

CASE STUDY: MICHIGAN'S RESPONSE TO THE COVID-19 PANDEMIC COMPARED WITH ROMANIA'S RESPONSE

Ștefania Szeibert-Kerekeș, Ph. D.
Babeș-Bolyai University Cluj-Napoca
E-mail: stefaniakerekes@gmail.com

Abstract

This article conducts a comparative analysis of health policies during the SARS-CoV-2 pandemic in Michigan, USA, and Romania, EU, focusing on the critical period of 2020-2021. It evaluates the effectiveness of various strategies, highlighting the implementation of non-pharmaceutical measures, vaccination campaigns, digital health transformations, and contact tracing initiatives. The study contrasts Michigan's relatively flexible approach to lockdowns with Romania's stricter measures, particularly in addressing minority group needs. The research reveals similarities in core health policies between the US and EU, but also notes region-specific differences.

Keywords: pandemic health policies; non-pharmaceutical interventions; digital health transformation
J.E.L. Classification: I18; I15; O33; H75

Introduction

The development of health policies is a very difficult task, especially when we have an ongoing pandemic and there are many factors that must be considered to develop these policies. The present article analyzes the actions of the State of Michigan in the United States (US) during the SARS-CoV-2 pandemic in comparison with the policies applied in Romania, member of the European Union (EU). By observing the strategies applied, we can deduce the degree of effectiveness of policies in both areas.

The study period chosen is the year between 2020-2021 because this is the time frame when most policies were introduced globally. This research paper brings to the light the detailed analysis of health policies, highlighting effective strategies in pandemic management and comparing health policies between the EU and the US, focusing on Romania and the State of Michigan.

Among the most important policies applied in both regions we can mention the application of non-pharmaceutical measures (e.g., temporary closure of small and medium-sized enterprises, mask-wearing regulations, hygiene, social distancing, etc.), vaccination strategy, digital transformation of the health sector, implementation of COVID-19 applications and contact tracing.

Regarding the differences between the health policies, we can say that the State of Michigan approached a much less strict lockdown compared to Romania. The State of Michigan decided to put a higher trust in the population and prioritized local policies aimed to correct racial and religious inequalities (Gretchen Whitmer, 2020b).

Compared to Michigan, Romania has made little effort to protect Roma communities, for example. Minority groups, such as the Roma, are at a much higher risk of death from COVID-19 because most of them live in extreme poverty, with a lack of education and healthcare (Korunovska & Jovanovic, 2020).

Most of the health policies formulated both in the US and the EU have been very similar to each other, with only a few specific differences depending on the country or state. Comparing the multitude of policies undertaken in the health crisis, the focus was on two locations, namely Michigan and Romania.

The population of Michigan is very diverse and very different from the population of Romania in many ways. By comparing the applied policies and considering the socioeconomic contrast, we were able to draw conclusions on what needs to be changed to manage the health crisis. In addition, by observing the results of the policies, decisions have been made about the most specific policies which have contributed to a significant change.

As shown in many other studies, implementing lockdown policies is a great way to save time and reduce the burden on the healthcare system. If these policies are effective, they can go a long way towards stopping the spread of the disease and stopping community transmission of the disease.

Concerning vaccination policies, Michigan had a much more aggressive strategy than Romania and highly constrained the mobility of unvaccinated populations. Michigan has also been able to control food prices and send financial aid to individuals/businesses in critical situations. In Michigan, we can conclude that there has been an emphasis on three main policies: lockdown (which also included travel restrictions, closing institutions and small and medium-sized businesses), mask-wearing mandates and vaccination.

A rethinking of the vaccination rate, in Romania, by changing old strategies and developing new methods, such as offering vaccination at home, offering financial incentives, or sending trained community members to spread their experience with the vaccine would be useful. The future of the country depends on timely reforms. To increase the quality of the health system, Romania needs specialists among political leaders with long-term vision and competency-based clinical education of health workers through active learning and evidence-based learning.

After a fairly long period of the pandemic, it was concluded that the best approach in the early stages of the pandemic is to control the infection rate by applying non-pharmaceutical measures, without stopping the functioning of the economy and without applying drastic measures that affect people's mental health. Subsequently, policymakers can progressively attach more severe policies depending on the infection rate.

The development of the new vaccine and its rapid administration was another tool in the "fight" against the virus. Thus, by immunizing the population, a stage can be reached where the virus will not cause mass illness and become a common/known disease requiring annual vaccination as in the case of the influenza virus.

Materials and methods

In the present work, a case study type qualitative analysis method was chosen for understanding health policies. It was considered that this method is the best choice for studying this subject because the research has an exploratory character. The depth and richness of the analysis is due to the real, already existing data that was developed during the health crisis. Qualitative analysis research aims to create a reality based on the variety of individual experiences. Complex phenomena are allowed to be studied without restrictions.

The objective of the research is not a variable, as in the case of quantitative analysis, but a complex psychological reality, which is not necessarily assimilable to a construct, as a result the question of representativeness does not arise.

In this research, another mirror of reality is presented in which the finding and implementation of remedies are attempted in a suitable manner. The studied phenomenon is a reality investigated over a fixed period, i.e., the pandemic period between the years 2020-2021. The data collection method was carried out through the analysis of many official documents, rules, laws, policies, and strategies existing or developed during the health crisis to have a wide range of information available in order to formulate innovative policies.

Result

The analysis concluded that the results of the implementation of health policy plans were different in Romania compared to the State of Michigan, reflected in the increased number of cases of COVID-19 and the success or failure of the vaccination rate. The severity of health policies was felt in both cases, but with different intensity.

In the policy response of the United States, we can list three main points that contributed to the pandemic management: the large economic stimulus, regulatory changes to telemedicine and increased research funding through the NIH (National Institute of Health) (Bergquist et al., 2020). The response to the health crisis was strongly influenced by the divergent behavior of the population regarding the application of mask-wearing mandates, the social distancing rules and the beliefs related to the effectiveness of vaccines (Perry et al., 2020).

In the case of Romania, the main issues that could be observed after the outbreak of the pandemic were the lack of medical equipment, lack of health education, political instability, inadequate

medical facilities, inequalities in accessing services, lack of trust in the decisions of the competent authorities and in the effectiveness of vaccination (Cristian Vladescu, 2016).

Lockdown measures have been implemented in both Romania and Michigan at the same time, but the effects of the policy were different. Romania had a stronger political response in the early stages of the pandemic and during the lockdown, while in Michigan, citizens had more flexibility.

Unfortunately, the lockdown proved to be an ineffective strategy in case of Romania due to several factors, such as the migration of seasonal workers, non-compliance with the rules imposed by the authorities, lack of trust in political decisions (Alfano & Ercolano, 2020).

The circular movement of temporary labour between origin and destination requires special attention (Hâncean et al., 2020). Detection of virus transmission in these population groups requires the development of new strategies to better control infection rates. Adapting mobility control measures can help authorities in early disease detection and assist public health experts in planning and preparing for different scenarios at a later stage of disease transmission.

Romania, like any other European country, has its own national institutions responsible for managing threats affecting the population, such as pandemics. However, outbreaks of infectious diseases do not respect country borders and quickly spread over a large territory. The EU recognized this aspect and tried to emphasize collaboration and the application of common strategies.

Important institutions/agencies that had a strong impact on Romania's response to the pandemic acted immediately to protect citizens' lives, collaborating with EU institutions/agencies, and applying both national and EU policies.

As the pandemic progressed, the deficiencies that already existed in the health sector became more visible and, as a result, received more attention than before. WHO (World Health Organization) publications have shown that Romania has the lowest health expenditure of all EU countries both as a percentage of gross domestic product (GDP) and in expenditure per capita (World Health Organization, 2020b).

Mitigation policies helped to control the outbreak in the early stages in Romania, but to a degree as relaxation measures were introduced, new cases began to appear. In Michigan, a noticeable peak in the number of deaths due to COVID -19 was observed in three different periods of time: in April 2020, December 2020, and May 2021. In Romania, the peak for the same reason was only observed in December 2020, May 2021 and October 2021 (Worldmeter, 2020a, 2020b).

During the lockdown period in Romania, other rules were also implemented, such as: the imposition of fixed circulation hours for people over 65 years of age, the need to draw up affidavits to justify circulation, the application of isolation and quarantine rules to people from the country and abroad, etc. (Government of Romania, Military Ordinance no. 2 and 3, 2020).

Experts also recommended other measures to protect the elderly community, such as the involvement of volunteers in the delivery of food and medicine or their separation for a short time from the younger family members to reduce the likelihood of infections (Chiruță et al., 2020).

Romania had a positive response in the early stages of the outbreak, but after the first wave, the decisions were not taken accordingly. The transition from strict lockdown to relaxation had to be done progressively and continuously, emphasizing physical distancing, the importance of wearing a mask and the clear benefits of immunization. Together with the development of evidence-based measures in the management of the pandemic, there is a need to intensify the work at the level of communication and collaboration.

On the other hand, the State of Michigan has taken several steps to increase public safety and citizen well-being. For example, they banned excessive food and medical service inflation, facilitated telemedicine and drive through testing, increased the number of hospital beds, prepared food packages for deprived children, and fought against racial inequality (National Academy for State Health Policy, 2020).

Michigan has decided to distribute free and/or reduced-price meals to disadvantaged children. Thus, the school created prepackaged boxes with different foods, and the food banks worked hard to prepare and distribute packages to students or other underprivileged people who were suffering of food insecurity (National Academy for State Health Policy, 2020).

Within this strategy, the request for food was decided as a priority for three categories of people: small children, people who are part of the vulnerable population and the homeless or unemployed (Council of Michigan, 2020). Romania could also apply this type of strategy by allowing

their school canteens to prepare packed lunches and involve volunteers in their distribution. The food bank could be easily implemented with the establishment and implementation of strategies and by respecting food quality standards.

The European Union has an important role in developing health policies for EU members, but countries have their own autonomy when it comes to decisions made in the health sector (European Committee of Regions, 2021a). To prevent the food crisis in the future, the government could consider investing in modern technologies, such as the digital transformation of the sector, which could contribute to a sustainable flow of products, preventing waste and lack of food (Abid & Jie, 2021) (Costi Rogozanu, 2020).

Due to the differences in economic development between Michigan and Romania, we must consider the readjustment of several health policy strategies. The policies that come from the CDC (Centers for Disease Control and Prevention) or from the EU must be analysed by Romanian experts and modified to be applicable at the country level. Funding from the EU contributes to better management of the pandemic and certainly helps to rebuild the economy.

A very good example is the digital transformation of the health sector and the education sector. Even if Romania has taken some steps in this direction, it still has local problems to solve, such as facilitating Internet connection in isolated locations, encouraging the population to use new tools, including the elderly population, etc.

Reorganizing local public health institutions would be a crucial step to improve local response. A better and more efficient workflow should be prepared in advance for similar situations. Communication between local and national health agencies needs to improve by receiving clear orders from higher-ups.

Regarding relaxation and vaccination policies, the United States has seen a shift from non-pharmaceutical measures to those policies, such as limiting access to social life based on vaccination status. Experts pointed out that this transition is indicated to resume daily activities and restart the economy. They also decided to implement fewer lockdowns and emphasize the use of masks, especially in closed spaces.

Digital transformation is extremely useful when it comes to facilitating communication with experts through online applications on a computer, tablet, or phone, without getting out of the house. This can reduce waiting time and increase the chances of getting treatment faster.

In Romania there are hard-to-reach locations where the digital tool could be very useful, and people could receive care at home for minor illnesses (Bianca Preda, 2017). Investing more in the training of medical personnel would be a long-term strategy to consider for Romania. Modernizing medical education and the vision of integrating students would be important steps for universities to consider.

Training of "contact tracing" teams and volunteers who are certified in case of health emergencies, correctly informing the population, and involving them in decision-making can contribute to a better management of the pandemic. The development of emergency plans for each area and the involvement of communities in these plans would be an ideal strategy in pandemic management. Identifying the contacts of COVID-19 and implementing "contact tracing" courses would be useful to fill the gaps in the disease surveillance system.

The citizens of the State of Michigan addressed a popular and accepted measure by most people, namely, the use of the "Go Blue" app. It was developed within the University of Michigan, and the use of the application was mandatory for all members of the university who had activities in the city of Ann Arbor, Michigan. People had to answer a few questions every day, generated by the application, then the app generated a temporary access code for entering university buildings.

Thus, when the vaccination of the population started, the vaccination certificate had to be uploaded to the application. Without the vaccination certificate and the access code from the app, people were not allowed to enter closed spaces. People who refused to be vaccinated but wanted to access the university's facilities were required to test themselves once a week and upload the test result to the app.

Due to limited mobility and access to university buildings, there were very few cases of unvaccinated people. Students who did not want to be vaccinated had the option to attend online courses only without receiving the right to participate to other activities within the University of Michigan. Another option for unvaccinated and active people (ex. students, employees) was weekly

testing to prove the presence or absence of the disease. So, this strategy for increasing the vaccination rate was very successful, and Ann Arbor ranked among the cities with the highest vaccination rate.

In our opinion, the solution in Romania would be the implementation of "contact tracing" courses on university level to have volunteers trained for such tasks. For example, students can be included in these volunteer activities. To reduce the pressure on the staff, the system for receiving telephone calls and processing the personal data obtained should also be modernized. Thus, online platforms can be implemented where the population can upload personal data, information about the situation of the sick person or the person who encountered a sick person, certainly in compliance with the data protection law.

Using online platforms reduces the risk of contact tracing staff making mistakes and increases the speed of data processing. Thus, the waiting time for important documents such as the quarantine/isolation decision or other certificates, would decrease significantly, and the telephone option remains valid for people who prefer this method.

In the state of Michigan, people in charge of "contact tracing" went through several weeks of preliminary training before taking this position and had a system with a few key questions to increase the speed of data processing. There was also the "online" option in which citizens uploaded their personal data to a platform, which generated, after a prior check, the quarantine/isolation decision or medical certificate as appropriate. The "phone" option was only available to people who preferred this route (Michigan Health Watch, 2020).

On the other hand, in Romania, contact tracing was done at **ISU centres** (Department of Emergency Situations) in each county where a limited number of phones and a limited number of volunteers were available. The people doing this work could not cope with the volume of data that had to be processed. Thus, it was concluded that the "online" system and the preliminary "contact tracing" courses should also be implemented in Romania to already have a prepared team and a more efficient system in managing similar situations.

To raise awareness about COVID-19, the authorities have launched information campaigns through social networks, television or radio about hygiene rules, the correct wearing of masks, social distancing, etc. When the vaccine became available, for better promotion, health professionals, local officials and nationals, well-known stars from the world of show business, tried to emphasize the importance of immunization (Dascalu, 2020).

Along with the immunization campaigns, the introduction of the "Health Education" subject as a compulsory subject in Romanian schools would draw attention to the importance of vaccination as a tool in the "fight" against the disease, starting from the primary grades leading to a better understanding in the middle and high school classes.

Immunization campaigns demonstrated that Romanian leaders must find more effective methods to distribute correct and reliable information to the population, combating false and unscientific information.

The spread of fear through mass media and other channels planted the seeds of doubt in the Romanian government and its applied policies. Therefore, people questioned almost every decision taken by the government. Government instability and chaos in decision-making also contributed to the inadequate response to the health crisis. Vaccine hesitancy is another topic that should be discussed in depth by government and religious leaders.

The priority is to return to the "new normal", which means that by increasing the vaccination rate, gradually allowing the reopening of the economy and access to social activities while maintaining the policies of testing and mask-wearing. This method is called: strategic decision based on secure information.

Discussions

One of the institutions that played an important role in Michigan was the Michigan Department of Health and Human Services. Their main purpose is to promote health, to support families and reduce long-term health risks (Michigan Department of Health and Human Services, 2020).

Regarding Michigan's COVID-19 illnesses, the first two cases were reported on March 10, 2020. The same day Governor Gretchen Whitmer declared a "state of emergency" and travel restrictions went into effect. Among the restrictions we can list the temporary closure of non-essential businesses, the ban on mass gatherings and sports events, the temporary closure of schools, restrictions

on the entry of people into aged-care facilities to protect vulnerable populations (Gretchen Whitmer, 2020a).

Efforts to mitigate the pandemic were slowed down by the independence of States in their decision-making, because rules were applied in different time-frames. Until policies were unified and federal financial aid distributed, States were left to fend for themselves to stop the spread of the disease.

Among the most important acts adopted at the federal level we can list:

- Families First Coronavirus Response Act (FFCRA) (2020)
- "Coronavirus Aid, Relief, and Economic Security" (CARES) (2020)
- "Uniform Emergency Volunteering Health Practitioner Act" (UEVHPA) (2020)
- "Coronavirus response and Consolidated Appropriations" (2021)

These pieces of legislation helped protect families and small and medium-sized businesses; covered testing and treatment for low-income people. They have also contributed to the temporary distribution of the medical workforce in areas more affected by the pandemic and expanded the responsibilities of medical students to supplement the shortage of medical personnel (U.S. DEPARTMENT OF THE TREASURY, 2021) (Lowey, 2020) (Iris Hentze, 2020).

It is important to note that the declaration of the state of emergency was only valid for 28 days, after which the renewal was possible only with the approval of the legislature. The legislature can legislate firm limits on emergency executive power to prohibit the governor from taking advantage of any form of power. In the end, Governor Whitmer was able to get approval of President Trump in receiving federal emergency management funds (National Conference of State Legislatures, 2020)(Michigan Government, 2020b).

Federal aid meant that Michigan citizens became eligible to receive financial assistance from the Federal Emergency Management Agency (FEMA) (National Conference of State Legislatures, 2020)(Michigan Government, 2020b). In April 2020, the governor of Michigan created the "Michigan Coronavirus Task Force on Racial Disparities" to provide recommendations for addressing disparities. During that time, 40% of the deaths from COVID-19 were among African Americans (while only 14% of the state's population is African American) (Gretchen Whitmer, 2020b).

Minority groups often face a lack of access to healthcare and a lack of workplace protection. Therefore, the task force was created to expand unemployment benefits, to provide access to health care and to redress the deep inequities that affect vulnerable communities (Gretchen Whitmer, 2020b).

In continuation, a brief description of the composition of the population is needed because health policy experts are required to consider the different variations of the population before developing new policies to achieve a better response to the crisis. Michigan has a population of approximately 10,077,331 million as of an April 2020 census, with the following percentages: 79.2% White, 14.1% Black or African American, American Indian, and Alaska Native 0.7%, Asian 3.7%, Hispanic or Latino 5.3 %, two or more races 2.5%, Native Hawaiian and Pacific Z (Z=Value greater than zero but less than half a unit shown) (US Census, 2020). The state is also 50.8% female and 49.2% male, with 17.7% of the population being elderly (65 or older) (World Population Review, 2021).

Romania has a population of 19,286,123 million, according to World Bank data from 2020, with a percentage of 51.41% women and 48.62% men (World Bank, 2020). The minority groups in Romania are: 6.1% Hungarian, 3.1% Roma, 0.3% Ukrainian, 0.2% German (World Directory of Minorities and Indigenous Peoples, 2020).

As mentioned earlier, policy making and implementation means that those in power, responsible for making health policies, must consider people from all levels of society and from all minority/ethnic groups to have an effective response.

Romania has one of the largest diasporas in the EU, with over 3 million citizens living in other European countries outside of Romania (Eurostat, 2020). As the authorities anticipated, accelerated human movements are good predictors of the development of pandemics (Fan et al., 2020). The large influx of people in the first periods of the outbreak at the country's border made it difficult to apply the restrictive measures by the Romanian authorities.

The first case of COVID-19 was identified on February 26, 2020 in Gorj county (Lobiuc et al., 2021), followed by the government's decision on March 16 to implement the lockdown (Government of Romania , Military Ordinance no. 1, 2020) (Crețan & Light, 2020). This lockdown was extended

until May 15, after which a “state of alert” was declared, and non-pharmaceutical measures were requested to be observed.

Another important date when there was an intense migration of people was in April 2020, on one of the most important religious holidays in Romania: Orthodox Easter. It is estimated that 1.3 million Romanians returned from abroad during Easter, a situation that made it difficult to manage the pandemic crisis in the country (Cristian Gherasim, 2020).

Thus, in the future, the people responsible for making decisions should apply functional strategies not only for the moment, but for the long term. The long-term consequences of the pandemic should also be considered and develop plans to combat negative effects such as price increases of food, fuel, energy, and gas.

Unfortunately, the pandemic is predicted to bring poverty to Romania and will increase the gap between the poor and the rich, exacerbating social inequalities. Thus, unemployment, product costs, and emigration will continue to rise, and will be a lot more evident than before.

Romania still has a lot to do to regain people's trust, to build a stable government and long-term strategies that contribute to the country's evolution and modernization. At the same time, the state must rethink its collaboration with people from all levels of society, including the marginalized population for the effective control of the pandemic. For example, increasing the number of homeless centers with access to food, clean water, and vaccines to prevent the spread of disease; monitoring nursing homes, providing medical assistance, etc.

In the United States, the pandemic, and the uncertainty of tomorrow led to an increase in drug use, especially among the young population and among people who lived alone. Moreover, the increase in the number of people with mental illness also led to the increase in the rate of suicide. For this reason, the United States should bring policies to protect this category of people and to offer solutions to precede the consequences of these facts in a near future.

Another important aspect to mention was the conflicting recommendations coming from the CDC regarding mask wearing policies. In the United States, this decision has varied by State and by population vaccination status. Information on the effectiveness of mask wearing was uncertain in the early stages of the pandemic, but over time it has proven to be one of the most important non-pharmaceutical interventions in controlling the spread of disease.

The decision to oblige the population to wear a mask, was taken for the first time in April 2020 at the reopening of small and medium-sized businesses. In 2021, when population vaccination began, wearing masks in public spaces was related to the presence or absence of vaccination certificate. Vaccinated people were not required to wear a mask, and non-vaccinated people had to wear them. This health policy proved to be wrong because vaccinated people could transmit the disease without realizing it and could infect healthy people.

Analyzing the key priorities in managing the pandemic and recognizing all the steps that must be taken for a successful strategy could increase the chances of improvement. Making small steps, such as accessing EU funds for the development of the country, can contribute to rapid recovery and increase living standards. The existing framework already stimulates digitization, education, and transformation of the health sector, in addition, the interdependence of regions and cross-border collaboration in health services will increase preparedness for future health crises.

Conclusions

In conclusion, after careful analysis of the results, we can state the following key stages in the management of health crises:

1. Treatment of patients, prevention and control of outbreaks.
2. Stimulating global governance based on scientific evidence.
3. Digital transformation of the health, educational and work sectors.
4. Accessing funds for economic recovery.
5. Redistribution of attributions.
6. Launch of immunization and health education campaigns.

Summarizing everything we have presented; we can conclude that health policies are still being developed. Due to the outbreak of the COVID-19 pandemic in 2020, the countries of the world had to rethink existing strategies and apply strategies applicable in the new globalized world, involving citizens in the control of the pandemic.

Even if there are similarities between countries' strategies, the results and effects of the pandemic have been different due to the economic but also cultural differences between countries and due to the application of strategies with obvious time lags.

Protecting citizens can be achieved by the people in power taking global decisions, so that every entity (e.g., agency, NGOs, institution, etc.) involved in stopping the pandemic, is aware of the obligations it has, ensuring clear and correct communication of information among citizens from different backgrounds.

Romania has waged a continuous struggle in correcting weak points such as the lack of medicines, the rapid spread of false information about the pandemic and vaccination, even if these actions have been followed by periods of political instability.

The mixed response in the United States was due to relatively late federal intervention. The standardization of laws/regulations was made only a few weeks after the outbreak and the official statement from the White House.

Population testing was slowed down by CDC bureaucracy in the early stages of the pandemic, but also because of poor-quality tests distributed to health centers (John Cohen, 2020). The CDC made rapid strides in regulating population testing and bringing effective tests to the market, but until that stage was reached, medical staff had to adapt to the needs of the population and implement sometimes inappropriate methods of detecting and controlling the spread of the virus (Kucharski et al., 2020).

Wearing masks was another very sensitive topic in the United States because of the intensification of racial conflicts, but also because of political parties, which played an important role in intensifying these conflicts. Limiting the mobility of the population has led to many protests and increasing inequalities between people. Access to medical services was not possible for certain groups of people, so many ended up treating themselves at home.

The implementation of vaccination campaigns as a tool to "fight" the disease was another important strategy in controlling the spread of disease and reducing the rate of infection, but due to the spread of false information on the subject, there were areas that failed to achieve high vaccination rates in the community.

Analyzing the strategies applied, we can conclude that the most important plans that were implemented in the control of the pandemic were the obligation to wear masks in closed spaces and social distancing. These non-pharmaceutical methods, as well as daily hygiene, are effective if applied in a timely manner and followed over a long period of time.

We also recall electronic contact tracing applications that have proven to be ineffective due to a lack of confidence in data protection. For this reason, the decision to implement them was made by each individual country. In Romania, "contact tracing" centers with staff responsible for data collection and processing operated with priority.

Finally, it has been shown that on long term, increased vaccination rates could be the main answer to stopping the pandemic and perhaps eradicating the disease.

The limits of the research

The current paper focuses on health policies during the pandemic. Any other economic reconstruction policies and policies aimed at actions taken outside the health field are well beyond our analysis. For this reason, this paper focuses on policies that are related to health and infectious diseases.

A limitation of the research would be that it could not include all sectors involved in this health crisis. Due to the complexity of the research, the wealth of data had to be condensed and the focus was on highlighting the most important factors that influenced the response to the pandemic.

Bibliography

1. Abid, A., & Jie, S. (2021). Impact of COVID-19 on agricultural food: A Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis. In *Food Frontiers*. <https://doi.org/10.1002/fft2.93>
2. Alfano, V., & Ercolano, S. (2020). The Efficacy of Lockdown Against COVID-19: A Cross-Country Panel Analysis. *Applied Health Economics and Health Policy*, 18(4), 509–517. <https://doi.org/10.1007/s40258-020-00596-3>
3. Atalan, A. (2020). Is the lockdown important to prevent the COVID-9 pandemic? Effects on psychology, environment and economy-perspective. *Annals of Medicine and Surgery*, 56, 38–42. <https://doi.org/10.1016/j.amsu.2020.06.010>
4. Balmford, B., Annan, J. D., Hargreaves, J. C., Altoè, M., & Bateman, I. J. (2020). Cross-Country Comparisons of Covid-19: Policy, Politics and the Price of Life. *Environmental and Resource Economics*, 76(4), 525–551. <https://doi.org/10.1007/s10640-020-00466-5>
5. Bergquist, S., Otten, T., & Sarich, N. (2020). COVID-19 pandemic in the United States. *Health Policy and Technology*, 9(4), 623–638. <https://doi.org/10.1016/j.hlpt.2020.08.007>
6. Bianca Preda. (2017). *Dincolo de civilizație. Satele de lângă Cluj, la secole distanță de România. Cum reușesc niște clujeni cu suflet mare să aducă bucurie bătrânilor din creierul munților - FOTO/VIDEO*. <http://www.monitorulcj.ro/actualitate/61435-dincolo-de-civilizatie-satele-de-langa-cluj-la-secole-distanta-de-romania-cum-reușesc-niste-clujeni-cu-suflet-mare-sa-aduca-bucurie-batranilor-din-creierul-muntilor#sthash.7MzuhdeB.dpbs>
7. Chirută, C., Bulgariu, E., Avsec, J., Ferčec, B., & Mencinger, M. (2020). Comparison of the evolution of the COVID-19 disease between Romania and Italy. In *Applied System Innovation* (Vol. 3, Issue 4, pp. 1–21). <https://doi.org/10.3390/asi3040044>
8. Cristian Gherasim. (2020). *Romania braces for 1.3m workers' Easter return*. <https://euobserver.com/coronavirus/147718>
9. Cristian Vladescu, S. G. S. V. O. C. H.-Q. A. S. (2016). *Romania: Health System Review - PubMed*. <https://pubmed.ncbi.nlm.nih.gov/27603897/>
10. Council of Michigan. (2020). *COVID-19 - Food Bank Council of Michigan*. <https://www.fbcmich.org/covid-19/>
11. Costi Rogozanu, D. G. (2020). *Are western Europe's food supplies worth more than east European workers' health? | Costi Rogozanu and Daniela Gabor | The Guardian*. <https://www.theguardian.com/world/commentisfree/2020/apr/16/western-europe-food-east-european-workers-coronavirus>
12. Dascalu, S. (2020). The Successes and Failures of the Initial COVID-19 Pandemic Response in Romania. *Frontiers in Public Health*, 8(July), 1–6. <https://doi.org/10.3389/fpubh.2020.00344>
13. European Committee of Regions. (2021a). *Cross-border health threats. January*, 1–31.
14. Eurostat. (2020). *Migration and migrant population statistics - Statistics Explained*. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Migration_and_migrant_population_statistics
15. Fan, C., Cai, T., Gai, Z., & Wu, Y. (2020). *The Relationship between the Migrant Population's Migration Network and the Risk of COVID-19 Transmission in China-Empirical Analysis and Prediction in Prefecture-Level Cities*. <https://doi.org/10.3390/ijerph17082630>
16. Gretchen Whitmer. (2020a). *Whitmer - Executive Orders*. https://www.michigan.gov/whitmer/0,9309,7-387-90499_90705---,00.html
17. Gretchen Whitmer. (2020b). *Whitmer - Governor Whitmer Creates the Michigan Coronavirus Task Force on Racial Disparities*. <https://www.michigan.gov/whitmer/0,9309,7-387-90499-525224--,00.html>
18. Greer, S. L. (2021). Coronavirus Politics. In *Coronavirus Politics*.
19. Hâncean, M. G., Perc, M., & Lerner, J. (2020). Early spread of COVID-19 in Romania: Imported cases from Italy and human-to-human transmission networks: Early spread of COVID-19 in Romania. *Royal Society Open Science*, 7(7). <https://doi.org/10.1098/rsos.200780>
20. Iris Hentze. (2020). *COVID-19: Occupational Licensing During Public Emergencies*. <https://www.ncsl.org/research/labor-and-employment/covid-19-occupational-licensing-in-public-emergencies.aspx>
21. Kelley Lee, Kent Buse, S. F. (2002). Health Policy in a Globalising World. In *Social Science &*

Medicine. <https://doi.org/10.1016/j.socscimed.2005.08.055>

22. Korunovska, N., & Jovanovic, Z. (2020). *ROMA IN THE COVID-19 CRISIS. An Early Warning from Six EU Member States*.
23. Lobiuc, A., Dimian, M., Gheorghita, R., Sturdza, O. A. C., & Covasa, M. (2021). Introduction and Characteristics of SARS-CoV-2 in North-East of Romania During the First COVID-19 Outbreak. *Frontiers in Microbiology*, 12(July), 1–14. <https://doi.org/10.3389/fmicb.2021.654417>
24. Lowey, N. M. (2020). *Text - H.R.6201 - 116th Congress (2019-2020): Families First Coronavirus Response Act*. <https://www.congress.gov/bill/116th-congress/house-bill/6201/text>
25. Michigan Department of Health and Human Services. (2020). *MDHHS - Policy and Planning*. https://www.michigan.gov/mdhhs/0,5885,7-339-73970_5093---,00.html
26. Michigan Government. (2020b). *Coronavirus - President Trump Approves Governor Whitmer's Request for Major Disaster Declaration*. <https://www.michigan.gov/coronavirus/0,9753,7-406-98158-523407--,00.html>
27. Michigan Health Watch. (2020). *Michigan launches coronavirus contact tracing. Here's what you need to know. | Bridge Michigan*. <https://www.bridgemi.com/michigan-health-watch/michigan-launches-coronavirus-contact-tracing-heres-what-you-need-know>
28. National Academy for State Health Policy. (2020). *Blogs / Reports – Page 28 – The National Academy for State Health Policy*. <https://www.nashp.org/publications/blogs-reports/page/28/>
29. National Conference of State Legislatures. (2020). *President Trump Declares State of Emergency for COVID-19*. <https://www.ncsl.org/ncsl-in-dc/publications-and-resources/president-trump-declares-state-of-emergency-for-covid-19.aspx>
30. National Institute of Health. (2017). *Mission and Goals | National Institutes of Health (NIH)*. <https://www.nih.gov/about-nih/what-we-do/mission-goals>
31. Perry, S. L., Whitehead, A. L., & Grubbs, J. B. (2020). *Culture Wars and COVID-19 Conduct: Christian Nationalism, Religiosity, and Americans' Behavior During the Coronavirus Pandemic*.
32. Romanian Government. (2020a). *Military Ordinance nr. 1*.
33. Romanian Government. (2020b). *Military Ordinance nr. 2 (Issue 1)*.
34. Romanian Government. (2020c). *Military Ordinance nr. 3 (Issue 3)*.
35. Ryan Goodman, D. S. (2020). *Timeline of the Coronavirus Pandemic and U.S. Response*. <https://www.justsecurity.org/69650/timeline-of-the-coronavirus-pandemic-and-u-s-response/>
36. U.S. Census. (2020). *U.S. Census Bureau QuickFacts: Michigan*. <https://www.census.gov/quickfacts/fact/table/MI/AGE775219#AGE775219>
37. U.S. DEPARTMENT OF THE TREASURY. (2021). *About the CARES Act and the Consolidated Appropriations Act | U.S. Department of the Treasury*.
38. World Health Organization. (n.d.-b). *Situation Report*. Retrieved February 8, 2021, from <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/>
39. World Health Organization. (2020b). *Global Health Expenditure Database*. <https://apps.who.int/nha/database/Select/Indicators/en>
40. Worldmeter. (2020a). *Michigan COVID: 1,198,850 Cases and 22,738 Deaths - Worldometer*. <https://www.worldometers.info/coronavirus/usa/michigan/>
41. Worldmeter. (2020b). *Romania COVID: 1,382,531 Cases and 40,071 Deaths - Worldometer*. <https://www.worldometers.info/coronavirus/country/romania/>
42. World Population Review. (2021). *Michigan Population 2021 (Demographics, Maps, Graphs)*. <https://worldpopulationreview.com/states/michigan-population>
43. World Bank. (2020). *Population, total - Romania | Data*. <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=RO>
44. World Directory of Minorities and Indigenous Peoples. (2020). *Romania - World Directory of Minorities & Indigenous Peoples*. <https://minorityrights.org/country/romania/>
45. WHO -International Regulation(2005). (2007). *International Health Regulations (2005) Areas of work for implementation. World Health Organization, June, 28*. http://apps.who.int/iris/bitstream/10665/69770/1/WHO_CDS_EPR_IHR_2007.1_eng.pdf?ua=1