Impact of Leadership on the Implementation of Public Policies for Disease Control in Mexico

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Abstract

The research conducted on: "Impact of Leadership in the Implementation of Public Policies for Disease Control in Mexico", whose objective: is to analyze the role of leadership applied by the then Secretary of Health Hugo Lopez Gatell, in the execution of public health policies, during the pandemic of COVID-19. This pandemic presented itself as a historic challenge worldwide, but above all, it put the Mexican health system to the test. Consequently, the government responded with a national policy, led by the Secretary of Health. This policy ensured the containment of the virus, reinforced the capacity of the hospital system and strengthened public health in Mexico. The methodology used was based on a qualitative analysis that included interviews, case studies, and official documents, focusing on the figure of the then Secretary of Health. The findings showed that there are many challenges in terms of communication, management, and coordination. In addition, there is a notorious absence of a permanent transforming leadership that would allow the creation and effectiveness of public health policies that respond reliably in contexts of crisis in Mexico.

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Introduction

We live in a world of constant change, such changes occur in all areas. In human beings, it is reflected in their way of thinking, acting and in the evolution of diseases that, years ago, would never have been thought to exist.

These changes require people capable of facing them, confronting them and resolving them successfully. This is where the concept of leadership becomes important. According to Hernández et al. (2023), leadership is the ability to guide and direct a group or team towards the achievement of specific objectives, in search of a common benefit. As well as, to inspire others towards the achievement of objectives, based on respect, authority and mutual trust.

For their part Jin et al. (2016), indicate that there is abundant literature demonstrating the impact of transformational leadership on the willingness of followers to work towards organizational goals, achieving higher levels of performance and higher levels of creativity.

From this perspective, each person adopts their own leadership style in the face of challenges, based on what they have seen and learned throughout their life. In this sense, and as a result of the comparative analysis conducted, the characteristics demonstrated by the Secretary of Health, Hugo López Gatell, at the beginning of the COVID-19 pandemic, support the identification of a transformational leadership style. However, the research reveals a leadership approach that initially appeared pleasant and reassuring to the population but, over time, evolved into a closed and unempathetic approach, ultimately becoming authoritarian leadership.

As a result, it significantly impacted both the effectiveness of the government's response and public trust. Therefore, this study proposes analyzing the fundamental role of leadership in the successful implementation of policies, identifying outstanding practices and areas for improvement. In doing so, it offers a critical and constructive perspective that, according to the results obtained, can strengthen the weaknesses evidenced during a health crisis as catastrophic as COVID-19 in Mexico. This approach aims to promote better management and communication supported by a leadership style that can effectively address future health crises.

In this order of ideas, considering that the new normality and the use of ICT will change the dynamics within organizations, today's leader must develop specific skills and qualities that allow him/her to face the new challenges, among them, strategic agility, emotional intelligence,

cultural intelligence, courage, authenticity and focus (Marr, 2020).

It should be emphasized that during the COVID-19 pandemic, the leadership of the Undersecretary of Prevention and Health Promotion, Hugo López-Gatell, generated a wide debate in Mexico, both for his achievements and for the criticisms received. Communication and decision-making were key to the implementation of public policies aimed at mitigating the spread of the virus. This leads us to ask: *How does leadership style impact the effectiveness of public health policies, particularly in emergency situations such as a pandemic?*

The decisions taken by López-Gatell's team show that crisis management is a complex field where successes and mistakes are intertwined. According to (Pérez & Martínez, 2021), a leader provides the ability to inspire confidence and motivate a team in times of crisis, which is fundamental for an effective leader. Thus, the implementation of public policies, the epidemiological traffic light and the vaccination strategy revealed the importance of clear and cohesive leadership. However, despite the criticisms, its communicative approach sought to keep the population informed, a crucial factor for adherence to health measures. However, the data provided by the Secretary of Health were neither accurate nor reliably corroborated, affecting their credibility. It is precisely here where it becomes vital to analyze how leadership impacted not only the management of the health crisis, but even more so, public confidence in health policies, which in turn affects the effectiveness of the actions implemented.

The effect of Leadership on the Effectiveness of Government Response during the COVID-19 Crisis as a Public Health Sector in Mexico

As mentioned in the previous section, the COVID-19 pandemic posed significant challenges to public health worldwide, testing the capacity of governments to manage large-scale crises.

In this context, the creation of public policies focused on health and a transformational leadership style in its leaders would be the key pieces to achieve effectiveness of governmental response, marking speed, security, coordination and efficiency in the implementation of measures, which would allow counteracting the effects of the COVID-19 pandemic.

Thus, (López & Sánchez 2022), compared the leadership strategies of Mexico and Chile during the COVID-19 pandemic, highlighting that the effectiveness of the government response is closely linked to the ability of leaders to make timely decisions, communicate clearly, and coordinate the efforts of different actors in this way, the administration with which the health crisis was carried out showed both strengths and weaknesses in terms of leadership, which directly influence the effectiveness of the government response.

In this sense, (Hernández & Ramírez 2021), also compared Mexico's response to the COVID-19 pandemic with that of other countries, highlighting that political leadership played a crucial role in the effectiveness of the measures implemented. The authors argue that the decisions of the leaders of other countries, unlike Mexico, in terms of communication, coordination and decision making, significantly influenced the outcomes of the health crisis.

For this reason, (Sánchez & López 2021) argue that leadership in crisis situations is defined by the ability to make agile decisions, communicate effectively and coordinate resources efficiently. As evidenced by the challenges posed by the COVID-19 pandemic, these competencies were crucial to mobilize different social and governmental actors in the search for collective solutions. Thus, leadership in crisis situations is characterized by the ability to make quick decisions, communicate clearly and coherently, and mobilize resources. to address the emergency effectively."

In Mexico, the centralization of decision-making and the visible leadership figure in the Ministry of Health played a central role in the national COVID-19 response strategy (Ministry of Health, 2020).

Inter-institutional coordination proved to be a crucial factor in the governmental response to the COVID-19 pandemic. Rodríguez et al. (2020), analyzed the coordination between the different levels of government and health institutions in Mexico, identifying deficiencies that hindered the implementation of coherent and effective strategies. The lack of coordination led to delays in the care of the population and further spread of the virus.

Despite the criticisms, it is important to highlight the areas where effective leadership was demonstrated. For example, the quick implementation of containment measures early in the pandemic and the coordination of large-scale vaccination campaigns were efforts that reflect the capacity for mobilization and leadership at specific governmental levels (Ministry of Foreign Affairs, 2021).

Likewise, collaboration with the private sector for the production and distribution of medical supplies allowed for a more agile response at critical moments (López & Hernández, 2022).

All this analysis does not neglect effective government communication. This is of utmost importance in situations such as a pandemic. Such communication keeps the population informed and generates a sense of protection and peace of mind. The COVID-19 crisis demonstrated its importance.

In this regard, (Hernández & González 2021), analyzed government communication during the pandemic in Mexico and concluded that the lack of clarity, transparency and timeliness in official messages generated confusion and misinformation among the population. These deficiencies in communication hindered adherence to health measures and eroded trust in institutions.

In addition, both communication and effective leadership in crisis situations require not only operational management of the emergency, but also the ability to anticipate problems and to plan for the long term with the consensus of the leaders responsible for their achievement.

This manifested itself in significant challenges reflected in the shortage of medical supplies, lack of hospital beds and insufficient diagnostic testing capacity in the early months of the pandemic resulting in thousands of deaths (Flores & Gutiérrez, 2021).

The above, affirms that at the beginning of the COVID-19 pandemic, the Undersecretary of Prevention and Health Promotion, Hugo Lopez-Gatell, applied a leadership style with characteristics similar to *Transformational Leadership*, which is characterized by giving an approach that motivated the population, generating confidence and presenting a clear vision of the measures to follow to stop the spread of the virus, which generated security because it made them believe that he had everything under control, when the reality was different. However, as the crisis progressed and various difficulties, criticisms and questions arose, his leadership leaned towards *Authoritarian Leadership,* whose decisions and messages emphasized strict control and centralization of information.

This transition in their leadership style had a significant impact on the results obtained. This is reflected in the following way: in the first stage they were able to mobilize the population and generate a sense of unity with the application of transformational leadership. However, the lack of flexibility and openness to different opinions in the later phases, when authoritarian leadership was already applied, contributed to a decrease in public trust and difficulties in coordinating efforts with different sectors. Thus affecting the overall effectiveness of the response to the pandemic.

Public Policies for the Control of COVID-19

Taking into account that public policies, "are government actions with objectives of public interest that arise from decisions supported by a process of diagnosis and feasibility analysis, for the effective action of specific public problems, where citizens participate in the definition of problems and solutions" (Franco, 2012), it should be commented that the public policies for the control of COVID-19 were:

1.   The National Day of Healthy Distance, implemented as a strategy to prevent the spread of COVID-19, also as a means to quarantine and prevent social contagion as much as possible, with this came the suspension of economic, educational and labor activities, coining the phrase "stay at home".

2.   A character called "Susana Distancia" was created to represent a heroine who promoted social distancing and hygiene measures to avoid Covid-19 infections.

In addition to this, the most crucial axis of public policy was the National Vaccination Plan, launched at the end of 2020, whose priority was to vaccinate the most vulnerable sectors of the population, such as the elderly and health workers, in an initial phase, to be later extended to the rest of the population.

Despite the difficulties, such as the initial shortage of resources and logistical problems, these measures were an integral part of the Mexican government's strategy to confront the pandemic and reduce its health, economic and social impact on the country.

It is worth making an observation at this point regarding the term public policy and what its theoretical notion implies, since, as can be seen, public policy in Mexico was basically designed through immediate actions to counteract the negative effects of Covid-19, since this was the way in which the State addressed the health needs demanded by the population, Although the pandemic was a surprise, its attention was immediately part of the public agenda through the Ministry of Health, and the person who faced this chaotic panorama was the then Secretary of Health Hugo López Gatell Ramírez, who was widely criticized for the inefficiency of public policies to control the problem.

It should not be lost sight of the fact that public policies have a cycle, which is determined by four main stages (Table 1):

Table 1: Public policy cycle

GESTATION	DESIGN	IMPLEMENTATION	IMPACT ASSESSMENT
Emergence and identification of public problems	Problem analysis	Decision	
Inclusion in the public agenda	Solution analysis	Budgeting	
	Feasibility analysis	Legislation	Evaluation of the effects of public
	Action plan	Execution of government agencies	policy

Source: *Own elaboration based on Franco, 2012.*

As can be seen in Table 1, public policies have four stages, the first one is the gestation, that is, the emergence of the public problem, in this case the pandemic that was part of the public agenda, in the design part, there are the strategies implemented to face the problem, in the implementation it implied putting in place a series of actions as mentioned above to confront the problem, and finally the evaluation.

The main participants in the public health policy implemented by the Mexican government during the COVID-19 pandemic were the following (See Figure 1):

Fig. 1: Authors Involved in the COVID-19 Pandemic
Source: *Own elaboration, 2024.*

As shown in Fig. 1. The actors involved were the Federal Government, through the Ministry of Health and the Undersecretary of Prevention and Health Promotion, led by Hugo López-Gatell, who coordinated national actions; the Ministry of Health (SSA), which was in charge of designing, coordinating and executing health policies, including hospital conversion and COVID-19 prevention and treatment strategies. It was joined by the Instituto de Salud para el Bienestar (INSABI): providing logistical and operational support for the distribution of medical resources and health services, especially to vulnerable populations. The Mexican Social Security Institute (IMSS) was also an important actor,

implementing measures to protect its beneficiaries and reconverting its hospitals for the care of severe cases of COVID-19.

Likewise, the Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado (ISSSTE) participated in the hospital conversion and provided medical attention to its affiliates. State and Municipal Governments collaborated with the implementation of restrictions and sanitary measures, such as the use of masks and the control of mobility in their respective jurisdictions. The Armed Forces (SEDENA and SEMAR) supported the logistics and distribution of vaccines, medical equipment and health personnel, as well as the construction of temporary hospitals. The World Health Organization (WHO) and the Pan American Health Organization (PAHO) provided technical advice and support in obtaining medical supplies and vaccines; the private sector collaborated with donations of medical supplies, equipment, and in some cases, participated in the manufacture of vaccines and medicines and the general population, where citizens play a crucial role in compliance with preventive measures, such as confinement and the use of masks, as well as the mass vaccination process.

Table 2 summarizes the actions taken as from the National Vaccination Plan and shows exactly each of the actions that were executed in the vision of a public policy, for example, in the definition stage, the formal strategy of immunizing the population through hospitalization and the use of mouth covers was established; During the process, the form of vaccination is designed through vulnerable sectors and hospital measures to reduce hospitalization; the federal government worked under a well identified goal that implied vaccinating the highest percentage of Mexicans in order to limit contagion, it is worth mentioning that a budget was allocated for the purchase of vaccines and the signing of international agreements. In addition, the participation of different actors in the solution of this health problem was reaffirmed; the evaluation was made according to the vaccination results in the different sectors of the population; in terms of transparency, reports and press conferences were held to inform the number of vaccinated by age, the type of vaccine and the budget spent; the planning of the vaccination was endorsed by world laboratories and epidemiology studies.

Table 2: Examples of Covid-19 Public Policy Implementation in Mexico

Criteria	Public policy (Example: National Vaccination Plan).	Shares (Example: Hospital reconversion, confinement measures, use of masks).
Definition	Formal government strategy to immunize the population against COVID-19 in several phases and priority groups.	Immediate and reactive measures taken to reduce hospital overcrowding and slow the spread of the virus.
Process	Designed and planned in several phases (prioritization of vulnerable groups, geographic scaling).	It reacts and adjusts according to the evolution of the pandemic, without following a full formal planning cycle.
Time horizon	Long-term, with immunization goals over several months or years.	Short-term, focused on immediate results such as bed availability and reduction of infections.
Goals and objectives	Clear goals: to vaccinate the largest percentage of the population, reduce mortality and stop the spread of the virus.	Immediate objectives: reduce hospital overcrowding, limit contagion, maintain the capacity of the health system.
Regulations	Formally regulated, with allocated budget, international agreements for the purchase of vaccines.	Without explicit regulations in many cases, such as recommendations for the use of mouthguards or confinement.
Participation	It involved several actors: federal and state governments, private sector, international organizations such as the WHO.	Implemented by the federal government, with state and municipal collaboration, but without structured coordination.
Evaluation	Periodically evaluated by vaccination results and population coverage.	Limited evaluation, with adjustments according to the evolution of the pandemic, but without exhaustive follow-up.
Transparency	High levels of transparency, with regular reports on vaccination phases and vaccine distribution.	Variable transparency; some actions, such as hospital conversion, were not always transparent in terms of results.
Planning	Based on epidemiological studies and recommendations from international organizations.	Little advance planning, adjusted according to the evolution of the crisis and the needs of the health system.
Execution	Orderly and staggered implementation, coordinated between different levels of government and health sector actors.	Rapid and reactive execution, depending on the local situation and the resources available at the time.

Source: *Own elaboration, 2024.*

López Gatell's Leadership Style Assessment

This section examines the evolution of leadership during the COVID-19 pandemic in Mexico and its impact on the implementation of public health policies. Crisis management began with a transformational leadership approach, focused on informing and motivating citizens to adopt preventive measures. However, as the health emergency progressed and new challenges emerged, leadership became more authoritarian, with centralized decisions and little openness to feedback.

This change not only influenced the way in which public policies were implemented, but also the population's perception and willingness to collaborate, crucial elements for an effective response to a health crisis of such magnitude.

Thus, Blake & Mouton's (1964) Managerial Grid theory is a key model for evaluating and improving leadership, considering the balance between concern for people and concern for production. This theory classifies leadership styles into five categories in a 9x9 matrix, allowing to visualize and analyze how a leader distributes his efforts between the team's welfare and the achievement of results. Fig. 2. shows a representation of the Managerial Grid, which is useful for evaluating the leadership style of public figures, as in the case of Dr. Hugo López-Gatell. (Fig. 2).

In Gatell's leadership assessment section, this model is applied to analyze whether your management is close to a specific grid style. For example, a leader with a combined (9,1), task style, would focus primarily on goal achievement, often with less emphasis on team well-being. Meanwhile, the (9,9) team style, ideal for Blake and Mouton, integrates a high commitment to results and team motivation. Through this approach, Managerial Grid theory helps identify how Gatell's leadership styles are reflected in his ability to address both the efficiency of his

management and the well-being of the community he serves.

The Table 3, illustrates the specific characteristics that distinguish transformational leadership from autocratic leadership, highlighting the implications of each style on organizational dynamics. While transformational leadership focuses on empowerment, mutual growth and the development of creativity through motivation and collective commitment, autocratic leadership focuses on the centralization of power, with one-person decision making and strict control over the team. These contrasts highlight how, in transformational leadership, collaboration and shared vision enhance adaptability and positive change, in contrast to autocratic leadership, where efficiency and speed in executing decisions are prioritized, often at the expense of team participation and commitment (Table 3).
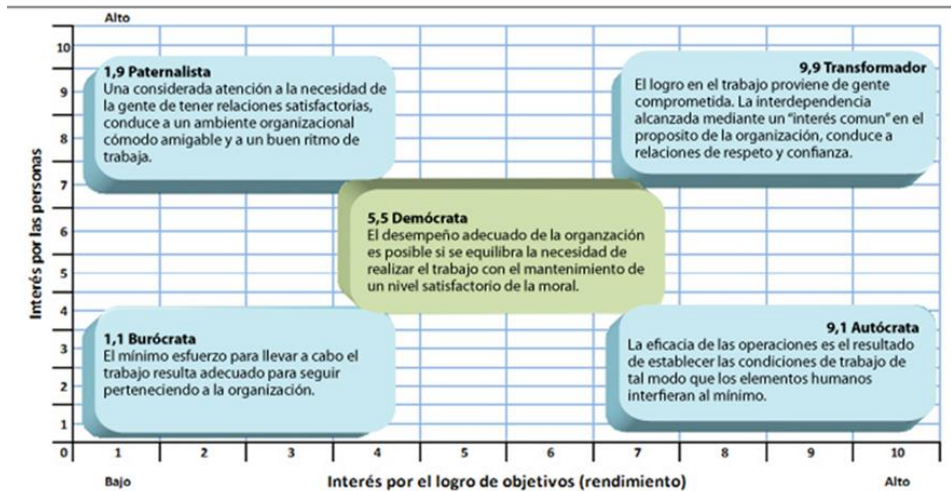
Fig. 2: Management Grid
Source: *Blake & Mouton, The managerial network: the key to leadership excellence.*

Table 3: Characteristics of leadership types according to Blake and Mouton.

Characteristics of the Leadership Style	9.1 Autocratic	9.9 Transformer
Communication	Frequent and friendly.	Common agreement.
Instructions	It does not require. It is indirect.	Objectives and goals created and shared as a team.
Mistakes and errors	Accentuate the positive, eliminate the negative, blame no one.	Includes error warnings.
Complaints	He joins the group and accepts the complaints.	They are meaningful, learn through criticism.
Productivity	Only works in connection with Average Productivity awards.	High motivation. Tensions are resolved at every step. Maximum productivity.
Performance evaluation	Avoid performance evaluation.	Conduct the assessment by analyzing strengths and weaknesses.

Source: *Münch, Leadership and Management, 2015.*

The change from transformational to authoritarian leadership during the COVID-19 pandemic in Mexico had a significant impact on public health policies. At the beginning of the crisis, transformational leadership fostered open communication aimed at informing and sensitizing the population, seeking to build trust in health policies. However, as the pandemic progressed, a more authoritarian approach was adopted, with centralized decisions and little flexibility in the face of criticism or public feedback. This shift affected the implementation of policies, generating discontent in certain sectors and weakening the perception of transparency and adaptability of the system. As a result, some measures were seen as imposing, which hindered citizen collaboration and commitment, essential elements for dealing with a public health crisis.

The pandemic that was experienced worldwide has positioned itself as one of the most important events for the new generations and because of that uncertainty, a health leader appears in Mexico. Hugo López Gatell, Undersecretary of Prevention and Health Promotion; He was consolidated and popularized as a transforming leader assuming the role of a communicator who generated confidence in the public, always with empathy establishing weak and strong aspects that were developing in the period of the pandemic, modifying habits and lifestyles with the recommendations that the expert epidemiologist proposed, however, once the raw figures of mortality and contagions were reflected in the health emergency, he began to lose the connection with the Mexican people, His image wore out and his veracity was questioned, however, the Undersecretary of Health of López Obrador's government changed his style and personality to an authoritarian leadership, where his decisions were centralized, without giving openness to the questioning of the population, avoiding the evaluation of the situation that at the time was perceived as a negative result.

**Budget Allocated for COVID-19 Public Control Policies**

One of the main challenges faced by the leader under any scenario is to foresee and provide the necessary resources for the implementation of tasks aimed at achieving objectives. The execution of public policy actions in the area of health to address the health emergency demanded a broad and rapid availability of financial, human, material and technological resources, a somewhat complex task for the then Secretary of Health, as well as for the other institutions and actors (Figure 2) who worked together during the COVID-19 pandemic, when since the beginning

of the federal administration in office, the country was working under the principles of budgetary austerity and the business sector was going through a period of decline in the country's economic activity. In light of this, it is important to review the budgetary strategies used to provide the necessary resources to address the health crisis.

Regarding the government's program to face the health emergency, the following stand out: rigorous application of the so-called Federal Law of Republican Austerity, reduction of salaries of high-level officials, non-exercise of 75% of the budget for general services, materials and supplies, increase of the budget by 622,556 million pesos for the shielding of 38 social programs and priority projects, as published in the Official Gazette of the Federation (DOF, 2020).

Regarding the budget allocated for the attention of health needs prevailing in the different sectors of society; (Macías & Pérez 2021), in their analysis of the Public Account 2020, point out that the increase in programmable spending did not show priority towards activities related to pandemic care. For (Arellano 2022), budgetary resources to mitigate the effects of the pandemic were insufficient due to the weakness in the structure of public finances, thus magnifying the negative impact on both the health of the population and the pace of economic activity.

A comparative analysis of the public account shows an increase in programmable spending in both the approved and exercised in the health sector during 2020 and 2021 with respect to the previous year (Figure 3), being also the third administrative branch with the largest budget, preceded by public education and welfare. This situation is aligned with the attention to the 38 social programs and priority projects. The programmable expenditure approved for health in 2020 increased 3.7% over the previous year, while that exercised was 28.26% higher than in 2019 and the highest during the period that the health emergency lasted. Despite the fact that the budget exercised in 2021, amounted to $175,004.40 million pesos, it was only 11.12% higher than the exercise in 2020.
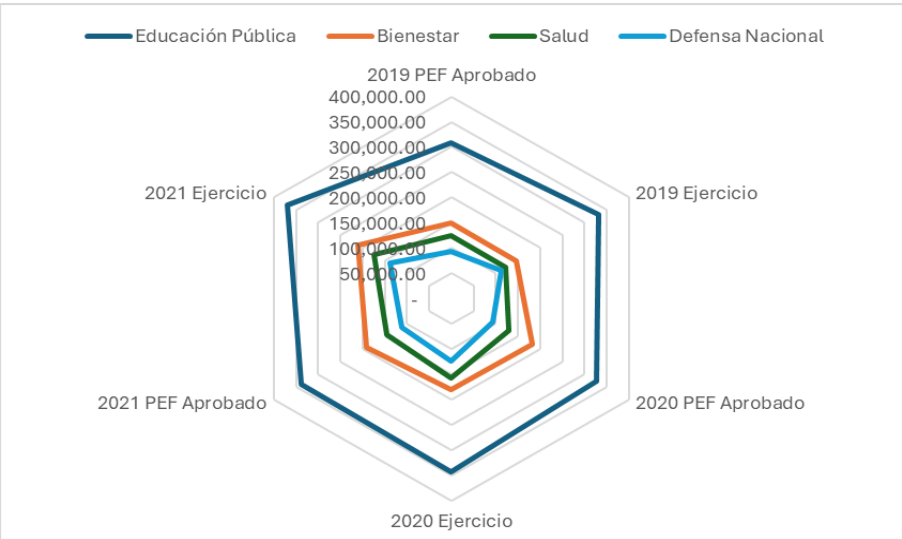
Fig. 3: Programmable Expenditures of Administrative Branches (millions of pesos)
Source: *Public Account 2019, 2020 and 2021, S.H.C.P.*

Huerta & Vanegas (2020), through their analysis of the exercise of public spending on health programs in our country during the times of the health emergency, found that in 2020 there was a 16.6% decrease in real spending on resources allocated to personal services for health, with respect to the previous year. This affected the availability of human resources for patient care. Regarding the distribution of per capita and total health expenditure, it was higher in the entities with greater population and economic activity, a situation that coincides with the expenditure associated with the care received reported by the National Health and Nutrition Survey on Covid-19 (INSP, 2022), which highlights that the average expenditure on care in rural areas was 33% higher than the national average (Table 4).

Table 4: Average expenses associated with received care by region (pesos)

Region	Traslate	Atention	Medications	Studies	Other medical expenses
National	80	150	450	777	600
Urban	70	150	400	777	680
Rural	100	200	500	777	600

Source: INSP *2021 on COVID-19, Mexico*

It also highlights that more than half of the population received care in private medical services (INSP, 2022), which represents a significant shift of health spending to families, whose percentage represented an increase of 40.5% in 2020, with respect to the previous period (Table 5), which supports the preference of families for care in the private sector. (Table 5)

Table 5: Quarterly average monetary current expense items (pesos)

	ENIGH 2018	ENIGH 2020	Var.
Food, beverages and tobacco	12,090	11,380	-5.9
Health	901	1266	40.5
Housing and services	3274	893	-72.2

Source: INEGI *2020*

Likewise, the entities with the highest level of spending were Mexico City and Baja California, which on average allocated 3.9% and 3.2%, respectively, of their total spending to health, while Oaxaca and Chiapas, with the lowest level of spending, allocated 6.2% and 5.1%, respectively, to health services (INEGI, 2021).

Conclusion

The COVID-19 pandemic represented a great challenge for all humanity and an enormous challenge for Mexico, forcing its government and its leaders to implement a national health policy. Thus, under the leadership of Hugo Lopez-Gatell Ramirez, strategies were applied to contain the spread of the virus, reduce deaths and strengthen the health system. He became the most visible public figure in the management of this crisis. The first part of his administration was characterized by a transforming leadership, in which he was empathetic, concerned, sensitive and interested in the health of the entire nation. Providing peace of mind in the midst of so much death. However, with the disproportionate increase in deaths, his leadership hardened and became authoritarian. Demonstrating no flexibility and imposition of strategies, which lacked any feedback. This led to an infinity of criticisms and disagreement in the execution of the preventive policy applied. The findings demonstrated that at the beginning, the leadership projected by the Secretary of Health was key in the implementation and acceptance of measures, but also suggested the creation of policies and the promotion of transformational leadership to strengthen the health system in Mexico.

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