
Management of the COVID-19 Pandemic Crisis at the Local Level: The Case of Szczecin

Submitted 02/10/21, 1st revision 26/10/21, 2nd revision 14/11/21, accepted 30/11/21

Renata Podgórzanska¹

Abstract:

Purpose: The aim of this paper is to describe the case of pandemic crisis management on the basis of an analysis of plans and actions of the local government of the city of Szczecin during the first waves of the COVID-19 pandemic. The analysis was supplemented by a description of the context of functioning of the city in the political, social and economic dimension.

Design/Methodology/Approach: The study extends across disciplines and has a basis typical to social sciences, mainly to disciplines such as management and political and administrative science. It is a case study investigation. It involves an analysis of documents, part of which were internal, supplemented by expert interviews.

Findings: Local authorities have played a significant role in efforts to impede and counteract the pandemic. Their activity brought support to actions carried out by the central government. However, as seen in the epidemic practice, measures intended to counteract and stop the spread of SARS-CoV-2 entailed restrictions that determined the functioning and the life of residents and required unprecedented actions.

Practical Implications: The text presents local government's key role in an effective fight against the pandemic and in mitigating its negative consequences. Such an observation should be taken into account both in regime-related actions and in designing sectoral policies, especially in the context of crisis management.

Originality/value: To the best of our knowledge, it is the first analysis of this sort that looks at the activities of Szczecin's local government during the development of the first waves of the COVID-19 pandemic. Its findings may be significant especially for the management of public policies, though limitations resulting from the very definition of a case study analysis are natural. The observations must be verified by an investigation of other municipal or commune self-governments, also outside Poland.

Keywords: Crisis, crisis management, pandemic.

Paper Type: Research study.

¹University of Szczecin, Institute of Political Science and Security Studies, Poland, ORCID: 0000-0001-6610-9699, renata.podgorzanska@usz.edu.pl;

1. Introduction

When analysing the problem of the COVID-19 pandemic we must note both its global and local character. Consequences of responding to the increase of SARS-CoV-2 infections have determined the functioning of local communities and the activity of local authorities. The latter, owing to their rights and responsibilities, are competent to take measures for the security of residents and to respond to the emerging threats to their health and life. The multidimensional nature of the occurrence local authorities have lived to face required equally complex actions.

What is more, the lack of relevant experience and sufficient knowledge has reinforced the difficulties in responding to the crisis triggered by the COVID-19 pandemic. Truly, the situation local authorities had to tackle took an unprecedented form and required a reaction to situations by that point not foreseen, both in terms of the extent and size.

Even though epidemics of infectious diseases have been named as a threat to the security of the city of Szczecin, the one caused by Sars-CoV-2 was first included in the Municipal Crisis Management Plan (Miejski plan zarządzania kryzysowego...) only in 2021, after tens of months of experience in this regard. However, it is worth noting that despite the complex consequences of the epidemic (such as a threat to the life and health of those infected, inefficiency of the bodies of the National Health Inspectorate or limitations in access to health care, to name just a few), there were still voices that undermined the essence of the occurrence or even pointed to inadequate response methods.

Similar criticism was directed towards measures taken at the central and local level which served to impede and prevent the spread of infections. Irrespective of the above determinants, local government institutions, including the president of the city as a participant of the crisis management system, carried out a number of actions that involved, for example, coordination of tasks in planning for a possible threat in the territory of the city, establishing the Municipal Crisis Management Team, updating the said Municipal Crisis Management Plan, securing funds for combating infectious diseases, administration of training and practical exercises for crisis management in the city or educating residents in appropriate behaviour before and during the pandemic (Municipal Crisis Management Plan).

These operations did not exhaust the catalogue of activities of municipal institutions for counteracting and preventing the spread of SARS-CoV-2. Effective responses to the COVID-19 pandemic crisis in the territory of the city of Szczecin were dependent of many variables that were a consequence of relevant governmental decisions, the city's financial and organizational standing, and lastly, the public attitude towards the restrictions put in place.

2. State of the Epidemic Threat

The first case of coronavirus in Poland was recorded on 4 March 2020, a few months after the outbreak of the pandemic in Wuhan. It is worth noting that back then it was still commonly believed that the pandemic would not grow to such proportions in Poland. The optimistic thinking was that measures taken following the example of other European and non-European countries would be enough to impede the pandemic.

However, a dynamic increase of infections in Europe and most of all the related consequences in the sphere of health care required a quick response. The existing practice that had boiled down to monitoring the situation, checking persons returning from pandemic-affected areas, increased health inspections at the borders or education on and promotion of basic epidemic security rules did not prevent the escalation of infections. This all culminated with the decision to introduce the state of epidemic threat in Poland on 12 March 2020, which meant that a number of restrictions could be introduced in the future, such as temporary controls of travels inside the country, limitation of the activity of certain institutions and work places, prohibition of organising shows and other gatherings of people, the obligation to perform specific health and safety procedures, which, if performed, affected the functioning of certain production, service, trading and other places, an order to share one's property, premises and land as well as means of transport for anti-pandemic activities stipulated in relevant schemes (*Od dziś wprowadzimy stan zagrożenia epidemicznego*).

The decision to introduce the state of epidemic threat meant far-reaching restrictions in the activity of public places, including shopping centres and malls, restaurants, gyms, swimming pools, dance studios, fitness clubs, museums, libraries or cinemas (*Ograniczenia działalności gastronomicznej, rozrywkowej oraz funkcjonowania galerii handlowych*). In subsequent days, as the infections escalated, further restrictions were introduced, such as the closing of state borders on 15 March 2020. A week later (23 March 2020), the state of epidemic was introduced, which on the one hand meant greater opportunities to respond to the situation, and on the other—it allowed further restrictions (*Wprowadzamy stan epidemii w Polsce*).

The introduction of further restrictions and sanctions for non-compliance was determined by the dynamics of infections. Starting on 1 April 2020, each person under the age of 18 was allowed to leave the house only if accompanied by an adult, while parks, avenues or beaches were closed. Rules of operation of physical shops were changed and the activity of hairdresser's places, beauty salons and tattoo parlours was suspended, the principles for provision of hotel services were changed and so was sports and recreation activity (*Regulation of the Council of Ministers of 31 March 2020 on the introduction of certain restrictions, bans and orders related to the state of epidemic*).

On 16 April 2020 it became mandatory to cover one's mouth and nose and as future showed, this has become a permanent element of the pandemic reality (*Wychodzisz z domu? Zasłoń usta i nos!*). Leaving aside the discussion on the essence of the measures introduced, their legitimacy, effectiveness or pace, it was essential to use all possible resources that served the protection of the life and health of residents. In the next months, in a response to the dynamics of the pandemic situation, the restrictions were gradually cancelled or modified by the development and proposal of further strategies for combating the pandemic.

The measures introduced during the autumn pandemic wave were particularly important as the surge affected Poland more strongly and, unfortunately, it revealed loopholes in existing solutions. The fact that the situation was complex was proven by qualifying the entire Poland as a red zone on 24 October 2020, which in practice meant the highest level of threat and serious restrictions (*Cała Polska w czerwonej strefie, kolejne zasady bezpieczeństwa oraz Solidarnościowy Korpus Wsparcia Seniorów*). Their scale was unprecedented as seen in the fact that cemeteries were closed between 31 October and 2 November during a holiday particularly important for the Polish people.

This decision, as well as many other measures that were the pillars of the strategy of combating coronavirus, were intended to de-escalate the wave of infections and to bring back "normality" (*Od 28 listopada wchodzimy w Etap odpowiedzialności*). It was emphasised that only responsibility, solidarity and understanding will allow for the pandemic's negative outcomes to be mitigated. At the same time, the strategies warned not to undermine the threat and the return to normality was only to be possible thanks to a COVID-19 vaccine (*Rząd przyjął Narodowy Program Szczepień – plan powrotu do normalności po pandemii*).

Authorities had huge hopes in the vaccine to mitigate subsequent waves of infections that swept through Poland in 2021. As is true for any pandemic, the success of preventing the threats is the product of many factors. One of them is compliance with regulations introduced, which greatly depends on the social context, citizens' discipline, their readiness to follow the restrictions, a certain self-control and the understanding of the essence of being responsible for others. The unsatisfactory pace of vaccinations in Poland while, what is crucial, they were commonly available, disregard to the procedures in force and negation of the outbreak as a threat to health security weaken or in fact preclude an effective fight against the pandemic. It is worth mentioning that as early as in the first wave of SARS-CoV-2-related infections, the Polish society manifested defiance against the restrictions introduced by the government and against the pandemic itself.

These behaviours found confirmation in opinion polls, the results of which clearly showed that the Polish society differed in their attitudes to the epidemic threats. The differentiating factors in opinions on the real presence of the pandemic and its consequences included, i.a., respondents' age, place of residence, education or

political beliefs (Koronasceptycyzm, czyli kto nie wierzy w zagrożenie epidemią). Close to two years of the pandemic reality have still failed to convince many that doubt the threat. Let us take, for example, opinion polls from autumn 2021. Their results show that despite the growing number of cases, concerns about a coronavirus infection have not in fact changed for a long time. At the moment, nearly half of respondents (48%) are afraid of being infected with coronavirus, while slightly more than half (52%) do not express such concerns.

Despite the fact that the number of vaccinated persons is growing gradually, the pace of vaccinations is not satisfactory. The said survey carried out by CBOS (Public Opinion Research Centre) in September 2021 shows that the percentage of persons vaccinated (with at least one dose) has gone up to 67%, while at the same time the percentage of persons not intending to take the vaccine has decreased (to 23%) (Stosunek do szczepień i postrzeganie polityki rządu we wrześniu).

When analysing the impact of the pandemic from the perspective of the functioning of Szczecin, we must note that it obliged all municipal services and institutions to act in circumstances previously unknown. What is more, the pandemic showed materiality of effective operation of bodies competent to counteract such occurrences, at the central and local level alike. The need to respond to increasingly frequent cases of infections throughout the country and in the city required authorities to undertake a number of legal and organizational measures and to use all available material, financial and organizational resources. Those actions intended to mitigate the effects of the pandemic in the health, social, economic, political and cultural context (Rok 2020 pod znakiem pandemii) and were an example of the implementation of responsibilities vested in local government institutions—responsibilities that involved the creation of optimal conditions for the functioning of the community of the city of Szczecin and the protection against various types of dangers, including epidemic threats (Miejski plan zarządzania kryzysowego).

The time of the pandemic meant that existing needs and capacities had to be revised, on the national, regional and local scale alike. Regardless of the degree of readiness of individual countries to counteract and respond to such types of national security threats and regardless of the experience with similar situations (not similar in scale though) in the past, the situation proved a challenge for all in the social, political and economic context.

While such threats have been known and forecast in the near past (bird flu, SARS, swine flu, Ebola or MERS epidemics) (Gliński and Żmuda, 2020), the global aspect of the epidemic was the most serious challenge in decades, at the international, national and local level. It is these categories that we should use to look at tasks faced by local government authorities responsible for actions to counteract infections and the spread of the virus and to combat its consequences. It must be noted that the scale of the challenge local authorities had to deal with was determined by very

number of infections. In 2020 alone, close to 16,500 cases of SARS-CoV-2 were recorded in Szczecin (in the author's collection).

3. Actions of the Local Government of the City of Szczecin

The COVID-19 pandemic has had an immense impact on the functioning of the local government of Szczecin and of its residents. As the central government introduced restrictions relating to the operation of the economy, administration, educational establishments and other institutions, local authorities were obliged to incorporate them. This did not only involve the creation of a novel pandemic reality, but most of all having to re-organize the functioning of institutions accountable to the city and an introduction of various types of preventive measures and support actions.

These procedures involved, for example, purchasing disinfectants and personal protection resources, support for businesses and non-governmental organizations, organization of remote learning, prolonging deadlines for payment of fees and exemption from certain fees, or suspension of Paid Parking Zones (Raport o stanie gminy miasto Szczecin za rok 2020). On the one hand, the regulations gradually introduced were a response to decisions taken by the central government, and on the other they were a response to the pandemic crisis and a search for effective mechanisms to react to the new reality. The character of solutions put forward was a product of many factors, while their crucial element was the experience gathered in subsequent waves of the pandemic. The key lied in the realization of the joint responsibility for the development of the pandemic situation among all stakeholders, that is both residents and local government institutions.

It needs to be emphasized that the pandemic affected various spheres of the city's activity. For example, on 9 April 2020 a general (16th) session of the City Council was organized remotely as a video conference for the first time ever in the history of the city. Later on, many municipal undertakings and activities moved "to the web" and the online reality became everyday life for many Szczecin's residents. It must be highlighted here that the pandemic resulted in far-reaching restrictions from the residents' point of view. On the one hand—as has been noted—they were a derivative of decisions of the central and local governments relating to efforts taken to minimize the risk of the spread of coronavirus, on the other they were the result of an individual situation that involved, e.g., confirmation of the infection and its consequences for the health and life of residents.

The actions taken by Szczecin's authorities that were intended to prevent and counteract the spread of SARS-CoV-2 and thus to minimise threats to the life and health of residents had to ensure the efficiency of the city's institutions and to create conditions for the functioning of its residents, irrespective of the restrictions and regimes introduced. They all were to result in the creation of safe conditions that would not threaten the health security of residents and in enabling them to fulfil all

their professional, social and family obligations. At the same time, as never before they all were a certain test of the municipal crisis management system and of the local authorities' capability to respond and act in unprecedented circumstances that required thinking out of the box and the introduction of solutions not practiced before. What is more, it exposed areas by that point ignored, whose usefulness in the conditions of the pandemic was fundamental.

The unprecedented situation resulting from the COVID-19 pandemic required equally unprecedented actions. Regardless of their character, burdensome nature and related costs, it was assumed that thanks to these measures the consequences of the pandemic for the city and its residents would be reduced. Given the nature of the occurrence in question, and primarily due to the lack of sufficient knowledge on the specific characteristics of the virus (at least in the initial phase of the pandemic), different measures were tested that experts believed were to bring the desired result. They related to key areas, that is the functioning of the city, including the performance of local government's responsibilities, support to residents and individual social groups, providing aid to businesses and organization of the work of local government units, services and institutions or the municipal office.

Following the guidance and recommendations from the Chief Sanitary Inspectorate and the recommendation from the Provincial and Country Sanitary Inspectorates, having the security of residents in mind, they city consistently introduced necessary preventive measures, such as resignation from the organization of various sporting and artistic events (or postponing them) that were not mass events or gatherings. As early as in March 2020, the decision was taken to limit the activity of cultural and sports establishments and to suspend classes in nurseries, schools and most educational institutions (*Zawieszenie zajęć dydaktyczno-wychowawczych w przedszkolach, szkołach i placówkach oświatowych*).

As part of the implementation of governmental recommendations, the functioning of public transport was changed, the operation of municipal services and institutions as well as of the municipal office was reorganized and modified. In cooperation with the City Guard and the Police, measures were taken to increase the safety in service and trading places. Playgrounds, open air gyms and other recreation and sporting places were taken out of use. To adapt regulations to the restrictions related to the nationwide state of epidemic, solutions that were intended to support residents in this period and to mitigate the consequences of the restrictions introduced were put in place.

Already in the first wave of the pandemic, support was directed towards all sectors and groups that required help from and involvement of municipal resources (financial, organizational or personal). Procedures intended to support businesses that lost incomes and liquidity and reduced employment following the introduction of an array of restrictions were launched. They included suspension, postponement or reduction of fees for renting municipal property, local tax credits, postponement

of payment of such taxes, payment in instalments or partial write-off thereof, granting loans to micro- and small enterprises or recapitalization of the loan fund (Szczeciński Fundusz Pożyczkowy) (Koronawirus#108 - wsparcie lokalnych przedsiębiorców). Out of concern for the health sector, hospitals were supported by additional investment in medical equipment, protection measures or the purchase of coronavirus tests for the medical staff.

At the same time, a number of actions were initiated to support Szczecin's education sector, for example by providing schools with computer equipment necessary to deliver on-line or hybrid learning. Nursery fees were suspended, which meant that parents and guardians did not have to pay for the period in which nurseries were closed due to the coronavirus pandemic. Similarly, limitations in the functioning of educational institutions meant that dormitory fees were reduced. These were dictated by the introduced rules of operation of schools and thus by the need to implement distance learning.

It is worth noting here that education was one of the areas that was most affected by the pandemic and was the most important challenge next to the health care system. As we may read in the Report on the condition of the Municipality of the City of Szczecin, from the city's perspective, it was paramount to ensure the security of nursery and school children as well as teachers and other educational staff and to provide conditions to serve teaching and learning in forms set forth in regulations.

The time of the pandemic was also a test for the functioning of the social assistance system in Szczecin and required special actions for the benefit of particularly vulnerable groups (persons living on their own, homeless persons or seniors) which were the answer to completely new circumstances and needs of residents (Raport o stanie gminy miasto Szczecin za rok 2020). However, the city's activity was not limited solely to the actions referred to above. As support was needed by many spheres, including the culture realm or the sector of non-governmental organizations, sports and recreation, they too were beneficiaries of these schemes. The scope and character of the support was the product of the city's financial capabilities. However, regardless of the amounts, the aid given was intended not only to support their everyday activity, but first and foremost it encouraged them to re-organize their operation and to adapt their offer to the new pandemic reality.

We must emphasize here that the pandemic has become a monumental challenge on the social plane. Given the restrictions aiming to limit the transmission of the virus, their introduction involved immense changes in professional and non-professional life. Rules for the organization of work were changed (where reasonable and possible), employee relations were modified, and contact and communication were limited. Sectors most vulnerable from the point of view of pandemic restrictions, such as the catering or service sector, experienced frequent cases of temporary suspension of the activity of companies, their winding up or lay-offs.

This had far-reaching consequences for the material functioning of a family, which also translated into the mental condition and health of its members (Skutki epidemii koronawirusa w życiu zawodowym i budżetach domowych. 2020). What is vital is that one of the true consequences of the pandemic was the worsening of the general mental health condition. This affected not only persons that lost their jobs or sources of income due to the pandemic. The occurrence gained a much broader dimension, and mental health problems were largely rooted in the uncertainty about tomorrow, the fear of losing one's health or loved ones, physical distance, isolation, quarantines and increased work burden (Majewska, 2020).

The new reality was determined by changes in how the public sphere was organized, especially the health care system, and in the functioning of schools and nurseries. They all limited and hampered the use of the public sphere, which, as in the case of the health care system, could have had an adverse impact on the health and life in the future. It needs to be noted that the way individual components of the health care system operated was influenced not only by their new pandemic organization, but most of all by the fact that some of them were a key element in the fight against the pandemic. Looking at it from the perspective of an individual, the most severe consequences involved having to limit the activity of GP clinics and their new organization (e.g., phone consultations as a new form of contact with the patient), difficult access to specialists, longer waits for visits or tests, their postponement or cancellation.

Leaving aside the discussion on the capacity of the clinics and the efficiency of the solutions adopted, the situation unquestionably worsened the weakness of the health care system in Poland that had been identified long before, namely its exclusive focus on treatment, with insufficient emphasis on prevention and health education (Raport: system ochrony zdrowia w Polsce – stan obecny i pożądane kierunki zmian). While the system was under a lot of strain, its shortcomings related to underinvestment or staff shortages were exposed. The overload issues affected the system as a whole and Szczecin's health care points could feel relevant problems. However, the system's saturation was caused by the scale of infections and the number of persons in need of medical intervention or hospitalization.

4. Conclusions

Summing up, 2020 was a challenging year from Szczecin's perspective and a year in which the thinking about the security of the city and its residents had to be revised. This involved difficult decisions that determined the functioning of the city as an organism and that affected the residents' everyday life. In March 2020 an optimistic outlook prevailed that the epidemic threat was a temporary thing and a quick return to "normality" was expected. Unfortunately, the scenario envisaged did not materialize in 2020. After a temporary de-escalation of the number of new infections and deaths during the summer holidays, the next wave of the pandemic in autumn

2020 confirmed opinions about the intensity of the pandemic and about the virus's strength and unpredictability.

Local authorities played a significant role in efforts to impede and counteract the pandemic. Their activity brought support to actions carried out by the central government. However, as seen in the epidemic practice, measures intended to counteract and stop the spread of SARS-CoV-2 entailed restrictions and repercussions that determined the development of the city and the life of residents.

What is more, they required unprecedented actions that had a direct impact on the quality of life of residents. However, we must at the same time bear in mind the lack of experience in this regard and the need to apply solutions that had not been previously introduced and practiced. Following the experience of other countries and drawing on the available knowledge, attempts were made to implement solutions that were seen as the most effective and possible to apply.

References:

- Cała Polska w czerwonej strefie, kolejne zasady bezpieczeństwa oraz Solidarnościowy Korpus Wsparcia Seniorów. 2020. Retrieved from: <https://www.gov.pl/web/koronawirus/cala-polska-w-czerwonej-strefie-kolejne-zasady-bezpieczenstwa-oraz-solidarnosciowy-korpus-wsparcia-seniorowz>.
- Gliński, Z., Żmuda, A. 2020. Epidemie i pandemie chorób zakaźnych. *Życie Weterynaryjne*, 95, 554-560.
- Grochowicz, M., Salata-Kochanowski, P. (ed.). 2020. Działania miast podczas pandemii. Retrieved from: <http://obserwatorium.miasta.pl/wp-content/uploads/2020/04/Dzia%C5%82ania-miast-podczas-pandemii-marzec-2020-Grochowicz-Salata-Kochanowski-raport.pdf>.
- Klimczak, M. 2020. Przez koronawirusa zwieszono opłaty za bursy i internaty w Szczecinie. Retrieved from: <https://szczecin.naszemiasto.pl/przez-koronawirusa-zwieszono-oplaty-za-bursy-i-internaty-w/ar/c1-7620769>.
- Kolejne kroki w walce z koronawirusem – w sklepie mniej osób, ograniczenia w poruszaniu nieletnich, a parki, plaże i bulwary zamknięte. 2020. Retrieved from: <https://www.gov.pl/web/koronawirus/kolejne-kroki>.
- Koronasceptycyzm, czyli kto nie wierzy w zagrożenie epidemią. Komunikat z badań. 2021. 2020. Retrieved from: https://www.cbos.pl/SPISKOM.POL/2020/K_158_20.PDF.
- Koronawirus COVID-19 a problemy psychiczne. Retrieved from: <https://www.medicover.pl/o-zdrowiu/koronawirus-covid-19-a-problemy-psychiczne,6939,n,192>.
- Koronawirus#108 - wsparcie lokalnych przedsiębiorców. 2020. Retrieved from: <https://wiadomosci.szczecin.eu/artukul/koronawirus/koronawirus-108-wsparcie-lokalnych-przedsiębiorcow>.
- Majewska, M. 2020. Psychospołeczne skutki COVID-19. Wpływ izolacji i pracy zdalnej na psychikę. Retrieved from: <https://pulsmedycyny.pl/psychospoleczne-skutki-covid-19-wplyw-izolacji-i-pracy-zdalnej-na-psychike-994607>.
- Miejski plan zarządzania kryzysowego, cz. I, Plan główny. 2021. 2020. Retrieved from:

- <http://bip.um.szczecin.pl/files/C52C22D2D7414954850530C1015C54D5/Miejski%20Plan%20Zarz%C4%85dzania%20Kryzysowego.pdf>.
- Od 28 listopada wchodzimy w Etap odpowiedzialności. 2020. Retrieved from: <https://www.gov.pl/web/koronawirus/od-28-listopada-wchodzimy-w-etap-odpowiedzialnosci>.
- Od dziś wprowadzimy stan zagrożenia epidemicznego. 2020. Retrieved from: <https://www.gov.pl/web/koronawirus/od-dzis-wprowadzimy-stan-zagrozenia-epidemicznego>.
- Ograniczenia działalności gastronomicznej, rozrywkowej oraz funkcjonowania galerii handlowych. 2020. Retrieved from: <https://www.gov.pl/web/koronawirus/ograniczenia-dzialalnosci-gastronomicznej-rozrywkowej-oraz-funkcjonowania-galerii-handlowych>.
- Raport o stanie gminy miasto Szczecin za rok 2020. 2020. Retrieved from: http://bip.um.szczecin.pl/chapter_131221.asp.
- Raport o stanie gminy miasto Szczecin za rok 2020. 2021 Retrieved from: http://bip.um.szczecin.pl/chapter_131221.asp.
- Raport: system ochrony zdrowia w Polsce – stan obecny i pożądane kierunki zmian. 2018. Retrieved from: <https://www.nik.gov.pl/plik/id,20223,vp,22913.pdf>.
- Rok 2020 pod znakiem pandemii. Komunikat z badań. 2021. 2020. Retrieved from: https://www.cbos.pl/SPISKOM.POL/2021/K_015_21.PDF.
- Rząd przyjął Narodowy Program Szczepień – plan powrotu do normalności po pandemii. 2020. Retrieved from: <https://www.gov.pl/web/koronawirus/rzad-przyjal-narodowy-program-szczepien>.
- Skutki epidemii koronawirusa w życiu zawodowym i budżetach domowych. 2020. Komunikat z badań Centrum Badania Opinii Społecznej, 2020. Retrieved from: https://www.cbos.pl/SPISKOM.POL/2020/K_056_20.PDF.
- Stosunek do szczepień i postrzeganie polityki rządu we wrześniu. Komunikat z badań. 2021. 2020. Retrieved from: https://www.cbos.pl/SPISKOM.POL/2021/K_115_21.PDF.
- Wprowadzamy stan epidemii w Polsce. 2020. Retrieved from: <https://www.gov.pl/web/koronawirus/wprowadzamy-stan-epidemii-w-polsce>.
- Wychodzisz z domu? Zasłoń usta i nos! 2020. Retrieved from: <https://www.gov.pl/web/koronawirus/zaslon-usta-i-nos>.
- Zawieszenie zajęć dydaktyczno-wychowawczych w przedszkolach, szkołach i placówkach oświatowych. 2020. Retrieved from: <https://wiadomosci.szczecin.eu/arttykul/koronawirus/zawieszenie-zajec-dydaktyczno-wychowawczych-w-przedszkolach-szkolach-i-placowkach-oswiatowych>.