

Health impact of security agents' COVID-19 lockdown control tactics on citizens of north-central Nigeria: evidence and policy options

Chukwuka Eugene Ugwu,¹ Uchenna Paulinus Okafor,² Anthony Chukwuemeka Onyekwelu,² Chetachi Euphemia Orji-Okafor,³ Calistus Ifeanyi Mamah,¹ Obinna Chidi Anyanwu,² Nnamdi Charles Ajaebili,⁴ Paulinus I. Attama,¹ Chigozie Freda Ugwuanyi,¹ Modesta C. Okolo¹

¹Department of Public Administration and Local Government, Faculty of the Social Sciences, University of Nigeria, Nsukka;

²Department of Geography, Faculty of the Social Sciences, University of Nigeria, Nsukka; ³Nursing Services Unit, University of Nigeria Teaching Hospital Ituku/Ozalla, Enugu State; ⁴Department of History and International Studies, Faculty of Arts, University of Nigeria, Nsukka, Nigeria

Abstract

The COVID-19 lockdown control tactics used by security agents on the citizens of north-central Nigeria were studied for their effects on health. The convenience sampling method was employed to select six states of the study area. Due to the nature of the data collected, quantitative data analysis was limited to percentages, while state-by-state evaluation was used to summarize qualitative data sources. Additionally, hospital records from five

privately owned and two government-owned hospitals in each of the study area's states were generated, for a total of 42 hospitals sampled for the research. The obtained medical records demonstrate that the COVID-19 lockdown control actions by security agents have a detrimental effect on the health and well-being of the citizens in the study area. Amputation (0.27%), bacterial vaginosis (3.43%), coughing (11.16%), cataracts in the eyes (7.69%), *etc.*, were reported. There was an association found between victims' health issues and security agents' use of force. Proposed were reforms and least invasive methods of managing public health, including social marketing, education, democratic policing tactics, and facilitation engagement.

Correspondence: Uchenna Paulinus Okafor, Department of Geography, Faculty of the Social Sciences, University of Nigeria, Nsukka, Nigeria. E-mail: uchenna.okafor@unn.edu.ng

Key words: COVID-19; health challenges; security agents; north central Nigeria; lockdown control tactics.

Conflict of interest: the authors declare no potential conflict of interest.

Funding: none.

Ethics approval: the Ethics Committee of the University of Nigeria, Nsukka approved this study (APPROVAL CODE: UNN/EC/STAFF/024/FSS-MED/JUL/24). The study is conformed with the Helsinki Declaration of 1964, as revised in 2013, concerning human and animal rights.

Availability of data and material: data and materials are available by the authors.

Informed consent: the manuscript does not contain any individual person's data in any form.

Patient consent for publication: written informed consent was obtained from a legally authorized representative(s) for anonymized patient information to be published in this article.

Received: 6 October 2023.

Accepted: 19 June 2024.

Early access: 25 July 2024

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Healthcare in Low-resource Settings 2024; 12:11927

doi:10.4081/hls.2024.11927

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Introduction

Globally, the Coronavirus disease (COVID-19) has impacted negatively on the health of many people leading to so many medical emergencies including death during the era of the pandemic. Nadeem *et al.*¹ reported that the confirmed cases of COVID-19 worldwide recorded 84,780,171 with 1,853,525 deaths as of 20th May of 2021. The African and Nigerian history of COVID-19 indicates that Egypt recorded its first incidence on 14 February, 2020,² while the disease's emergence in Nigeria was recorded on 27 February, 2020.³

To eliminate the pandemic continuous spread in Nigeria, a broad summary of the Nigerian Government's response to managing the COVID-19 spread effect demonstrated that the Federal, State, and Local governments emerged with a plethora of public health control measures. Measures for the containment of the COVID-19 virus in Nigeria include lockdowns and enforcement of physical and social distancing among and within communities. Other measures included the closure of schools, and businesses (except those that deal with drugs, foods, and hospital services), the banning of all interstate movement, airports, seaports, and land border closures. There were compulsory closures of places of worship, social gatherings with the wearing of face masks.

In the course of enforcing these COVID-19 lockdown activities, noted deficiencies were observable in the country's handling of the disease management capabilities. To assist the government, collaborative private sector stakeholders were invited such as the coalition against COVID-19. Also, the main federal government's anti-COVID spread center called the Nigerian Center for Disease Control (NCDC), was manifestly empowered. Additionally, the UNO agencies and some NGOs all assisted in the initial Nigeria's response to managing the COVID-19 spread.

A major part of the enforcement of the COVID-19 lockdown

activities involved the Nigerian government's introduction of security agents to ensure lockdowns, restrictions of people's movement, and maintaining social distancing among other measures. For this paper, security agents are defined as a coalition of different public security outfits in Nigeria, under the auspices of the Nigerian police with the key role to ensure citizen's compliance with COVID-19 prevention regulations, maintenance of public order, safety, and security. These are the Nigerian government's employed security professionals or persons whose duty is to protect places or events from unauthorized access, harm or intrusion. For the purpose of the COVID-19 lockdown control measures, the various tiers of government in Nigeria evolved selected personnel from other security institutions in the country like the Nigerian Army, the Secret Security Services, the Department of State Services, and Neighborhood Security Set-ups. All these were encompassed in the general COVID-19 security agency under the control of the Nigerian Police Force (NPF), which is the main law enforcement and security institution in Nigeria, with the Inspector General of the Police as the Head.

In accordance with its mandate to manage the crisis generated by the COVID-19 pandemic, the NPF in May 2020, issued a security policy paper on ways to manage the COVID-19 closures and social distancing requirements called "Enforcement of COVID-19 regulation: operational guidelines for the police and other law enforcement agencies in Nigeria". The summary of this regulation is that enforcing people's restrictions due to COVID has imposed additional responsibilities on both the police force and other law enforcement agencies. The regulation requires security agents to be tactful, compassionate, and empathic to citizens in the course of their COVID-19 duties. At the same time, these agents were required to be firm, professional in duty, and remain polite and civil while respecting the fundamental rights of the Nigerian citizens. In the Nigerian context, some analysts have acknowledged concerns on the activities of these security agents as regards the COVID-19 lockdown tactics.^{4,5}

In the implementation of the anti-COVID-19 spread, a lot of emphasis has been stated on the need for human rights-promoting tactics.⁶⁻⁸ This becomes relevant as some control measures may, even enthrone harm than good to the citizens. In fact, analysts like Brook *et al.*⁹ opined that at the level of individuals, lockdown can cause some negative impacts such as psychological and emotional distress, loss of household income, and loss of employment. Based on these possible negative impacts of COVID-19 pandemic control measures, scholars such as Acheson and Haider *et al.* state that it is relevant to evaluate and monitor the social, economic, health and political impacts of lockdown during epidemic control such as COVID-19 and its consequent policy implications to mitigate such negative impacts.^{10,11} However, the dynamic health effects and impacts of the Nigerian security agents COVID-19 control measures on the well-being of Nigerians have been generally neglected by scholarship. Despite these earlier studies on the negative health effects of COVID-19 by some scholars,^{12,13} there exists a paucity of data on the negative health effects of the security agents' COVID-19 lockdown measures on the citizens of the north-central geopolitical zone of Nigeria. It is in the light of the above generalizations that this article takes as its general aim and objective the investigation of the phenomenon of the health impacts of the security agents COVID-19 lockdown control mechanisms, on the citizens of the North central geopolitical zone of Nigeria. To engage in the discourse, however, the following specific research objectives are raised to guide this study: i) understand the north-central States residents' experience of links between security agencies' COVID-19 control tactics and its health challenges; ii) capture the

reported medical cases of COVID-19 health effects from selected hospitals in the study area due to security agents' brutality on citizens; iii) understand the north-central State residents' perceptions the health challenges, inherent in the COVID-19 containment practices in the study area.

The study contributes to the understanding of the practical and theoretical underpinnings of the health impact of security agents COVID-19 lockdown control tactics on the citizens of north-central Nigeria and its policy dynamics. The least restrictive and coercive mechanism of achieving a public health pandemic is used for the study. It stipulates the adoption of full authoritative force and power of the state institutions only in extreme circumstances of pandemic spread control, which the COVID-19 era of pandemic did not warrant, we used quantitative and qualitative data analytic approaches in which respondents from the study area were involved.

The article is organized and structured in seven sections: the introduction, conceptual and theoretical perspectives on the subject matter, the study area, methods, results, discussion, conclusion and policy options. Since this present section is the introductory aspect, the next section deals with the conceptual and theoretical perspectives.

Conceptual and theoretical perspectives

The theoretical framework of least restrictive or coercive theory is used as the framework of analysis.

COVID-19 lockdown

All over the world, lockdown policies were designed and implemented by governments to control the spread of the epidemic of COVID-19. Lockdown as a concept defies clear and globally accepted definition, mainly caused by variations in design, implementation, and timing of the lockdown in different countries of the world. For Haider *et al.*,¹⁴ COVID-19 lockdown is set of adopted measures targeted at the reduction of transmission of COVID-19 disease, which are mandatory and indiscriminately applied to the citizens. Part of this definition is also the involvement of restrictions "on the established pattern of social and economic life". According to these scholars, lockdown adopts three intervention methods – the geographical containment, the home confinement and the prohibition of gatherings which includes closure of premises and establishments. This concept of lockdown reflects the opinion of Mboer *et al.*¹⁵ and Lau *et al.*¹⁶ on the concept of COVID-19 lockdown. The lockdown tactics are all measures used by a country's government to enforce geographical containment, home confinement, and prohibition of gatherings.

Health impact of COVID-19 security agents' control tactics

These refer to all observable and non-observable medical effects of the control measures. Many scholars have alluded to various negative health effects such as Mugabi,¹⁷ Ojukwu,⁵ and Brook *et al.*¹⁷ Some of the extreme force application by the security agents resulted in human deaths in some of the situations. These impacts are elements of this study's survey and data collection questions which were integrated into the findings of this study.

Framework of restrictive or coercive mechanism of public health management

This study is hinged on the least restrictive or coercive mechanism of achieving public ends. The key in the management of public health programs should be that the full force, authority, and

power of state institutions should be reserved for extreme circumstances as against the deployment of complete force.¹⁸ Though public health practice is meant to prevent harm, the key assumption here is that greater harm should not be construed in the process of preventing harm. In the accomplishment of this, more coercive mechanism should be the last resort in the failure of less coercive methods. Thus, the adoption of least intrusive means like education, discussion, and facilitation should be applied to the masses before the adoption of interdiction, regulation, and incarceration. The advocacy for the practice of the least restrictive or coercive means is enshrined in the Siracusa doctrine, which is an internationally agreed legal principles meant to justify conditions for the abridgment of civil liberty in public health management of pandemics such as the COVID-19 era. It advocates that the restriction of an individual's civil liberty must ensure sufficient legality, legitimacy, and necessity and without discrimination in its application. The application of this framework has been observed in Nigeria in the public health management tactics of correcting harmful traditional maternal health practices in Cross River State.¹⁹

The study area

The North Central zone is located in the following geographical coordinates longitude 3° 00" to 10° 00" E and latitude 7° 00" to 11° 00" N. It is one of Nigeria's six geopolitical regions, making up the majority of the Middle Belt. Benue, Kogi, Kwara, Nasarawa, Niger, and Plateau are six of its states, in addition to Abuja, the Federal Capital Territory of Nigeria. The north-central area covers the entire width of the country, from the border with the Republic of Cameroon to the border with Benin Republic, the map of which is shown in Figure 1 of this study.

Materials and Methods

A mixed method approach was adopted in this study which included, a structured questionnaire survey and semi-structured

oral interview that elicited key health challenges from respondents, based on their experiences of COVID-19 security agents lockdown control tactics. These methods have been applied in related studies such as Dawadi *et al.*²⁰ and O;Cathain and Thomas.²¹ The research data was collected during the last phase (phase 3) of the Nigerian COVID-19 national lockdown easing strategy, (August-October 2020). The convenience sampling method was employed to select six states, namely Benue, Kogi, Kwara, Nasarawa, Niger, and Plateau which formed the north-central geopolitical zone of Nigeria (Figure 1).

Population and sample size

The target population of the study area was 23, 428, 489 as in the 2006 census. It was extrapolated to 32,907,000 in 2020. The population of the study area was very large and was purposively narrowed down to victims of COVID-19 security agents' brutalization. From the survey carried out, 6814 victims were indicated in the six states of the study area. Because the population figure was finite, the Yamane formula was used to determine the minimum sample size.^{1,22}

$$(n) = \frac{N}{1 + N(e^2)}$$

In this formula, n = sample size; N = Total population; e = precision level. The precision level used in this study is ± 5%.

$$n = \frac{6814}{1 + 6814 (0.05)^2} = 379$$

The population derived from Yamane's formula is 379. For convenience, 20% after Nadeem was added making the total population size used in the study to be 486 respondents.¹ This was divided among the six states of the study area with a random selec-



Figure 1. North-central geopolitical zone, Nigeria (without federal capital territory Abuja). Source: GIS Unit, Department of Geography, University of Nigeria, Nsukka (2023).

tion of 76 respondents per state.

For the method of recruiting the 76 respondents from each of the six states, we adopted a stratified sampling approach. This was done by selecting 38 respondents from the first two major cities of each state for the usual mail-to-web survey making a total of 456 respondents,²³ while the qualitative oral individual survey was carried out using also, stratified sampling approach, picking 5 respondents from each state, making a total of 30 respondents. In all, 486 respondents were selected for the study, 456 for quantitative, and 30 for qualitative data collection. Both quantitative and qualitative questions were used to collect data which included 20 close-ended questions and 5 open-ended questions making a total of 25 questions used for the study. The qualitative data that demonstrated the perceptions of the victims on the subject matter were obtained through key informant interviews. Additionally, on-the-spot evaluation of the victim's situations was carried out by research assistants, who included medical doctors, community pharmacists, and nurses.

The analytical framework for quantitative data collected was statistics of simple percentages and frequencies which ensured a proportional summary and test of key variables. These were presented using simple tables. In other words, percentages and frequencies for each response option were calculated to access the level of agreement, disagreement or degree of variations with specific statements related to the key variable of the study.

The analytical framework adopted for the interview method were the narrative analysis method. It bothers on qualitative data analysis that emphasizes on interpreting the core narratives from respondent's personal stories. It employs the first-person narrative style acquisition, documentation or generalization, which allows the researcher to understand how respondents experience social phenomena. These experiences were summarized based on state-by-state evaluation. Questions for the respondents were targeted at eliciting individuals' experience on the health impact of Nigerian security agents' COVID-19 lockdown control tactics in the north-central states. Also, hospital records were generated from two government-owned hospitals and five privately owned hospitals from

each state of the study area making a total of 42 hospitals sampled, to show evidence of negative health effects of security agents COVID-19 lockdown control tactics on citizens in the study area (Figure 2). The sampled hospitals were mapped and their geographic coordinates were shown to ascertain the exact location of the hospitals in the study area (*Supplementary Table 1*). The data from the hospital records is different from the data derived from the population of the questionnaire survey.

Results

The sociodemographic features of respondents are consistent with the findings of related studies such as Rojas *et al.*,²⁴ and Haider *et al.*¹¹ However, of the 486 respondents for the study, the female respondents were in minority (156; 32%) compared to male respondents (330; 68%) in this study. This is in contrast with the findings of the related study by Rotimi *et al.*,²⁵ in which there were more female respondents (215 females as compared to 141 males) in a contextual study in Nigeria. In this study, however, the female respondents, though 32% of the entire population are relevant because they are the gender that experienced more sexual molestation from security operatives, besides the general human health and rights abuses common to both genders.

Health impact of security agents' COVID-19 lockdown control tactics and its attendant health effects on citizens

The respondents' answers to the question of whether Nigerian security forces had mistreated them during the COVID-19 pandemic lockdown were recorded. Respondents were selected based on being victims of either one or all of the cases of security agents' rough handling of citizens in the study area. In total, there were 275 reports of unlawful detention and arrest. Other signs of physical abuse that security agencies were responsible for included



Figure 2. Geographical coordinates of sampled government and private hospitals in the study area. Source: Fieldwork (2022).

tyrannical quarantine 382 (78.6%); whipping, slapping, pushing down, and general assaults 217 (44.6%); extrajudicial killing 28 (5.7%); torture 169 (34.8%); and sexual molestation 217 (44.6%); and tear gassing of gatherings 192, (39.5%).

The study's findings, utilizing the responses from the (456 respondents earlier mentioned) also showed a significant link between victims' health problems and these mistreatments of citizens as shown in *Supplementary Table 2* of this study. Evidence for this can be found in the survey reports of 227 (49.8%) head injuries acquired during a fight within a cell during incarceration as contrasted to 259 (50.2%), who had not. Also, 45 (17.6%) of survey participants stated they had been physically paralyzed as a result of arbitrary imprisonment.

The victims of the COVID-19 security officers' tear gassing of residents of the north-central states experienced a number of health issues. The inhalation of tear gas during the dispersal of the crowd presented health risks in the form of chest tightness. The majority of the victims 294 (64.3%) who experienced it, compared to 162 victims (35.7%) who did not, demonstrate the significance of the link between this indicator of security agents' enforcement and victims' chest tightness.

There is a significant association between choking sensation or shortness of breath and inhalation of tear gas. Of the respondents who had choking sensations and shortness of breath, 304 (67.7%) complained that they were tear-gassed compared to 152 (33.3%) who were not. There was also a significant relationship between complaint of inhalation of tear gas and health issues of swallowing difficulties. A significant number of the respondents 268 (58.7%) agreed that they had swallowing difficulties. For chemical burns, a total number of 304 (67%) affirmed that they experienced it, while 152 (33%) did not.

Reported cases of COVID-19 health effects from selected hospitals in the study area

To determine the reported cases of the COVID-19 health effects in the study area, medical records from the total number of 2534 case notes of patients with security agents' COVID-19 lockdown control tactics were selected during the months of March-October, 2020, from the 42 hospitals selected from the study area. The modality for selection depends on the nature of the illness or injury acquired during the COVID-19 period and if the illness or injury was a result of the activities of the security agents' enforcement of the COVID-19 restriction/lockdown in the study area. The type of illnesses and injuries recorded and the number of patients treated are shown in *Supplementary Table 3*.

Qualitative findings

The qualitative findings of this study are organized within the context of a state-by-state report of the in-depth interview report of respondents. To arrive at these reports, all the interview proceedings were audio-recorded, with a particular selection of the aspects of the recorded interviews that are relevant to the study's objective. Language difficulties were overcome through translation of the local languages. The consistency of the translated language was checked and transcribed. The respondents' reports are stated below.

Benue State

Report of the victim's experiences of the health impact of security agents' mistreatment of citizens in the course of the COVID-19 lockdown management from a female respondent, residing at Apir town of Benue state, indicated that she was raped severally by two security agents at night where she was incarcerated during the

period. According to her:

'These two-armed men violently pulled me down on the floor of the cell, and took turns to rape me. While one of them is raping me, the second is using available clothes to cover my mouth from people hearing my shouting.'

On release from detention, the respondent became sick, visited the hospital and reported as follows:

'I was diagnosed with genital inquiry, vaginal bleeding, and urinary tract infection. I spent a lot of money paying for my treatment.'

Kogi State

A yam trader caught at Anyigba market, was beaten thoroughly and later released by these security agents for violating COVID-19 quarantine's rules. According to this victim, three days later:

'I noticed I can hardly sleep (insomnia). I was having sweating, constant headaches, pains, loss of consciousness, nervousness, and anxiousness. Upon visiting the hospital and narrating my experience with the security agents, I was diagnosed with post-traumatic stress disorder.'

Kwara State

There is consistent tear gassing of people to prevent gatherings in Kwara State. This phenomenon was orchestrated by Muslim worshippers who insist on worshipping together in their mosques in spite of the restrictions placed on such activities during the COVID-19 pandemic. From the experience of the medical consequences, related to serious exposure to tear gas, one Muslim mosque official residing in the state capital Ilorin affirms as follows:

'The COVID-19 security agents threw canisters of tear gas at us during our Friday prayers. Many adherents were seriously wounded in the stampede that followed. Personally, I received excess of the tear gas inhalation. Within the next few hours, I rushed to the hospital where I was diagnosed with hemorrhage and severe asthmatic disposition.'

Nasarawa State

A young girl of 19 years old, in Akwanga town was raped by security agents inside a forest during the sit-at-home era of the COVID-19 period. Having been caught on the road alone by these security agents, she was forcefully taken to the forest where she was gang-raped. On noticing health challenges after one month of her experience, she visited a hospital, where she reported her worst expectations:

'I was diagnosed pregnant, with sexually transmitted infections of gonorrhoea which I am still receiving treatment. My parents insisted I underwent an induced abortion, which I did to save the public shame associated with the incident.'

Niger State

Interview respondents from Niger state reported related health challenges from the COVID-19 security agents. An elderly man resident at Minna gave an insight into his health difficulties after going through a heavy bombardment of tear-gassing with some of his friends in the marketplace. From his doctor's diagnoses, he said:

'I had increased chronic obstructive pulmonary disease, irritation of the lungs and respiratory failure. I was discharged after one week of admission in the hospital.'

Plateau State

A young man of 30 years who was discharged from General Hospital, Dengi, Plateau State after tear gas from an evening football exercise by the COVID-19 security agents' shared this experience with the study's researchers in this way:

'We were dispersed from the football field without prior warning with tear-gassing. Many of my football colleagues experienced health challenges as a result of that. For me, I suffered (hospital report) temporary blindness, coughing, nausea and vomiting. It was only after some days of treatment, that I recovered from these illnesses.'

Discussion

If the security operatives' COVID-19 lockdown enforcement was significantly proportionate in the context of COVID-19 containment in the study area, it was one key aspect that the respondents reported on very strongly. Individuals' rights to liberty, life, and security were recognized in Article 3 of the Universal Declaration of Human Rights (UDHR), adopted by the United Nations in 1948, while torture, cruelty, and excessive punishment or treatment were prohibited in Article 5. In accordance with Article 9 of the UDHR, arbitrary arrest, detention, and punitive exile were prohibited. Nigerians are protected by these UDHR laws, however, some of these human rights abuses are also prohibited by the Nigerian Constitution (1999) as amended.

There are public health measures that typically restrict internationally recognized individual liberties when governments undertake pandemic containment and management policies. These restrictions are mentioned in several documents, including the International Convention on Civil and Political Rights.

However, a minority of the respondents (61; 10.16%) were of the opinion that appropriate steps were implemented by the security authorities in regards to the COVID-19 shutdown in a proportionate intervention mechanism. This shows that more than 74.8% of the respondents believed that unjustified and haphazard force was used in the North-central states of Nigeria. Studies and reports from Alindogen,²⁶ Human Rights,²⁷ in the Philippines, Sri Lanka, Iran, El-Salvador, and Uzbekistan all pointed to discoveries of this kind. The conclusions of this study's component were supported by Amnesty International.⁶ Amadasun,⁷ Kunene,²⁸ and other studies undertaken in Zimbabwe, South Africa, and the other States of Nigeria under the guise of COVID-19 lockdown measures. All discovered the abuses by security agents on various COVID-19 lockdown measures to be the same with this study.

The issue of respondents' arbitrary imprisonment and tear gas inhalation is related to additional health issues caused by the security agents' excessive use of force in enforcing the COVID-19 lockdown. Hypertension, psychological issues, and paralysis are some illnesses that are related, as obvious consequences of incarceration. In Maria and Rosemary,²⁹ seminal study of sub-Saharan African nations, similar findings of this study are published, indicating a significant relationship between people's detention and development of similar health challenges.

Conclusions

The COVID-19 lockdown enforcement strategies used by Nigerian security officers in the north-central states of Nigeria were examined in this study. As part of the COVID-19 geographic

containment, it specifically evaluated the citizens' vulnerability to precarious enforcement practices and their health impact on the citizens of the study area. The empirical analysis of the survey poll supports the theoretical postulations that, despite the Nigerian government's containment policy for the COVID-19 pandemic being largely legal and necessary, the security agencies failed to use the least restrictive, intrusive, or coercive methods in the process. The results were considerable human mortality and negative health issues for the victims.

This article submits that the implementation of the COVID-19 lockdown policies as observed from the enforcement mechanisms of the security agents in the study area engendered health challenges for the citizens thus leading to the association of such containment practice to paralysis, hypertension, and chest tightness among other health problems. Using public health techniques such as social marketing, education, facilitation, and discussion which are the least invasive possible when dealing with crises such as COVID-19, was recommended.

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Online Supplementary Material:

Table S1. Names of sampled government and privately owned hospitals in the study area.

Table S2. Quantitative results of links between rough-handling of citizens and its associated health challenges.

Table S3. Summary of information on the number of patients (evidence of negative health effects) treated in the selected hospitals for an 8-month period (March-October, 2020).