

Counting the Dead in Nursing Homes during the COVID-19 Pandemic

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According to Public Health France, at the end of the first year of the pandemic in France, 5,921 nursing homes for the elderly (79.6 percent) had recorded at least one case of COVID-19. Some had to deal with an isolated case, others with veritable clusters, but all nursing homes faced an unprecedented social and public health crisis. Over this period, 33,864 nursing home residents died, accounting for more than one-third of all deaths (37.6 percent). Besides the fact that they were seriously affected by COVID-19, nursing home residents were also one of the groups most affected by the health and safety norms put in place, which were legitimized in part by the epidemiological statistics: they found themselves subjected to a longer and more draconian lockdown than the rest of the population.

Didier Fassin underlines the paradox between the declaration of the president of the French Republic that “nothing is more important than human life” (Macron 2020) and the fact that the most vulnerable among the elderly, those living in nursing homes, were the victims of a “negligence so tragic that deaths in nursing homes were not even included in the statistics intoned monotonously every day” (Fassin 2020). It was as if mortality in nursing homes was, for a time, intentionally constructed as a nonproblem in the sense of agnotology (Oreskes and Conway 2012). Initially, indeed, recording cases and deaths among nursing home residents and making the statistical data available to the wider public was difficult, such that mortality data for nursing homes began to be disseminated after hospital death data. On several occasions, moreover, mortality statistics that were already made public had to be corrected, which raised questions about both the methods used to gather them and their robustness.

In general, the “Quantitative Age” (Deringer 2018) is characterized by an ambiguous relationship with figures. Regarded as omnipotent, the figures that pervade

Florence Jany-Catrice warmly thanks the Institute for Advanced Studies (Princeton) for hosting her during the 2020–21 academic year. This research has also been funded by the French National Research Agency (ANR)/Région Hauts-de-France. Translated by Andy Wilson.

the media to the point of saturation are at once indispensable and objects of denigration and suspicion. From this point of view, the pandemic period seems to have unleashed a “quantophrenic” age as a result of the tumultuous eruption of epidemiology and its statistics into the media.

This is hardly surprising since, in a statocentric era (Gosh 2018) in which policy is data driven (Bruno, Jany-Catrice, and Touchelay 2016), numbers do not simply describe the realities they reveal. They are also representative and interpretative frameworks that define, construct, and regulate reality to diagnose and describe situations, raise awareness of how such situations are evolving, and/or assess their severity. With regard to health, while numbers may have promoted a collective awareness of infection and hospitalization rates and of admissions to intensive care, they also reminded each person of their individual responsibility to improve the future by helping to flatten the epidemic “curve,” a way of taking one’s destiny into one’s own hands and “making the future now” (Eyal 2020). Numbers generated during the pandemic period contributed to the definition and construction of the (variable) performance standards used to evaluate public policies: a downward trend in the number of deaths was regarded as a victory by the government, leading some authors to advise, “Beware the magic of metrics” (Appadurai and Kift 2020). But that same government regarded a zero-COVID policy as a success and its case or mortality data might trigger a lockdown, the level of which could vary.

It is in this context that the present article is situated. We analyze the genesis and consolidation of “the statistical argument” (Desrosières 2008) around mortality during the pandemic, focusing our investigation on mortality in nursing homes. We begin by describing the specificity of the health data collected in nursing homes from the perspective of Michel Foucault’s notion of *biopower*. The article goes on to explore the social conditions under which these data were produced, asking how they were produced and through what channels they were disseminated. The investigation focuses on the processing of the data produced and their dissemination by various actors in a web of interaction between agencies. This web was characterized by the involvement of myriad actors and by its ability to generate vagueness and uncertainty. Finally, we show the weakness of the nursing home system as an institution. The weakness of the mortality data is just one of many other deficiencies, whether economic (shortage of resources), institutional (permanent tension between health and social care), or symbolic (out-of-sight situations).

A Biopower Era

PUBLIC STATISTICS AS “STATE SCIENCE”

In formulating the concept of biopower, Foucault established the notion of a new relationship between power and life. Thus, the object of biopolitics is life, understood as a scientific and political problem. This power over individuals’ biological lives is exerted in specific ways, in particular through a “state control of the biological,” which concerns not only birth, health, and accidents, but old age and death as well. In the era of biolegitimacy (Fassin 2005), biopower is generally exerted through three channels (Jasanoff 2020): the juridico-legal channel, comprising the processes by which “illness” is defined and the establishment of systems for dealing with deviant behaviors; the disciplinary channel, establishing how an individual should behave to remain in good health; and the preventive channel, including statistical and mathematical systems¹ put in place to describe, predict, and manage illness. Cost-benefit analyses may then be deployed with the aim of gaining social acceptance for this biopower. Thus, statistics are integral elements of biopower. Far from advancing knowledge with the aim of learning from it, biopower statistics are a tool of governance and a space in which power can be exerted. The pandemic period of COVID-19 was marked by a very Foucauldian specificity, developed in *Security, Territory, Population* (2009). In one of his lectures in 1978, Foucault shows how, historically, statistics have allowed the emergence of a specific way of thinking about and representing illness. In particular, the idea of “cases” spreads as a way of *individualizing* the collective phenomenon of illness.

Conversely, statistics are also a way of *collectivizing* the phenomena of the disease, from the language of metrics and rational logics (Foucault 2009). Statistics were placed center stage to demonstrate the authorities’ ascendancy over, and control and management of, the epidemic and hence of the population and its health. The first months of the pandemic were marked by the spectacular eruption of life and death statistics into people’s daily lives through the media and government policies, making “life itself an object of explicit calculation” (Foucault 2014: 44).

PANDEMIC, BIOPOWER, AND COMMUNICATIONS WITH THE PUBLIC

The pandemic of the 2020s can be regarded as the manifestation of a new health order (Jasanoff 2020). From the very beginning of the health crisis, the French

1. Jasanoff (2020: 127) speaks of “mathematical predictions of incidence, mortality and cost-driven policies on the nature, stringency and duration of measures undertaken to suppress the virus.”

government established a three-way conversation between itself, the scientific community, and the statistical apparatus.

These political communications, which relied heavily on and were in turn informed by statistics, latched onto the symbolic power of scripting based on PowerPoint presentations to show a promise of transparency, and to demonstrate that a tally was being kept even if the situation was not exactly under control. “Magic metrics” (Appadurai and Kift 2020) were deployed to depict the state of the pandemic, to list the number of dead, and to justify the policies put in place. Thus the pandemic data were used to underpin the repeated dissemination of preventive behavior norms; the declaration of a state of emergency in France on October 17, 2020; the announcement of nationwide or regional lockdowns without the involvement of any parliamentary body and justified by a “war council” whose deliberations remained secret; as well as the deployment of travel tracking software. When authority is in peril, it calls for transparency.

Official communications around the epidemiological data also resembled a form of social marketing, an approach based on scientific data drawing on all available tools to give coherence to the messages and policy interventions aimed at improving the well-being of individuals and society. The mortality data were put to various uses, many of which exploited the tension between their function as a diagnostic and knowledge-generating instrument and their role as an instrument of government and social marketing seeking to persuade public opinion of the legitimacy of public action. All in all, the statization of biology is marked by a production of mortality statistics and a state that claims to control their production and dissemination: does this presage an ideology of quantification (“more data”)? In any case, the state seems to act, through the over-dissemination of statistics, “as if” it controlled the situation.

THE EXPERTS CHANGE SIDES

A new narrative power was given to certain professions, notably infectious disease specialists, immunologists, and even epidemiologists working in the public sector or on their own account. The period of quantification gave this narrative a character that was both dramatic (the daily announcements on television of the numbers of deaths and hospitalizations generated anxiety in many) and disembodied (the mortality figures concealed the human dramas that lay behind them), marked as it was by a data-driven policy. Concerned about its external communications (Andolfatto and Labbé 2020), the state nevertheless depended in its decision-making on administrative principles (particularly for its information feedback and data communica-

tion) and external expertise, of which it made increasing use, in particular by calling on consultancy firms for support in drawing up and implementing its policies (Assassi 2022). During the pandemic, these communications were marked by severe tensions between medical, economic, social, and regional assessments, to the detriment of economics, which had hitherto played a dominant role in the legitimation of public policies, at least in the early months, and to the benefit of epidemiology. These tensions arose because it was not always clear who the experts were (Eyal 2020).² Government communications did indeed rely heavily on epidemiological statistics. All in all, the figure of authority of the pandemic period of the years 2019 gives to see a definition that combines all these traits: in an era of post-truth, the authority is the “as-if-ness” that succeeds, that masters the narration of the story of its success (the “success story”) or the promise of success.

What statistics were these communications and decision-making based on? What did the statistical system around COVID-linked mortality, particularly in nursing homes, consist of? How can the information circuit (data reporting) and its dissemination be made visible? It is to these questions that we now turn.

Constructing the Mortality Statistics

The system for producing mortality data has three dimensions: data production, the data reporting circuit, and the uses (public and private) to which the data were put.

The production of data is an immense social undertaking requiring a diverse range of tasks to be completed and involving a broad array of actors. The system for compiling nursing home mortality statistics interacted closely during the pandemic with a complex statistical network involving, to varying degrees, a wide variety of protagonists: hospital administrators or directors, general practitioners or doctor-coordinators, the French Epidemiology Center on Medical Causes of Death (CépiDC/Inserm), the World Health Organization (WHO, with which it liaised to establish standard international rules), the regional health agencies, Public Health France (PHF), and the statistical office of the French Ministry of Health (DREES). All played their part in the data production chain (deaths, cases, and later, vaccinations) adapted to the characteristics of the pandemic. Some of these actors developed and adapted classifications and nomenclatures;³ others transmitted infor-

2. This led Gil Eyal (2020) to ask, “Who speaks on behalf of the virus?” He highlights the disputes, the polarization around certain actors (Professor Raoult in France) and the models that produced divergent results. Expertise emerged at a time when it was not very clear who the experts were. This is nothing new, says Eyal: as long ago as the 1960s, there were “multiple claims to speak as experts.”

3. For example, the doctors who certified deaths and identified COVID-19 as the primary cause.

mation, filled in forms, or entered data. This large web of agencies, which seemed proportional to the degree of anxiety and uncertainty among the public authorities, was brought into play in a context marked by strong constraints linked to the urgency of the pandemic and the uncertainty of the situation.

Data transmission and aggregation also constitutes an important phase in the statistical undertaking. In the case of the nursing home mortality statistics, there were two transmission channels: (1) the administrative channel, through which death certificates were transmitted either digitally or as hard copies to be processed by CépiDC; (2) the administrative management channel, consisting of a platform and questionnaire set up by Public Health France, which required information to be transmitted from nursing homes that was subsequently checked, aggregated, and formatted to be made available to the public.

Finally, the *public uses* of the data produced in these ways constituted a crucial phase of the statistical undertaking, since they formed the basis for government communications and contributed to health policy decision-making. We return now to the two data production channels.

During the electronic certification process, doctors can fill out a death certificate online that is uploaded immediately to CépiDC. These digital certificates accounted for 17 percent of all death certificates at the end of 2018 (Rey 2020) but still represented no more than 30 percent of the total at the end of 2020 (interview with director of CépiDC, March 25, 2021). Thus the database on which the entire information circuit rests depends on the doctors reporting the deaths. For CépiDC, it is the primary source of information *on the causes* of death. This information may be unreliable, however, particularly because doctors seem to be inadequately trained in the process of filling out death certificates; they spend “one hour in all medical degree courses and on average five years before doctors fill out their first death certificate.” Additionally, “many doctors complete only one certificate a year” (interview with director of CépiDC, March 25, 2021). The lack of resources available to CépiDC due to neoliberalism and the weakening of the social state also constitutes a brake on the production of high-quality data. The director of CépiDC expressed his concern about a large “staffing gap”: the team of medical coders has shrunk from twelve or thirteen people ten or eleven years ago to three and one-half today. He further discussed the difficulty of making activities related to death attractive to recruits: “I won’t go into the details . . . but the salary scales being what they are in jobs not linked to research, we find it very difficult to attract people. Even with open positions, we don’t manage to recruit.” Finally, while the lack of training for doctors may contribute to the unreliability of the “causes of death” recorded on the certificates, this is not the only explanation. Another source of fallibility is linked

to the fact that the CépiDC data are recorded at the place of death. Consequently, the number of nursing home deaths varied depending on whether or not it was the practice to take nursing home residents to the hospital if their state of health deteriorated. The policy on transferring residents to the hospital may have varied from one nursing home to another, from one wave of the epidemic to another, and from one region to another. One nursing home manager told us, “In the first wave, we were instructed that residents should not necessarily be hospitalized. Some were when certain situations got out of control, because we’re not a healthcare establishment” (interview with manager of nonprofit nursing home, March 22, 2021). He added, “In the second wave, residents were perhaps hospitalized as a matter of course . . . there was a change in the care.” Another explained, “The question the doctors asked was: ‘Is it someone who can be revived or not?’” (interview with manager of nonprofit nursing home, April 13, 2021).

Alongside the data produced by CépiDC, the regional health agencies and Public Health France set up a channel for the production and transmission of COVID-19 case and mortality data. This channel was particularly informal in the early weeks of the pandemic. Until the end of March 2020, nursing homes and regional health agencies engaged in an informal dialogue with each other,⁴ and the nursing homes sent their COVID-19 case and mortality data to the regional agencies by email, filling out—sometimes with difficulty—the Excel spreadsheets hastily created by some of the regional agencies. Then, alongside the Si-vic system (an information system for monitoring the victims of attacks and exceptional health situations set up in 2016 after the terrorist attacks in France, but of little relevance in a pandemic in which the “emergencies” were medical rather than surgical), Public Health France activated a platform known as “voozanoo” that could be used for the transmission of COVID-19 case and mortality data from medical and social establishments, particularly nursing homes.⁵ Rather mundanely, the purpose of collecting these case and mortality numbers was twofold: first, to produce knowledge, and second, to assist in the management of the pandemic. Cases and deaths were identified and counted “to put management measures in place rapidly” and to help with “the management of outbreaks of COVID-19 in nursing homes and other medical and social-medical facilities” (voozanoo user guide, 2021).

The quality of the data reporting was compromised by the belated activation of the platform, by the urgency of the situation, by the nursing homes’ structural lack

4. As early as the end of February 2020 an emergency medical center was set up, managed by Public Health France.

5. The voozanoo platform is hosted by a private company.

of resources, and by the cyclical lack of personnel, the employees having themselves been largely affected by COVID-19. The system failed to protect the most vulnerable among the workers (Kift 2022: 143).

Launched at the end of March 2020, a month when nursing home residents were not allowed visitors, the platform required that all cases and deaths prior to the end of March 2020 be reported. The social conditions under which these data were produced made reporting awkward, to say the least. One nursing home manager explained that “the regional health agency instructed us to report the data via the daily surveys. Even if there were no cases, we had to fill them out” (interview with nonprofit nursing home manager, March 22, 2021). The truly acute crisis that nursing homes were going through at that time (“It was crisis management, pure and simple”; interview with manager of a mutually owned nursing home, March 16, 2021), combined with their structural lack of resources as well as with memory biases affecting the early weeks of retrospective data gathering, may have adversely affected the quality of the data reported in this initial data-gathering period. Furthermore, the absence of tests in the early waves of the pandemic gave rise to estimations that were, on occasion, fairly unreliable, due to the numerous clusters, the proliferation of local, nonstandardized practices, and the impossibility of verifying the cause of death by tests.

In sum, the public data thus constituted for nursing homes were disseminated on a weekly basis. They underlined the advanced age of the victims and their comorbidity to justify public action, in particular the closure of nursing homes, and to “promote and justify the action of the authorities, and enlist the public in the war against the virus” (Peretti-Watel, Alleaume, and Constance 2022).

All things considered, the institutions’ encounter with public action—notably through the coding and quantification of COVID-19 cases and deaths—left neither the institutions nor the statistics unscathed. In the early days of the pandemic, only those nursing home residents who had died in the institution itself were included in the count. The others were included in the hospital mortality statistics.

Once this first count had been carried out, some of the actors interviewed had no hesitation in pointing to a “harvesting effect” to explain the statistical increase in mortality. This epidemiological term gives nuance to the mortality statistics for the elderly, on the grounds that some of them would have died at a later stage “anyway.” The harvesting effect argument acted as an anesthetic (Gamba et al. 2020) against the sheer scale of the human tragedy revealed by the statistics.

The Unreliability of the Mortality Statistics for Elderly Nursing Home Residents and Infrastructural Weakness

The saturation of the media with statistics and the omnipresence of scientists, particularly epidemiologists, stand in sharp contrast to certain shortcomings in the provision of real-time data, since measuring mortality and its causes is by no means self-evident (Le Bras 2000).

The pandemic had the effect of revealing these structural difficulties, colliding as it did with

a healthcare system . . . that had already been shaken by multiple crises to which professionals had been trying for years in vain to attract the attention of the public authorities: crisis in accident and emergency departments, crisis in primary care in urban areas and medical deserts, crisis of the bronchiolitis epidemic, extremely serious crisis in psychiatry, crisis of the shortage of medical and paramedical staff in public hospitals. . . . More fundamentally, this accumulation of crises in various parts of the healthcare system has revealed a paradigmatic crisis in our entire healthcare system, which has been further aggravated by austerity policies. (Grimaldi and Pierru 2020, qtd. in Lambert and Cayouette-Remblière 2021: 15)

The economic imperative within the official statistics system, as well as the competition between agencies and institutes involved in health policies, weakened the reporting of case and mortality data at the very moment that these data constituted the basic building block of official statistics on deaths in nursing homes.

THE ECONOMIC IMPERATIVE AND STAFF SHORTAGES IN NURSING HOMES

One of the characteristics of neoliberal bureaucracy is that it rests primarily on calculation, using management indicators and various aggregates. Thus even before the pandemic, nursing homes had to provide a considerable amount of data: data for the agencies collecting employer and employee social security contributions, forecasts of income and expenditures, end-of-year data for actual income and expenditures, activity reports, performance dashboard data for the National Agency for the Support of the Performance of Health and Medical-Social Facilities, and so on, all reported more or less formally depending on the size of the establishment and its organizational structure. These values are important factors in nursing homes' financial lives, since they serve to optimize certain activity indicators. After all, residents' average levels of dependency and care needs as calculated by the establish-

ments determine the amount of public funding they receive. The social conditions under which establishments confronted and managed the COVID-19 platform were shaped by this neoliberal bureaucracy, combined with a shortage of staff that was a direct effect of austerity policies (Delouette and Nirello 2016, 2020).

While this staff shortage has well-documented effects on the ill-treatment of elderly people, it also affects the quality of the data reported in times of crisis: the task of filling in data on the platform required nursing homes to have at their disposal sufficient resources internally as well as an IT infrastructure that was up to the job. “But there are prior stages [such as] obtaining the right tools—some people still have old computers that take twenty minutes to boot up—[and] having functional networks. In our establishment . . . Wi-Fi was installed last year, I think. There’s also the learning phase, training employees to use the digital tools” (interview with an IT professional, February 12, 2021).

The small independent nursing homes in particular did not and still do not have categories of staff able to take responsibility for data reporting over the long term and on a regular basis. Some managers told us they had to fill in the data on the platform “when they were able to.” In other cases, deputy managers or the nurse took on the task, often in addition to their normal working day. This lack of resources led to some *incomplete* data reporting, which in turn led the regional health agencies to send out regular reminders. “The regional health agency regularly asked us to chase our members up because the reporting rates weren’t good,” explained a nursing home director (interview, April 13, 2021).

Overall, some of the managers we met lacked experience and, like their nursing and medical staff, had high turnover rates. The teams had to deal with more pressing issues and did not have time to fill out forms or questionnaires on the platform, sometimes failing to do so entirely and sometimes filling them out twice. There was a sort of rising barrier to the top-down, data-driven policy.

STRAINED RELATIONS BETWEEN THE ACTORS IN THE HEALTH INFORMATION AND GOVERNANCE SYSTEMS?

Why were so few of these death certificates digitized when they could have served as the basis for a real-time database and, according to the actors in the information system, for the establishment of public policies formulated closer to real time? Above and beyond the digitization issue, several sources of tension can be identified between DREES, DGS (public health policy), and DGOS (responsible for hospital catchment areas). Public Health France, the branch of the DGS responsible for implementing public health policies, encroached on these three organizations’

territories while increasingly extending its sphere of operations. As the successor organization to the Institute for Public Health Surveillance, Public Health France found itself at the forefront of operations. All things considered, the multilayered administrative network, the health system's web of agencies, and the power struggles within these public agencies and other bodies had repercussions for the information system, whether at the beginning of the crisis, when efforts were being made to establish appropriate protocols, or throughout the pandemic for the reporting of high-quality data.

Nursing home mortality data are one of the building blocks of the systems of mortality statistics embedded in a vast public health data system. This information system appeared to be extremely disorganized in the early months of the pandemic, with the public authorities focusing solely on hospital intensive care capacity. This lack of preparedness was surprising given a recent history marked by decades of epidemic alerts and, as far as the elderly are concerned, a particularly deadly heat wave in 2003. The greater ability of Asian countries to deal with the virus, at least in the early months of the pandemic, was attributed to their various experiences with SARS, which led to the establishment of more agile systems (Eyal 2020). Western countries seem to have learned less from their past experience.

Despite a strong push to centralize management of the epidemic, the disorganization of public information and regulatory systems was linked to structural factors, in particular neoliberal bureaucracy, the deliberate weakening of public institutions, and more globally the collapse of the social-welfare state. This lack of preparedness was and still is all the more inopportune since the health of vulnerable individuals (children and the elderly) acts as a crucial early warning system in a pandemic as it does in other catastrophes.

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