ECtHR, *Hristozov and others v. Bulgaria*, app. No. 47039/11 and 358/12, 13 November 2012; European Commission of Human Rights, *Boffa and others v. San Marino*, app. No. 26536/95, 15 January 1998.

With reference to its own jurisprudence on art. 9 ECHR, the ECtHR points out that not all opinions fall under the protection of thought and conscience freedom. The freedom of conscience protected by the ECHR does not at all imply the right to behave in the public sphere always according to one's own personal convictions and beliefs (Puppinck, 2017).²⁶

Actually, in all the cases faced by ECtHR, religious or ethical motivations do not constitute the main reasons for the objections of movements opposed to compulsory vaccination. Even in the contestation of compulsory vaccination against Covid-19, the reference to conscientious objection assumes a merely instrumental function to question the validity of the vaccination, which is rather based on pseudo-scientific considerations.

As happens more and more frequently in the *mistrust society*, the reasons put forward against compulsory vaccination are based on convictions of meta-legal character. In this regard, in a case submitted to the Italian Constitutional Court in 1988 (ord. n. 134), the applicants challenged the law imposing compulsory vaccination, "clearly intended to protect the health", on the basis of "a generic and subjective belief of its inappropriateness" (Liberali, 2021; Tomasi, 2021). In the same sense, the ECtHR in the aforementioned Vavříčka case points out that, in the various stages of the proceeding, the applicant contested the vaccination obligation for various reasons, at first, inherent in the protection of health and then, on philosophical and religious grounds.²⁷ The vagueness of the reasons invoked to challenge the legitimacy of mandatory vaccination confirms (as noted in §. 2) that, ultimately, those who oppose compulsory vaccination contest the contraction of personal freedom, of self-determination and of freedom of choice.

In modern Western "societies of suspicion" there is a sort of anti-scientific prejudice based on various ideological, cultural and religious motivations. What emerges in the jurisprudence is confirmed by a sociological analysis, which has measured the correlation between mistrust in institutions and the increase in the vaccination hesitation rate. In particular, during the health emergency due to AH1-N1 flu of 2009-2010, it was found that the more the distrust toward local and national institutions, the higher the vaccine hesitancy rate (Mesch and Schwirian, 2015).

Similarly, today, the analysis of the no-vaxer profile during the fight against Covid-19 shows that the rate of distrust in vaccination treatment is clearly higher among those groups most affected by the pandemic emergency. The greater the economic insecurity and the sense of distrust toward institutions, the lower the adherence to vaccination campaign (D'ambrosio and Menta, 2021). Those who have suffered severe economic consequences since the beginning of the pandemic are particularly vulnerable, they have felt abandoned by the state and, therefore, tend to be wary of vaccination.

From this point of view, in Western societies, the phenomena of political and scientific populism share similar dynamics, namely, a radical distrust of elites, experts, and technicians, who are considered expressions of a pervasive and exclusionary power (Kennedy, 2019; Ali and Pastore Celentano, 2017; Lasco, 2020). For this reason, if scientific populism and vaccine populism are converging phenomena, it is impossible to fight vaccine hesitancy without addressing the social, political and economic marginalisation that affects increasingly larger strata of the population in Western democracies.

The social evidence that clearly emerges from the national and supranational jurisprudence is a very clear indication that the distrust of vaccines, in the end, has little

²⁶ ECtHR, *Pretty v. the United Kingdom*, app. No. 2346/02, 29 April 2002, § 82-83.

²⁷ ECtHR, *Vavříčka and others v. Czech Republic*, app. no. 47621/13, 8 April 2021, § 334.

to do with the vaccines themselves. Rather, the challenge posed by vaccine hesitancy is a symptom or a consequence of wider and deeper problems in our society that is increasingly catalysed by a digital public debate, which is polarised, individualistic, and distrustful.

7. VACCINE OBLIGATION AND DEMOCRACY

Facing the phenomenon of vaccine hesitancy, one wonders what might be the response of institutions. In particular, the question is whether and to what extent the introduction of compulsory vaccination could constitute an adequate response.

According to the converging views of the domestic and supranational courts, as shown (in par. 5. and 6. above), the vaccination imposed by the state is a severe limitation of the right to self-determination. Therefore, both the national constitutional courts and the ECtHR consider compulsory vaccination to be an *extrema ratio*, derogating from the principle of individual self-determination.²⁸

The obligation to vaccinate affects the principles of inviolability and integrity, but is nonetheless legitimate if it is proportionate to the objective of the ensuring protection of the community health. Within these limits, compulsory vaccination does not violate the constitutional principle of safeguarding the integrity and dignity of the human person, nor the freedom of conscience.

In the same terms, the global network of jurists, the Lex-Atlas Covid-19 (LAC19), created to give legal responses to Covid-19, reaffirming that compulsory vaccination is not contrary to human rights, has indicated, in the Lac-19 Principles, that to be legitimate compulsory vaccination must be clearly prescribed by law, rather than by rules established by the executive and should preferably be preceded by public consultation. In accordance with ECtHR and national jurisprudence, LAC-19 underlines that compulsory treatment must also meet the principles of proportionality, must have a legitimate purpose, must be safe and effective and, finally, the fine for non-compliance with the mandate must be effective but not excessively onerous. (King, Motta Ferraz et al., 2021).

In the jurisprudence at every level, as well as in the recommendations of the LAC-19, the mandatory health treatment is therefore an extreme solution because it is objectively detrimental to personal integrity. Actually, in vaccination matters, democratic states must avoid the imposition of the obligation and ensure a high degree of adhesion, adopting instead measures aimed at combating disinformation, fake information and vaccine hesitancy. From this point of view, the awareness-raising campaigns carried out by the competent public authorities, with the aim of reaching and involving the widest possible segment of the population, have specific political and legal significance.

Namely, for the Italian Constitutional Court the institutional promotion of vaccination creates in individuals a natural trust in the advice of health authorities, leading them to a behaviour aimed at protecting the health of the whole community (Veronesi, 2021).²⁹ For this reason, for the recognition of the right to compensation for any damage

²⁸ Italy, Constitutional Court, sent. No. 5/2018 (24 January 2018); France, Constitutional Council, dec. QPC No. 458-2015 (20 March 2015); France, State Council, Association liberté information santé, No. 222741 (26 November 2001); France, Court of Cassation, No. 10-27.888 30 (11 July 2012); Constitutional Court of the Czech Republic, case No. Pl. ÚS 19/14 (27 January 2015); Hungary, Constitutional Court, dec. No. 39/2007 (20 June 2007); ECtHR, *Vavříčka and others v. The Czech Republic*, app. No. 47621/13, 8 April 2021; ECtHR, *Solomakhin v. Ukraine*, app. No. 24429/03, 15 March 2012. In Spain and Germany, there are no compulsory vaccinations, but programmes encouraging the vaccination of minors and monitoring of the epidemiological situation that may always justify the introduction of mandatory vaccination.

²⁹ Italy, Constitutional Court, sent. No. 107/2012 (16 April 2012) and sent. No. 5/2018 (24 January 2018).

resulting from vaccination, it is completely irrelevant whether vaccination has only been recommended or is mandatory by law. In fact, in the presence of widespread and repeated communication campaigns in favour of vaccination, the choice of individuals to vaccinate, regardless of any specific reasons, is in itself objectively aimed to safeguard also the collective interest.

The vaccination information and recommendation campaign assume a specific legal and political importance as a promotional tool, which is consistent with the need to avoid, as far as possible, the imposition of compulsory vaccination. Moreover, the incidence of vaccine hesitation in contrast to the spread of the virus and variants, highlights the legal and political importance of information.

The central role of communication for the success of the vaccination campaign already emerged very clearly from the Italian Strategic Plan for anti-SARS-CoV-2/COVID-19 vaccination of 12 December 2020 in which it was envisaged to develop and disseminate adequate information for the different age groups, to constantly updating traditional media and web 2.0 in order to prevent non-punctual information/communication and, above all, to develop contents and operational strategies both online and offline to detect and respond to disinformation in real time. Despite these indications, apart from some initiatives carried out in the initial stage, when the campaign had just begun, it does not seem that institutional information, conducted at the national level, was particularly pervasive.

Information and recommendations, combined with flexible procedures to adapt to changing health needs, are an alternative to coercion and, according to the ECtHR, represent a more respectful solution both of the principle of self-determination and of the right to physical and moral integrity.³⁰ In the fight against Covid-19, also the Assembly of the Council of Europe in its resolution of 11 January 2021, No. 2361 exhorts to develop strategies to build trust in the vaccine through transparent communication. Democratic systems, founded on the primacy of person, that is, on the centrality of human dignity, should prefer non-compulsory solutions.

In light of constitutional indications, the mandatory vaccination constitutes an exceptional solution, justified by the objective of protecting the community. This is a derogatory limitation, adopted according to the needs arising from the epidemiological condition, anchored to the concrete situation and susceptible to different assessments on the basis of the epidemiological context and to the medical-scientific findings, always on a provisional basis.

Compulsory vaccination is an extreme solution because, as the Assembly of the Council of Europe recalls in the aforementioned resolution No. 2361 of 2021, it is a typical feature of non-democratic and oppressive systems. In democratic systems, the use of coercion is obviously banned; therefore, the failure to comply with the mandatory vaccination may lead to the prohibition on engaging in certain activities or may preclude access to certain places and services. In any event, the sanction for non-vaccination shall take the form of an administrative fine.

The imposition of the obligation does not always allow for the goal pursued by the legislator to be achieved. In fact, the provision of the penalty does not necessarily constitute a deterrent and its imposition is useless for the purpose of protecting individual and collective health. The sanction is not functional in achieving the ultimate objective, namely, to ensure widespread vaccination coverage. Even the Assembly of the Council of Europe in the Resolution No. 2361 of 2021 affirms that making mandatory vaccinations

³⁰ ECtHR, *Vavříčka and others v. The Czech Republic*, app. No. 47621/13, 8 April 2021, § 239.

against Covid-19 is not recommended for the simple reason that the mandatory imposition may indeed prove to be counterproductive.

8. CONCLUSION

The present analysis offers some elements for reflection on vaccine hesitancy, a phenomenon that ends up involving the relationship between individuals, digital society and political institutions.

In a democratic society founded on the principles of freedom and solidarity, prophylactic coverage is a responsibility of states, which must undertake to make vaccination accessible, both in times of emergency and non-emergency. At the same time, vaccination is the responsibility of individuals who undergo this treatment for their own good and that of the community as a whole.

Vaccination treatment has a dual function: it is a sacrifice for the individual but is at the same time an advantage for the entire community. In this sense, the unjustified refusal of vaccination by a significant part of the population shows how in Western societies the ability of political systems to create a relationship of trust, based on compromise, which is necessary to achieve the common good, is in crisis.

In an increasingly polarised digital society, the aggregation around anti-scientific beliefs and individual needs makes compromise difficult. This social fragmentation complicates the political action needed both in emergency situations to counter the spread of the contagion, and also to plan an appropriate policy of prophylactic prevention.

This work therefore shows that behind the phenomenon of vaccine hesitancy hides the urgent need of placing at the centre of political action (national and European) the relationship between the individual and the community, which today mainly takes place through the regulation of the digital public sphere. In this sense, the data that emerged during the Covid-19 pandemic confirm indeed how pervasive and powerful online information is and how it can influence health, safety, consensus building and, ultimately, democracy.

The network, OTT platforms and artificial intelligence have become a part of the social structure; they are themselves a social infrastructure on which both individuals and authorities necessarily depend (Pollicino and De Gregorio, 2021, p. 13). For this reason, like with any social phenomenon that conveys and redefines the very notion of the public sphere, the network requires some democratisation interventions. The pandemic emergency has made clear the need to strengthen the tools to fight disinformation in order to promote a functioning digital public sphere based on the primacy of fundamental rights, freedom of information and democratic public debate. The only way to counter vaccine populism and rebuild a relationship of trust between individuals and institutions is investing in digital education and in the construction of a secure, egalitarian and democratic digital infrastructure.

On the contrary, although necessary in some emergency circumstances, imposition of mandatory vaccination represents a failure for a democratic state. Imposition of mandatory vaccination is a political and social failure, because it is a tangible indication of the inability of institutions to inspire confidence and counteract vaccination hesitancy.

Even from a political-constitutional point of view, the imposition of compulsory vaccination is in itself a failure for the system of a pluralist democracy, which is centred on the principles of tolerance and on the integration of the economic and social conflict into the dynamics of governance. The introduction of a general obligation to vaccinate is certainly constitutionally legitimate, but it may pose a risk to social cohesion. Like any

crisis, the Covid-19 pandemic has shaken society to its foundations, thus threatening to erode the sense of community, which the Constitution founds on the solidarity principles and shared duties.

BIBLIOGRAPHY:

- Ali K. A. and Pastore Celentano L. (2017). Addressing vaccine hesitancy in the 'Post-Truth' era. *Eurohealth*, 23(4), 16-20. Available at: <https://apps.who.int/iris/handle/10665/332615> (accessed on 31.05.2022).
- Byrnes S. and Collins C. (2017). The Equity Crisis: The True Costs of Extractive Capitalism. In: Lerch D. (ed.), *The Community Resilience Reader: Essential Resources for an Era of Upheaval*. Washington, DC: Island Press, ISBN: 9781610919302.
- Camilleri F. (2019). Compulsory vaccinations for children: Balancing the competing human rights at stake. *Netherlands Quarterly of Human Rights*, 37 (3), 245-267, <https://doi.org/10.1177/0924051919861797>
- Canepa A. (2021). Prove tecniche di sopravvivenza dell'ordinamento costituzionale. Il Supremo Tribunale Federale brasiliano e le multiformi problematiche della pandemia. *Corti Supreme e Salute*, 3, 559-585. <http://www.cortisupremeesalute.it/wp-content/uploads/2022/02/Canepa-1.pdf> (accessed on 31.05.2022).
- Cascini F., Pantovic A., Al-Ajlouni Y., Failla G. and Ricciardi W. (2021). Attitudes, acceptance and hesitancy among the general population worldwide to receive the COVID-19 vaccines and their contributing factors: A systematic review. *EClinicalMedicine*, 40, 1-14, <https://doi.org/10.1016/j.eclinm.2021.101113>
- Ceccherini E. and Rodriguez S. (2020). Fake news e vaccini: le verità nascoste. *Federalismi.it*, 11, 150-187. Available at: https://www.federalismi.it/nv14/articolo_documento.cfm?Artid=42118 (accessed on 31.05.2022).
- Cohen J. E. (2019). *Between Truth and Power. The Legal Constructions of Informational Capitalism*, Oxford: Oxford University Press, DOI:10.1093/oso/9780190246693.001.0001
- Communication from the Commission, to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Tackling online disinformation: a European Approach, Brussels, COM(2018) 236 final, 26 April 2018.
- Council of the European Union. *Conclusions on strengthening resilience and countering hybrid threats, including disinformation in the context of the COVID-19 pandemic*. Doc. No. 14064/20, 15 December 2020. Available at: <https://data.consilium.europa.eu/doc/document/ST-14064-2020-INIT/en/pdf> (accessed on 31.05.2022).
- D'ambrosio C. and Menta G. (2021). *L'identikit dei no-vax*, 29 September 2021. Available at: <https://www.lavoce.info/archives/89893/identikit-dei-no-vax/> (accessed on 31.05.2022).
- Directive 2001/83/EC of the European Parliament and of the Council of 6 November 2001 on the Community code relating to medicinal products for human use, OJ L 311, 28 November 2001.
- European Centre for Disease Prevention and Control (ECDC). *ECDC launches the report 'Countering online vaccine misinformation in the EU/EEA'*. June 29, 2021. Countering online vaccine misinformation the EU/EEA, Stockholm, ECDC, June 2021. Available at: <https://www.ecdc.europa.eu/en/news-events/ecdc-launches->

- report-countering-online-vaccine-misinformation-eueea (accessed on 31.05.2022).
- European Centre for Disease Prevention and Control (ECDC). *Countering online vaccine misinformation in the EU/EEA*. Stockholm: ECDC, 2021. Available at: <https://www.ecdc.europa.eu/en/publications-data/countering-online-vaccine-misinformation-eu-eea> (accessed on 31.05.2022).
- European Commission Guidance on Strengthening the Code of Practice on Disinformation, COM (2021) 262 final, 26 May 2021.
- European Data Protection Supervisor. *Opinion 3/2018 on online manipulation and personal data*. 19 March 2018. Available at: https://edps.europa.eu/sites/edp/files/publication/18-03-19_online_manipulation_en.pdf (accessed on 31.05.2022).
- Franchi J. (2021). Fact-checking, chi controlla i controllori? Anomalia, dubbi e conflitti d'interesse, in *Agendadigitale.eu*. Available at: <https://www.agendadigitale.eu/cultura-digitale/fact-checking-chi-controlla-i-controllori-anomalia-dubbi-e-conflitti-dinteresse> (accessed on 31.05.2022).
- Frosini T.E. (2016). Costituzionalismo 2.0. *Rassegna parlamentare*, 4, 673-694.
- Harris T. (2021). United States Senate Committee on the Judiciary, Subcommittee on Privacy, Technology, and the Law, *Algorithms and Amplification: How Social Media Platforms' Design Choices Shape Our Discourse and Our Minds*, April 27, 2021. Available at: <https://www.judiciary.senate.gov/meetings/algorithms-and-amplification-how-social-media-platforms-design-choices-shape-our-discourse-and-our-minds> (accessed on 31.05.2022).
- Italian Regulatory Communications Authority (2020). *Report on online disinformation. Special Issue on Coronavirus*, No. 3. Available at: <https://www.agcom.it/osservatorio-sulla-disinformazione-online> (accessed on 31.05.2022).
- Kata A. (2010). A postmodern Pandora's box: anti-vaccination misinformation on the Internet. *Vaccine*, 28(7), 1709-1716, DOI: 10.1016/j.vaccine.2009.12.022
- Kennedy J. (2019). Populist politics and vaccine hesitancy in Western Europe: an analysis of national-level data. *The European Journal of Public Health*, 29 (3), 512-516, <https://doi.org/10.1093/eurpub/ckz004>
- Krasser A. (2021). Compulsory Vaccination in a Fundamental Rights Perspective: Lessons from the ECtHR. *International Constitutional Law Journal*, 15 (2), 207-233, <https://doi.org/10.1515/icl-2021-0010>
- King, J., Motta Ferraz, O. L. et al. (2021). *Legal, Constitutional, and Ethical Principles for Mandatory Vaccination Requirements for Covid-19*. 1 November 2021. Available at: <https://lexatlas-c19.org/vaccination-principles/> (accessed on 31.05.2022).
- Lasco G. (2020). Medical populism and the COVID-19 pandemic. *Global Public Health*, 15(10), 1417-1429. <https://doi.org/10.1080/17441692.2020.1807581>
- Lévinas E. (1985). *La traccia dell'altro*. Napoli: Pironti.
- Liberati B. (2021). Vaccinazioni contro il Covid-19: obbligo e nuove forme di obiezione di coscienza? *Diritticomparati.it*, 15 April 2021. Available at: <https://www.diritticomparati.it/vaccinazioni-contro-il-covid-19-obbligo-e-nuove-forme-di-obiezione-di-coscienza/> (accessed on 31.05.2022).
- Martuccelli D. (2002). *Grammaires de l'individu*. Paris: Gallimard, <https://doi.org/10.4000/sdt.29989>
- Massa Pinto I. (2020). Il diritto costituzionale di fronte all'emergenza CoVID-19: la costituzione in senso funzionale e la (in)consapevolezza delle tendenze autodistruttive del sistema. *Lo Stato*, 14, 315-329. Available at:

- https://www.muccheditore.it/index.php?option=com_virtuemart&view=productdetails&virtuemart_product_id=3084 (accessed on 31.05.2022).
- Mchangama J. and Alkiviadou N. (2021). Hate Speech and the European Court of Human Rights: Whatever Happened to the Right to Offend, Shock or Disturb?. *Human Rights Law Review*, 21(4), 1008-1042, <https://doi.org/10.1093/hrlr/ngab015>
- Mesch G. S. and Schwirian K. P. (2015). Social and political determinants of vaccine hesitancy: Lessons learned from the H1N1 pandemic of 2009-2010. *American Journal of Infection Control*, 43(11), 1161-1165, DOI:10.1016/j.ajic.2015.06.031
- Monti M. (2017). Fake news e social network: la verità ai tempi di Facebook. *MediaLaws*, 1, 79-90.
Available at: <https://www.medialaws.eu/wp-content/uploads/2019/05/8-Monti.pdf> (accessed on 31.05.2022).
- Monti M. (2017). Regolazione, Internet e tecnica: le implicazioni di motori di ricerca e social networks sulla libertà di informazione. *Federalismi.it*, 24. Available at: <https://www.federalismi.it/nv14/articolo-documento.cfm?Artid=35322&content=Le+impl> (accessed on 31.05.2022).
- Morozov E. (2013). *To Save Everything, Click Here: The Folly of Technological Solutionism*. New York: PublicAffairs, ISBN: 9781610391382.
- Nilsson A. (2021). Is Compulsory Childhood Vaccination Compatible with the Right to Respect for Private Life? A Comment on Vavříčka and Others v. the Czech Republic. *European Journal of Health Law*, 28(3), 323-340, DOI: <https://doi.org/10.1163/15718093-bja10048>
- Ó Fathaigh R., Helberger N. and Appelman N. (2021). The perils of legally defining disinformation. *Internet Policy Review*, 10(4), DOI: <https://doi.org/10.14763/2021.4.1584>
- Pagano G. (2019). Il Code of Practice on Disinformation. Note sulla natura giuridica di un atto misto di autoregolazione. *Federalismi.it*, 11. Available at: <https://www.federalismi.it/nv14/articolo-documento.cfm?Artid=38723> (accessed on 31.05.2022).
- Panagopoulou F. (2021). Mandatory Vaccination during the Period of a Pandemic: Legal and Ethical Considerations in Europe. *BioTech*, 10(29), 1-14, <https://doi.org/10.3390/biotech10040029>
- Pariser E. (2011). *The Filter Bubble: What the Internet Is Hiding from You*. New York: Penguin Group, ISBN:978-1-59420-300-8.
- Pinelli C. (2021). "Diritto ad essere se stessi" e "pieno sviluppo della persona umana". *Rivista Aic*, 4, 309-328.
Available at: https://www.rivistaaic.it/images/rivista/pdf/4_2021_13_Pinelli.pdf (accessed on 31.05.2022).
- Pitruzzella G. (2018). La libertà di informazione nell'era di Internet. *Media Laws*, 1, 19-47.
Available at: <https://www.medialaws.eu/wp-content/uploads/2019/05/1-Pitruzzella.pdf> (accessed on 31.05.2022).
- Pollicino O. (2020). Freedom of Expression and the European Approach to Disinformation and Hate Speech: The Implication of the Technological Factor, *Liber Amicorum per Pasquale Costanzo*, 209-229, Available at: <https://www.giurcost.org/contents/giurcost//COLLANA/1.pdf> (accessed on 31.05.2022).
- Pollicino O. and De Gregorio G. (2021). Constitutional Law in the Algorithmic Society. In: Micklitz H.W., Pollicino O., Reichman A., Simoncini A. and Di Gregorio G. (Eds.), *Constitutional Challenges in the Algorithmic Society*. Cambridge: Cambridge University Press, DOI: <https://doi.org/10.1017/9781108914857>

- Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC, COM(2020) 825 final, 15 December 2020.
- Puppinc G. (2017). Conscientious Objection and Human Rights: A Systematic Analysis. *Law and Religion*, 1(1), 1-75, DOI: <https://doi.org/10.1163/24682993-12340001>
- Reckwitz A. (2020). The Society of Singularities. In: Bachmann-Medick D., Kugele J., Nünning A. (Eds.), *Futures of the Study of Culture: Interdisciplinary Perspectives, Global Challenges*. Berlin: De Gruyter, <https://doi.org/10.1515/9783110669398>
- Regulation (EC) No 726/2004 of the European Parliament and of the Council of 31 March 2004 laying down Community procedures for the authorisation and supervision of medicinal products for human and veterinary use and establishing a European Medicines Agency, OJ L 136, 30 April 2004.
- Saling L.L., Mallal D., Scholer F., Skelton R., and Spina D. (2021). No one is immune to misinformation: An investigation of misinformation sharing by subscribers to a fact-checking newsletter, *PLoS ONE*, 16 (8), 1-13, <https://doi.org/10.1371/journal.pone.0255702>
- Sallam M. (2021). COVID-19 Vaccine Hesitancy Worldwide: A Concise Systematic Review of Vaccine Acceptance Rates. *Vaccines*, 9(2), 1-14, <https://doi.org/10.3390/vaccines9020160>
- Salmon D.A. et al. (2006). Compulsory vaccination and conscientious or philosophical exemptions: past, present, and future. *The Lancet*, 367 (9508), 436-442, [https://doi.org/10.1016/S0140-6736\(06\)68144-0](https://doi.org/10.1016/S0140-6736(06)68144-0)
- Simoncini A. (2019). L'algoritmo incostituzionale: intelligenza artificiale e il futuro delle libertà. *BioLaw Journal*, 1, 63-89, DOI: <https://doi.org/10.15168/2284-4503-20191>
- Susser D., Roessler B. and Nissenbaum H. (2019). Technology, autonomy, and manipulation. *Internet Policy Review*, 8(2), DOI: 10.14763/2019.2.1410
- Tomasi M. (2021). La proporzionalità degli obblighi vaccinali nella lettura della Corte Edu. *Quaderni costituzionali*, 2, 445-448.
- Van der Linden S., Roozenbeek J. and Compton J. (2020). Inoculating Against Fake News About COVID-19. *Front. Psychol.*, 11, <https://doi.org/10.3389/fpsyg.2020.566790>
- Veronesi P. (2021). L'eccezione alla regola: il caso dei trattamenti sanitari obbligatori. *Osservatorioaic.it*, 6, 226-252. Available at: https://www.osservatorioaic.it/images/rivista/pdf/2021_6_06_Veronesi.pdf (accessed on 31.05.2022).
- Vinceti S. R. (2021). Covid-19 Compulsory Vaccination and the European Court of Human Rights. *Acta Biomed*, 92(S6), DOI: 10.23750/abm.v92iS6.12333
- WHO. *Global Vaccine Action Plan of 2013*. Available at: <https://www.who.int/teams/immunization-vaccines-and-biologicals/strategies/global-vaccine-action-plan> (accessed on 31.05.2022).
- WHO. *Ten threats to global health in 2019*. February 1, 2019. Available at: <https://www.who.int/news-room/spotlight/ten-threats-to-global-health-in-2019> (accessed on 31.05.2022).
- Brazil, Supreme Federal Tribunal, ADI 6.586 and 6.587 (17 December 2020)
- Czechia, Constitutional Court of The Czech Republic, case No. Pl. ÚS 19/14 (27 January 2015)
- ECTHR, *Matter v. Slovakia*, app. No. 31534/96, 5 July 1999
- ECTHR, *Pretty v. the United Kingdom*, app. No. 2346/02, 29 April 2002
- ECTHR, *Salvetti v. Italy*, app. No. 42197/98, 9 July 2002
- ECTHR, *Solomakhin v. Ukraine*, app. No. 24429/03, 15 march 2012

- ECtHR, Hristozov and others v. Bulgaria, app. No. 47039/11 and 358/12, 13 November 2012
- ECtHR, Vavříčka and others v. Czech Republic, app. No. 47621/13, 8 April 2021
- ECtHR, Abgrall and 671 others v. France, app. No. 41950/21, 24 August 2021
- ECtHR, Kakaletri and others v. Greece, app. No. 43375/21, 9 September 2021
- ECtHR, Theofanopoulou and others v. Greece, app. No. 43910/21, 9 September 2021
- European Commission of Human Rights, Boffa and others v. San Marino, app. No. 26536/95, 15 January 1998
- France, Constitutional Council, dec. QPC No. 458-2015 (20 March 2015)
- France, Constitutional Council, Decision No. 2021-824 DC (5 August 2021)
- France, Court of Cassation, No. 10-27.888 30 (11 July 2012)
- France, State Council, Association liberté information santé, No. 222741 (26 November 2001)
- Hungary, Constitutional Court, dec. No. 39/2007 (20 June 2007)
- Italy, Constitutional Court, dec. No. 75 del 1992 (17 February 1992)
- Italy, Constitutional Court, sent. No. 107/2012 (16 April 2012)
- Italy, Constitutional Court, sent. No. 5/2018 (24 January 2018)
- Italy, Council of State, III, sent. No. 7045 (20 October 2021)
- USA, Supreme Court of the United States, Dr. A, et al. v. Kathy Hochul, Governor of New York, 595 U.S. (13 December 2021)

