Violence and pandemic by COVID-19: physicians' views on scarce resources for health in critical situations

Violencia y pandemia por COVID-19: punto de vista de médicos acerca de escasos recursos en salud durante situaciones críticas

Ivette María Ortiz Alcántara*
Institute of Biomedical Ethics and History of Medicine (IBME)
at the University of Zurich, Switzerland

Felicitas Holzer**
Institute of Biomedical Ethics and History of Medicine (IBME)
at the University of Zurich, Switzerland

https://doi.org/10.36105/mye.2025v36n1.05

Abstract

The aim of this article is to contribute to the knowledge and reflection on the experiences faced by medical personnel in critical situations.

* PhD student in Biomedical Ethics and Law. Physician at the Institute for Biomedical Ethics and History of Medicine (IBME), University of Zurich.
E-mail: ivette.ortiz@ibme.uzh.ch https://orcid.org/0009-0000-5175-859X

** Researcher at the Institute of Biomedical Ethics and History of Medicine (IBME), University of Zurich. E-mail: felicitas.holzer@ibme.uzh.ch
https://orcid.org/0000-0002-3674-0241
Reception: 02/04/2024 Acceptance: 11/07/2024

Eleven interviews were conducted with physicians in different regions of the country, using a script developed from a literature review in academic articles and online media. With the data collected, a matrix was constructed, and a thematic analysis was performed. Five sets of themes were identified: (i) Physicians' general information and motives for working in critical areas; (ii) effects of violence and the COVID-19 pandemic on health service delivery; (iii) Health resources; (iv) The ambivalence of triage: relief from shortages, but moral dissatisfaction towards physicians; and (v) Governance and public policies. As conclusions, it can be said that the interaction of two critical situations, violence and the COVID-19 pandemic, poses ethical challenges that require deep reflection.

Keywords: violence and health services, medical work.

Declaration of conflict of interest
No conflict of interest to declare

1. Introduction

The health system[1] in Mexico constitutes an essential component to guarantee the fundamental right to health protection, which not only implies timely and adequate medical care, but also the observance of fundamental elements such as accessibility, availability and quality of health services. Accessibility refers to the elimination of barriers that may hinder access to health services, while availability implies the existence of sufficient resources such as facilities, equipment and personnel to guarantee the exercise of this right for all persons. Finally, quality refers to the level of excellence in the provision of

[1] The Mexican health system is composed of the following public institutions: Mexican Social Security Institute (IMSS), Institute of Security and Social Services for State Workers (ISSSTE), Petroleos Mexicanos (PEMEX), Ministry of National Defense (SEDENA), Ministry of the Navy (SEMAR). State Health Services (SESA); and the private sector. Mexican Health System. Available at: https://www.researchgate.net/publication/262501775_Sistema_de_salud_de_Mexico

https://doi.org/10.36105/mye.2025v36n1.05

health services, which increases the probability of obtaining favorable results for the health of the population (1).

However, compliance with these elements has faced major challenges arising from two critical situations. First, the persistent and deep-rooted violence in certain regions of the country. International agencies such as Médecins Sans Frontières have documented that the presence of criminal groups in certain areas has caused health personnel to migrate from these regions or even avoid them altogether, resulting in the disruption of health services in these localities (2,9).

Second, in early 2020, the COVID-19 pandemic, a worldwide emergency, impacted the Mexican health system. This health crisis exacerbated pre-existing deficiencies in the health system, marked by a chronic lack of investment, recent budget cuts, and various reforms that resulted in a shortage of trained personnel and insufficient resources to address the health crisis (3).

This article presents the results of an exploratory study based on interviews with Mexican physicians, some of whom work in regions of the country characterized by high levels of violence. In addition, we show the influence and interaction of two critical situations, namely violence and the COVID-19 pandemic, on medical resources and the availability of health personnel in the context of the Mexican health system.

The second section of this paper proceeds to discuss, based on the narratives obtained from the conversations with participants, mainly normative problems, as well as ethical principles, values and public health issues. An analysis is conducted that considers both micro and macro allocation levels. However, it is important to note that this discussion shows issues and areas of study that require future research.

2. Scarce resources in the Mexican Health System

Resource allocation involves prioritizing needs according to their urgency and the potential benefit they generate, or the least harm they

https://doi.org/10.36105/mye.2025v36n1.05

may cause. This process can be understood from two main perspectives: First, allocation at the micro level involves deliberation about which person will receive a specific resource and in what order they will get it. For example, the use of a hospital bed or a mechanical ventilator; the allocation of individual treatments or therapeutic measures. These decisions are made at the hospital level and are directly linked to the context of the patient or, where appropriate, to the health status of a local or population.

On the other hand, macro-level allocation refers to a larger scope, such as the distribution of budgets or the prioritization of health programs, since medical care is not the only important good, and therefore discernment about other needs within the system is required (4).

In order to guarantee its functioning and the equitable distribution of the necessary resources, the Mexican Health System (MHS) is made up of two main components: the public and private sectors. Table 1 shows some characteristics of both sectors that describe fundamental changes in different time periods. While the private sector provides services to those individuals with the economic capacity to cover the associated costs, the public sector is responsible for providing care to those with formal employment and those without social security (5).

However, this public sector faces limitations even for eligible individuals,[2] either due to the lack of nearby health facilities or, in cases where they do exist, due to insufficient medical personnel or material resources to cover the health needs of the population (6).

[2] Beneficiaries: workers, pensioners and entitled family members. Ley del Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado. Available at: https://www.diputados.gob.mx/LeyesBiblio/pdf/LISSSTE.pdf
Derechohabiente IMSS: rightful claimants or beneficiaries: the insured, the pensioner and the beneficiaries of both, who in the terms of the law have the right to receive the benefits of the Institute in force. Section xiii of art. 5 a. of the Social Security Law. Available at: https://portalhcd.diputados.gob.mx/LeyesBiblio/PortalWeb/Leyes/Vigentes/PDF/92_230421.pdf

https://doi.org/10.36105/mye.2025v36n1.05

Table 1. Characteristics of the Health System in Mexico

Public Sector

Private Sector

Private Sector

Period	Description	Users	Funds	Users	Funds
1940-1970	Centralized approach The Mexican Social Security Institute (IMSS) is created. Creation of the Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado (ISSSTE). Social Security (PEMEX, SEDENA, SEMAR) Secretaria de Salubridad y Asistencia (currently Secretaria de Salud, SSA)	Formal sector workers Workers' families Retirees	Formal sector workers Workers' families Retirees	Population with ability to pay	Individuals Employers Private insurers
1970-2003	Decentralization of the National Health System General Health Law originating the State Health Services (SESA). Secretaria de Salubridad y Asistencia (currently Secretaria de Salud, SSA)	Self-employed, informal sector workers and the unemployed	Contribution from state governments Federal government contribution		
2003-2019	Seguro Popular. Medical care became the responsibility of the state health services.	Self-employed, informal sector workers and the unemployed	Contribution from state governments Federal government contribution		
2019-2023	Health Services Federation 2019. Disappearance of the Social Protection System in Health (INSABI). 2022. Creation of the Decentralized Public Organization called Servicios de Salud del Instituto Mexicano del Seguro Social para el Bienestar (IMSS_Bienestar). 2023. INSABI is dissolved.	People without social security Self-employed, informal sector workers and unemployed	Federal Government		

Source: own elaboration Prepared by the authors with information from Gómez O. Health system in Mexico. [Internet]. 2011; 53:s220-s232. Available at: https://www.researchgate.net/publication/262501775_Sistema_de_salud_de_Mexico
National Council for the Evaluation of Social Development Policy (CONEVAL). Study on the right to health 2023: a qualitative analysis. Mexico: CONEVAL; 2023. Available at: https://www.coneval.org.mx/EvaluacionDS/PP/CEIPP/IEPSM/Documents/E_Derecho_Salud_2023.pdf

3 Crisis situations and health services

This article will adpersonnelcrises[3] that impact Mexico and interact with the problem of scarce health resources and the lack of medical

[3] Crisis is when a public health problem occurs, with a higher incidence or lethality than normal for this time and place, and where we cannot guarantee the final dimension of the problem. Lamata C. Health crises and political response. Rev Adm Sanit Siglo XXI. 2006; 4(3):401-406. Available at: https://www.elsevier.es/es-revista-revista-administracion-sanitaria-siglo-xxi-261-articulo-crisis-sanitarias-respuesta-politica-13094669 In a crisis context there are three important characteristics: point of change or trend of a pre-established situation; acute or subacute situation and urgent need for action. Posada de la Paz M. How to face a crisis in Public Health. MEDIFAM. 2002; 12(1). Available at: https://scielo.isciii.es/pdf/medif/v12n1/editorial.pdf

https://doi.org/10.36105/mye.2025v36n1.05

personnel, affecting the guarantee of health protection: (i) violence and (ii) the COVID-19 pandemic.

(i) Violence

In some areas with high levels of violence, the lack of safe working conditions reduces the coverage of medical services and hinders both the improvement and maintenance of health infrastructure, as well as the provision of medicines and medical supplies needed to perform medical work.

The National Association of Doctors in Training has documented that five medical interns were victims of homicide in the last five years in the country. In addition, during the year 2021, a total of ten cases of homicides perpetrated against medical personnel and medical students were recorded in several Mexican states, such as Chiapas, Zacatecas, Coahuila, Michoacán and Guerrero. Some of these cases had media repercussions[4] (7).

According to the results obtained by this association in its National Survey of Physicians in Training 2021 and the National Survey of Nursing Students 2021, 32.6% of those interviewed reported that their university institutions were forced to modify clinical fields due to security problems (8). In places where health services are not operational due to the presence of violence-generating groups (9), causing health personnel to avoid these regions (10).This represents a problem for the Mexican population, which since 2019 has experienced an increase in the lack of access to health services (3), even when a greater budget has been allocated for construction and the maintenance of medical infrastructure, and significant efforts have been made to hire health personnel through incentives that guarantee adequate working conditions (11).

[4] An example of media coverage is the article published by SWI swissinfo.ch (business unit of the Swiss radio and television company SRG SSR). Medical trainees march in Mexico following murders of colleagues. 2022. Available at: https://www.swissinfo.ch/spa/médicos-en-prácticas-marchan-en-méxico-tras-asesinatos-de-compañeros/47785496

https://doi.org/10.36105/mye.2025v36n1.05

(ii) The COVID-19 pandemic

The overwhelming number of COVID-19 cases in Mexico occupied all the attention of the health services; existing resources were mostly diverted to the treatment of the pandemic, leaving aside other important public health problems, such as obesity, diabetes, measles or violence. Vaccination campaigns were interrupted, and other health policies were temporarily suspended (12). According to Karlinsky and Kobak, using the World Mortality Dataset, Mexico was among the countries with the highest excess mortality (13). In addition, other problems developed that directly affected medical personnel, such as the lack of protective equipment or the measure announced in April 2021, in which medical personnel working in private institutions would not receive the vaccine until it was distributed according to their age range (14). All these difficulties together probably made Mexico the country with the highest number of deaths of health personnel, according to Amnesty International (15).

4. Methods

To gain an understanding of subjective experiences and perspectives, rather than seeking generalizable knowledge (16), our method was characterized by exploratory interviews (n=11) with physicians, addressing the allocation of health resources immersed in the two crises and the normative issues and ethical dilemmas that arise.

Based on a literature review, we developed a thematic guide for the interviews and mapped issues with normative relevance at two different levels: micro and macro.

At the micro level, we addressed the issue of physician protection versus the public good of health protection. While, at the national level, we explore the distribution of health resources, especially human resources, among the different regions, security and healthcare. Finally, at the macro level at the international level, we examine highly

https://doi.org/10.36105/mye.2025v36n1.05

skilled migration,[5] including the recruitment of foreign physicians to work in Mexico and the migration of Mexican physicians abroad.

Following a purposive sampling strategy, respondents could work in public or private health institutions or both, covering various specialties and located in one of the four characteristic regions of the country according to the Bank of Mexico in its Report on the Regional Economies of Mexico:[6] North, Central-North, Central and South regions. In addition, physicians working in states with the highest rates of violence during 2021,[7] where the homicide rate per 100,000 inhabitants was highest, were included.[8]

[5] Those with higher levels of education (in general, those with tertiary education or higher). Gandini L. Explanations of skilled migration: the role of women from the North American experience. Stereotypes, biases and challenges. 2019; (14). https://doi.org/10.22201/cisan.24487228e.2019.1.371

[6] April-June 2021 Report (Bank of Mexico 2021). The regions we refer to are those used by Banco de México in its reports on Mexico's regional economies. Those referred to in the April-June 2021 report were used. This report is divided into four regions: north, north-central, central and south. The northern region includes: Baja California, Chihuahua, Coahuila, Nuevo León, Sonora and Tamaulipas; the northern center includes: Aguascalientes, Baja California Sur, Colima, Durango, Jalisco, Michoacán, Nayarit, San Luis Potosí, Sinaloa and Zacatecas; the central region comprises: Mexico City, State of Mexico, Guanajuato, Hidalgo, Morelos, Puebla, Querétaro and Tlaxcala, and the southern region is composed of: Campeche, Chiapas, Guerrero, Oaxaca, Quintana Roo, Tabasco, Veracruz and Yucatan. Available in Banco de México (September 15, 2021) report on regional economies April - June 2021. https://www.banxico.org.mx/publicaciones-y-prensa/reportes-sobre-las-economias-regionales/reportes-economias-regionales.html

[7] During 2021, there was an increase in homicides in Mexico, reported in press release No. 376/22 of the National Institute of Statistics and Geography (INEGI) [Internet]. 2022. Available at: https://www.inegi.org.mx/contenidos/saladeprensa/boletines/2022/DH/DH2021.pdf
Most of these crimes were related to the operation of organized crime, since during this year the crime of drug dealing increased up to 139% according to the Institute for Economics and Peace, IEP. Mexico 2022 Peace Index: identifying and measuring the factors that drive peace [Internet]. 2022. Available at: https://reliefweb.int/report/mexico/indice-de-paz-mexico-2022-identificar-y-medir-los-factores-que-impulsan-la-paz [Homicide rate per 100,000 inhabitants, by state during 2021, taken from Ortiz Alcántara and Holzer. 2023.

[8] In Table 1. Homicide rate per 100,000 inhabitants, by federal entity during 2021, taken from Ortiz Alcántara and Holzer. 2023.

https://doi.org/10.36105/mye.2025v36n1.05

Physician participation in the study was voluntary and pro-bono. In all cases, informed consent was obtained in Spanish. Interviews were conducted individually through an online platform, lasting between 30 and 90 minutes, carried out between December 2022 and October 2023. The transcriptions of the video recordings were made in Spanish by the authors of this paper. The names and positions of the interviewees are kept undisclosed, and the data were processed and stored in accordance with the data protection regulations of the University of Zurich.

Data analysis was conducted simultaneously with the interviews, which were guided based on five major themes. As data were obtained, phenomena or ideas that were recurrent among the interviewees were identified, which made it possible to construct a matrix relating the data obtained in the interviews to each classification. The use of this categorization strategy greatly facilitated a general understanding of the situations under investigation (17 p. 236).

The literature review was conducted in online media, such as newspapers, magazines, and blogs, as well as academic articles published in English and Spanish in PubMed, Research Gate, and Google Scholar. Key words used were: "violence and health services", "medical work", "allocation of scarce health resources" and "COVID-19 in Mexico".

5. Results

The interviews began by asking the participating physicians to provide some general information to help identify their work and geographical context, among other aspects, such as the medical specialty or hospital service in which they work, the type of health institution where they work, the population they serve, the region of the country where they are located and the reason why they work in that locality, as shown in Table 2. The next block of questions focused on

https://doi.org/10.36105/mye.2025v36n1.05

violence in daily life and at work. Subsequently, they were asked about their opinion on the allocation of health resources and supplies, their experiences during the COVID-19 pandemic, and triage. They were asked whether these critical circumstances, such as violence and the pandemic, have affected their personal and professional lives. Finally, they were asked about their perspectives on critical situations from a governance and health policy point of view.

Below, we present the five themes that were categorized from the information obtained in the interviews: (i) General information of physicians and reasons for working in critical areas; (ii) Effects of violence and the COVID-19 pandemic on the delivery of health services; (iii) Health resources; (iv) The ambivalence of triage:[9] relief from shortages, moral dissatisfaction towards physicians; and (v) Governance and public policies.

[9] "Triage decision" (regardless of the origin of the expression). Rivera E. Proposal for the development of a triage protocol in the context of the COVID-19 pandemic. Rev Bio y Der. 2020; 50:37-61. Available at https://www.researchgate.net/publication/343290473_Propuesta_para_la_elaboracion_de_un_protocolo_de_triaje_en_el_contexto_de_la_pandemia_de_COVID-19

https://doi.org/10.36105/mye.2025v36n1.05

Table 2. Characteristics of the interviewees, the institutions where they work and the region

Healthcare professional	Age	Genre	Specialty	State and region of the country	Type of health institution where you work	Population served
Health professional 1	70	Male	General Medicine	Guerrero Southern Region	Private	Population that can pay for health services
Health professional 2	n/a	Male	Occupational medicine	Sonora Northern Region	Private enterprise	Company employees
Health professional 3	40	Male	Surgery and endoscopy	Guanajuato Central Region	Public (IMSS)[10] and private	Beneficiaries and population that can pay for private services
Health professional 4	41	Male	Anesthesiology	México City / Yucatan Central / Southern Regions	Public (IMSS) and private	Beneficiaries and population that can pay for private services
Health professional 5	38	Female	Anesthesiology	Chiapas Southern Region	Public (State Health Services)	General population and foreign migrants, beneficiaries

[10] IMSS: Mexican Social Security Institute.

https://doi.org/10.36105/mye.2025v36n1.05

Health professional 6	37	Male	Anesthesiology	Puebla Central Region	Private	population that can afford private services
Health professional 7	38	Male	Traumatology and orthopedics	Mexico City Central Region	Public (IMSS) and private	Beneficiaries and population that can pay for private services
Health professional 8	42	Male	Bariatric surgery and endoscopy	Guanajuato Central Region	Public (IMSS, resignation less than a year) and private	Beneficiaries and population that can pay for private services
Health professional 9	n/a	Male	Pediatric Anesthesiology	Puebla Central Region	Public (IMSS, resignation less than a year) and private	Beneficiaries and population that can pay for private services
Health professional 10	n/a	Female	Anesthesiology	Zacatecas Northern Central Region	Public (ISSSTE)[11]	Beneficiaries
Health professional 11	n/a	Female	Anesthesiology	Zacatecas Northern Central Region	Public (ISSSTE)	Beneficiaries

Source: own elaboration.

[11] ISSSTE: Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado.

Beneficiary: workers, pensioners and family members entitled to them. Law of the Institute of Social Security and Services for State Workers. Available at: https://www.gob.mx/cms/uploads/attachment/file/656785/LISSSTE_20_0_521.pdf

IMSS Beneficiary: beneficiaries or beneficiaries: the insured, the pensioner and the beneficiaries of both, who in the terms of the Law have their right to receive the benefits of the Institute in force. Section XIII of art. 5 a. of Social Security Law. Available at: https://portalhcd.diputados.gob.mx/LeyesBiblio/PortalWeb/Leyes/Vigentes/PDF/92_230421.pdf

(i) General information on physicians and reasons for working in critical areas

Of the eleven physicians interviewed, eight are men and three are women. The diversity of specialties is also reflected in the group, with the presence of one general practitioner, one occupational medicine physician; two surgeons and endoscopists; five general anesthesiologists, one pediatric anesthesiologist and one orthopedic surgeon. Three of them work exclusively in private institutions, while the rest work in both the public and private sectors. Among the public sector physicians, only one works in the State Health Services, serving a population that includes foreign nationals from South America. Two physicians are employed in ISSSTE, and five work in IMSS. However, two of the physicians who previously worked in the IMSS resigned from the public sector in the year prior to the interview, opting to work exclusively in private institutions.

In terms of geographic distribution, one interviewee works in the northern region, in the State of Sonora; two physicians work in the north-central region, in Zacatecas; six physicians work in the central region, two in Mexico City, two in Puebla and two in Guanajuato; and two physicians work in the southern region, one in Chiapas and one in Guerrero. It is relevant to note that one of the physicians currently working in the central region worked in the southern region during the year prior to the interview.

https://doi.org/10.36105/mye.2025v36n1.05

Regarding the circumstances and reasons that motivate them to work in the regions where they are, it was found that family reasons or reasons of origin were the main reasons for settling in those areas.

> "I was born here ... and when I finished my specialty, I returned ... in fact it is still a violent state, there is a lot of extortion ... well, all the private work that goes out, for example, emergency rooms and all that after 10 at night, one does not go there anymore, because of security ... but I would continue working here because I like that my family is close by". (ECH, Physician working in the central region, personal communication, 2022).

We can observe the different motivations that drive physicians to remain in the regions where they work. For example, one of the interviewees mentioned that his reason for staying in one of the marginalized regions in the country was his vocation to help, which reflects his personal commitment to serving communities in need. Another physician shared that he works in that area because he found more job opportunities available, which highlights the importance of career opportunities in making decisions about job location. In addition, another interviewee mentioned that he is in the city where he is located because of his familiarity with it, as he had done previous studies in that area. These different reasons highlight the complexity of factors that influence physicians' decisions on where to practice their profession.

(ii) Effects of violence and the COVID-19 pandemic on the delivery of health care services

It is notable how collective violence[12] affects both the daily and professional lives of the physicians interviewed, evidencing the complexity of their experiences in different regions of the country.

[12] Violence is defined as "[Violence is] the intentional use of threatened or actual physical force or power, against oneself, another person, or against a group or community, that causes or has a high likelihood of causing injury, death, psychological harm, maldevelopment or deprivation". Krug E, Dahlberg L, Mercy J. World report on vio-

https://doi.org/10.36105/mye.2025v36n1.05

Specifically, those working in the central region of the country and in some states of the southern region face situations such as assaults or kidnappings on public roads and even inside hospitals.

In some other states, physicians in the private sector also faced challenges, such as the need to limit their working hours, avoid night work or even refuse cases related to violent acts. These precautions reflect concerns about personal safety and risk management in environments where violence can pose a threat to their physical and emotional integrity.

> "What has happened is that they come in for a consultation and assault the doctor in the office or that patients ask for an emergency consultation on a Saturday night, and it is actually an assault". (GG, physician working in the central region of the country, personal communication, 2023).
> "I have colleagues whose van was taken away from them when they were leaving the main gate of the medical center complex". (AC, physician working in the central region of the country, 2022).

In the rest of the areas, physicians report secondary violence with organized crime activities, which have interfered in some activity or health program, and even enter hospitals with the objective of attempting against the life of someone involved in violent acts and receiving medical attention. One of the physicians mentioned that the health personnel where he works knows that, in the case of patients

lence and health. World Health Organization [Internet]. 2022. Available at: https://apps.who.int/iris/bitstream/handle/10665/42495/9241545615_eng.pdf

Collective violence is: violence committed by large groups or individuals, as well as gang violence. It is also useful to cite the definition described by Rutherford because it includes violent organized crime; "The instrumental use of violence by persons who identify themselves as members of a group against another group or set of individuals in order to achieve political, economic or social objectives and includes violent organized crime". (Rutherford A, Zwi A. Violence: a glossary. J Epidemiol Community Health [Internet]. 2007; 61(8):676-680. http://dx.doi.org/10.1136/jech.2005.043711

https://doi.org/10.36105/mye.2025v36n1.05

involved in some violent act, they are treated in a different hospital area from the rest of the patients, in order to minimize risks for the health personnel. This is not established as a formal protocol, but as part of the health workers' own actions.

> "...we took a patient who had been shot to the operating room and they entered the operating room to finish him off there in front of me ..." (GG, physician working in the central region of the country, personal communication, 2023).
> "...an indication as an underwater comment is that this patient has to be left or treated as close as possible to the entrance, so that if they finish him off he does not affect the staff or the other patients". (AC, physician working in central region, personal communication, 2022).

They also expressed that some health centers they know do not have physicians in social service due to a history of direct violence to the staff. One of the physicians referred that it is totally understandable not to want to go to those places, and said: "So, of course nobody is going to want to go there because it is a conflict zone and it is logical that you don't want to go because you don't know what can happen to you". (BG, physician working in the southern region, personal communication, 2023). Similarly, community hospitals do not have specialist physicians and as a measure to contain this need, some hospitals have had to be named as "satellites" (AV, physician working in the central-north region, personal communication, 2023), that is, hospitals that have to expand their work to serve the population in areas that no longer have medical personnel.

The direct impact on health services is not the only problem; they find that it affects different areas of daily life, such as the decrease in commerce, the loss of jobs in the area and the limitation of free transit; they are afraid to use public transportation or even their private vehicles because they report risks on roads and highways. In addition, it was found that the psychological sphere of the physicians is also affected, as they fear reprisals depending on

https://doi.org/10.36105/mye.2025v36n1.05

the outcome of the treatment or the patient's prognosis. One of the physicians mentioned that it is difficult to talk to patients and explain to them that they do not have the resources to treat them, because they do not know what response they will get. In other cases, it was said that, regarding the situation of violence, one of the physicians prefers to attend patients with a certain caution in the interrogation: "You don't even ask what they do and what they do or anything, you just do what you do as a doctor and that's it. (GG, physician working in the central region, personal communication, 2023).

However, regardless of these modifications in their professional work, the ethical principles that continue to govern their work are always for the benefit of the patient and to cause the least possible harm. Another of the topics on which we quickly found saturation in the interviews is that experiencing risky situations during medical care is part of everyday life and is not a reason to stop working in this region.

> "...Well, yes, I had several people who were shot and many of them arrived... But the cases were not so frequent, not once every six months... and we have to attend them no matter what". (RV, Physician working in the northern region, personal communication, 2022).
> "...In the hospital chat groups... it was not very common for these topics to be discussed... but now it is very common to find these alerts". (JB, physician working in the central region, personal communication, 2023).

Regarding the perspectives on how violence was experienced during the pandemic by COVID-19, this topic showed a remarkable saturation. The opinion of at least eight of the physicians interviewed was that during the pandemic, violent acts decreased. One of the physicians mentioned that the number of patients admitted for violence-related injuries decreased considerably and attributed this to uncertainty or fear of the disease.

https://doi.org/10.36105/mye.2025v36n1.05

> "... in a pandemic matter, the situation improved transiently, at the peaks exactly during the pandemic. I believe that also the offenders were kept at home." (ECH, Physician working in central region, personal communication, 2022).
> "... it helped us a lot that during the pandemic there were not so many accidents or acts of violence so that the medical staff was still functional." (PR, physician working in central region, personal communication, 2023).

(iii) Health resources

With the above information, it was observed that medical personnel have been directly affected by the two critical situations mentioned in our study, especially by violence. Although it is not the only area affected, the information provided by the physicians interviewed reflects that the scarcity of health supplies[13] is a chronic problem. Physicians must provide medical care with existing resources, even if they are not adequate. They say that they "manage" (PR, physician working in the central region, personal communication, 2023), to be able to offer the maximum benefit to patients. However, in certain circumstances, they are definitely unable to do so.

This issue generates divided opinions among professionals: on the one hand, some physicians consider that it is to provide the service, as long as it does not cause any harm to the patient. On the other hand, some professionals believe that continuing to care for under-resourced patients will exacerbate the shortage, as decision-makers will not be able to see evidence of the lack of resources. In addition, there is an increased risk of patient complications, which would directly affect the treating physician and also translate into poor quality health care.

[13] The following are considered health inputs: medicines, psychotropic substances, narcotics, and the raw materials and additives involved in their preparation; as well as medical devices. General Health Law. Available at: https://www.diputados.gob.mx/LeyesBiblio/pdf/LGS.pdf

https://doi.org/10.36105/mye.2025v36n1.05

> "...you learn to manage ... that's what happens with scarcity... And well, you always try to provide the best possible care, even if the material is not of the best quality or is not ideal for your injury". (RP, physician working in the central region, personal communication, 2023).

In this same sense, some interviewees explained that the error in the distribution of health supplies is due to the fact that many resources are allocated to high level or high specialty hospital institutions, while the resources for first contact health centers are lower. According to the physicians, focusing on first contact and preventive medicine is cheaper; however, probably from a political perspective it is more convenient to send resources to large hospitals. Nevertheless, two of the physicians working in one of the two largest public health institutions in the country pointed out that there is not enough budget to pay the salary of substitute physicians.

The situation during the COVID-19 pandemic was even more critical. With the hospital reconversion policy,[14] resources were allocated to hospitals that only received patients for diagnosis and treatment for COVID-19. For example, one physician mentioned that the hospital where he works did not receive screening tests because it was not a COVID-19 hospital, although they received patients presenting compatible symptoms of the disease. Physicians working in public institutions during the pandemic experienced a significant decrease in medical personnel, as all those with comorbidity were excused from their work duties. In addition, many physicians did not have sufficient personal safety equipment, not even the minimum necessary, such as masks or gloves, and at least six of the physicians interviewed reported having purchased their own equipment.

[14] Hospital reconversion refers to the process by which different types of hospitals are prepared for patient care during a health crisis, in this case, during the COVID-19 pandemic. Mendoza-Popoca CU, Suárez-Morales M. Hospital reconversion in the face of the COVID-19 pandemic. Rev Mex Anest. 2020; 43(2):151-156. Available at: https://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0484-79032020000200151#

https://doi.org/10.36105/mye.2025v36n1.05

> "...sometimes they did not arrive, there were no masks, there were no gloves, so only one person came in to attend sixty patients". (ECH, Physician working in the central region, personal communication, 2022).

One issue that showed two positions was access to the vaccine against COVID-19. Two of the physicians working exclusively in the private sector did not have easy access to the vaccine. One of them had to "fight or beg" (TS, physician working in southern region, personal communication 2022), through letters to the health authorities in order to receive it, and in another case, he had to travel abroad. Both physicians attended patients with COVID-19 throughout the emergency. On the other hand, physicians working in the public sector received the first dose almost immediately.

(iv) The ambivalence of triage: relief from shortages, but moral dissatisfaction with physicians

The physicians interviewed reported that they generally have to perform some form of triage in their daily work activities. However, in critical situations this process becomes much more complex. For example, it was mentioned that, if warranted and without being an official protocol, during triage they consider whether the patient is related to acts of violence. In such a case, these patients could be treated in the outermost areas of the hospital, to protect the medical staff or even other patients. Another special case that was mentioned is that when a person who works in the hospital is the victim of a violent act, medical attention is sought in a timelier manner.

With regard to triage activities during the COVID-19 pandemic, although the *Bioethical Guide for the Allocation of Limited Resources for Critical Medicine in Emergency Situations* was published in Mexico,[15] it

[15] This document is intended as a guide in the decision-making process to allocate resources that are not sufficient to meet a demand that cannot be met during a health emergency. Issued by the Consejo de Salubridad General in April 2020. [Internet]. Available at: https://www.gob.mx/cms/uploads/attachment/file/550962/GuiaBioetica-Triaje_30_Abril_2020_7pm.pdf

https://doi.org/10.36105/mye.2025v36n1.05

is important to mention that none of our interviewees had access to any document, protocol or guide at the national or international level to help them in the process of allocating resources. They describe that triage activities were carried out under the following characteristics: the first decision was to discern whether the patient had symptoms compatible with COVID-19 and, if so, the patient was sent to the area of the hospital assigned to only treat these patients. This step was critical, as the area of the hospital that was not designated for COVID-19 was less likely to receive safety supplies or equipment.

In general, the two principles used for triage were: order of arrival and medical necessity. One of the interviewees explained that medical necessity was the principle most used, since the fundamental strategy was to determine whether the patient clearly required some measure of hospital support, and then decide whether to admit the patient to the hospital or send him or her home, in order to avoid overcrowding the hospitals. In any case, when the medical services were full, there was no way to treat patients who were in critical condition, and in many cases, they ended fatally without being able to receive medical attention. This situation, mentioned by one interviewee, was what motivated the discontent of society towards doctors. Even today, he said he still receives complaints from patients who unfortunately did not survive the pandemic.

(v) Governance and public policy

The physicians interviewed had similar responses about the public policies needed to improve health services in context of violence.

Most were of the opinion that improving only the salary of physicians working in conflict areas is not an adequate incentive to increase the number of human resources. All agreed on the need for a comprehensive improvement of workplaces, with sufficient health supplies and prioritizing the safety of personnel. Otherwise, it is unlikely that national physicians will accept to work in these areas. In addition, the strategy of hiring foreign physicians to cover these areas

https://doi.org/10.36105/mye.2025v36n1.05

or implementing policies such as "zero patient rejections" (AV, physician working in north-central region, personal communication, 2023), is according to one interviewee "is not seeing reality" (BG, physician working in southern region, personal communication, 2023), resulting in more pressure for medical staff.

Another point of consensus in our interviews was the need to improve education as a priority and the main destination of the budget. Physicians stated that, if education were improved, violence and, consequently, other related problems would decrease. They also pointed out that better education would contribute to reducing corruption, which is considered to be responsible for scarce resources and poor governance in health.

Regarding the pandemic, interviewees criticized the policy of allocating all resources to the care of patients with COVID-19, considering it an inadequate strategy. They indicated that other populations, such as pregnant women or patients with chronic degenerative diseases, were neglected.

> "...patients came from all the towns to check their pregnancy, and they say at the health center, they don't attend me, they say that they only attend COVID patients". (TS, physician working in the southern region, personal communication, 2022).

6. Discussion

This study explores the ethical principles and dilemmas (Table 3), as well as normative issues (Table 4) that underline the situations described by the physicians interviewed about scarce health resources during two critical situations: violence and the COVID-19 pandemic.

From the **micro-level perspective,** we found that one of the problems faced by physicians in a context of scarcity is moral stress. The physicians interviewed reflect situations that clearly show what is defined by the Canadian Medical Association as a psychological response to a situation of moral conflict. This occurs when a person

https://doi.org/10.36105/mye.2025v36n1.05

feels that he or she is unable to do what he or she considers ethically appropriate because of institutional impediments. These situations can easily occur in public health emergencies or in resource-limited settings that affect patient care or the safety of medical staff (18).

Identifying moral stress in medical staff is important because it negatively affects the entire healthcare delivery chain: physicians, patients, and other healthcare professionals. Some authors recommend implementing strategies for the prevention, containment and management of this problem, as well as following up on its consequences, such as burnout, fatigue, depression, increased medical errors and decreased job satisfaction in the medical field (19,16).

Also, it was identified that physicians follow the principled perspective of Beauchamp and Childress (20). The principles of beneficence and nonmaleficence, followed by that of justice, were the ones referred to and stand out in the interview discourses. All the physicians interviewed agree that they must provide medical care despite knowing that they do not have adequate supplies, creating a context of improvisation in health care. In this context, it is necessary to jointly evaluate the two principles [beneficence and nonmaleficence] (21) to obtain the greatest benefit with the least risk and at a reasonable cost (22). However, this task is not simple; some decisions are really difficult and may result in some unintended harm to patients (23). This situation is related to the increased moral stress (21) mentioned above.

The principle of justice was considered of great importance in the discourses of the interviewees. Alexandra Kerbache, in her ethical analysis of moral stress, mentions that justice has two components: equity and distributive justice (21). In the context of health services, this means that patients with similar needs should receive the same medical care, regardless of other non-medical conditions such as monetary income or social position. As for distributive justice, it refers to the fact that, in the face of limited resources for medical care, the moral obligation of physicians is to allocate resources fairly or appropriately to the circumstances. This implies

https://doi.org/10.36105/mye.2025v36n1.05

that not everyone should receive equally but based on appropriate principles and criteria (21,20). These professionals may feel that they cannot provide adequate care for their patients due to lack of resources, which creates a conflict between their ethical values and operational reality, increasing moral stress in physicians (21).

During the COVID-19 pandemic, physicians saw this situation exacerbated and had to triage between the needs of patients affected by COVID-19 and determine the best use of supplies (24,25), as well as between those patients who also needed them for other causes.

In this regard, three of the physicians interviewed reported that, when performing triage in all cases, they were guided by the principle of clinical need for the distribution of resources. This criterion, constantly used by clinical staff, is also one of the rationing principles identified by Cookson, who defines need according to the degree of illness, prioritizing that which directly threatens life. Saving life takes precedence over improving it (26).

In this scenario, especially at the beginning of the pandemic, the specific context of epistemic uncertainty and the need to make decisions in a very limited time made the beliefs of each physician take an important role (12). Although in April 2020 the Consejo General de Salubridad issued[16] the *Bioethical Guide for the Allocation of Limited Resources for Critical Care Medicine in Emergency Situations,*[17] the physicians interviewed reported having no knowledge or support of this document or of any other resource allocation guide.

The General Health Council Guide was intended to help and guide decision making in the scenario of resource scarcity, but it was

[16] The General Health Council is a collegiate body that reports directly to the President of the Republic and has the character of a health authority, with regulatory, advisory and executive functions. The provisions it issues will be of a general nature and obligatory in the country [Internet]. https://www.gob.mx/csg/articulos/consejo-de-salubridad-general-366737?state=published

[17] General Health Council, [Internet]. available at: https://www.gob.mx/csg/articulos/consejo-de-salubridad-general-366737?state=published

https://doi.org/10.36105/mye.2025v36n1.05

not mandatory (27). Thus, decisions were made based on principles such as maximizing benefits by saving as many lives as possible (28), which was operationalized through clinical necessity, admitting only patients who needed imminent hospital intervention.

Speaking in the context of violence, in the discourse of the interviews we can observe the discussion about the priority that should be given to the welfare and protection of physicians versus the public good of health protection. The well-being[18] of the physician as an individual has a fundamental role in the well-being of society. It is a resource for daily life and is determined by social, economic and environmental conditions (29).

Well-being is part of the definition of health; therefore, protecting the well-being of the medical staff is also a fundamental part of protecting the health of an entire society. Both are essential and the balance between them must be considered in decision making and policies for the benefit of the health of the entire population, especially in crisis situations, when medical personnel are exposed to significant risks that could affect the quality and continuity of medical services provided to society at large.

However, the welfare and protection of health personnel is not only the responsibility of society, but also of health institutions[19] and health policy makers.

[18] Definition of well-being: well-being is a positive state experienced by individuals and societies. Like health, it is a resource for daily life and is determined by social, economic and environmental conditions (29).

[19] Understanding health institutions as the grouping of health establishments under the same command and regulatory structure. Art. 314, fr. XXIV of the Mexican General Health Law.

https://doi.org/10.36105/mye.2025v36n1.05

Table 3. Ethical principles identified at a micro level of resource allocation in critical situations according to the point of view of physicians

	Ethical principle	Speech in interviews
Micro level of resource allocation	Principle of beneficence	"…so, I always try to provide my care with a lot of respect, a lot of respect for my patient, and I always try to make it of the best quality." (BG, doctor working in the southern region, personal communication, 2023).
	Principle of non-maleficence	"…deciding whether or not you can treat a patient with the material you have, many times even though you know it is not the ideal management, you have to continue treating a patient. And well, you always try to give them the best possible care, even though the material may not be of the best quality or is not ideal for their injury." (RP, doctor working in the central region, personal communication, 2023).
	Principle of justice	"…And there were many people who you said deserved to be here but not as much as the other one, so, even though this one was getting seriously ill, you told him he had to

https://doi.org/10.36105/mye.2025v36n1.05

		take this measure, but you sent him home because you had no choice, because you had nowhere to treat him." (BG, doctor working in the southern region, personal communication, 2023).
	Clinical necessity principles of justice in health rationing[20]	"… it is a question of the more serious, more unstable patient who has priority" (ECH, Doctor working in the central region, personal communication, 2022). "(During COVID) …the problem is that in public hospitals they rejected women in labor, a real problem, suddenly in our hospital the number of births doubled or tripled, because they were rejected in the public hospital and of course this also affected them economically, in the public hospital care is free, so they had to find resources to pay for the private one." (TS, doctor working in the southern region, personal communication 2022).

Source: own elaboration.

[20] The substantive rationing principles identified by Cookson are classified into three large categories: principles of need, maximizing principles and egalitarian principles (26).

https://doi.org/10.36105/mye.2025v36n1.05

Table 4. Normative problems and ethical dilemmas identified at a micro level of resource allocation in critical situations according to the point of view of physicians

	Regulatory issues	**Speech in interviews**
Micro level of resource allocation	Health of medical personnel: moral stress	"…the patient died, so that family resents me, because we couldn't treat him at the hospital." (TS, doctor working in the southern region, personal communication, 2022). "…we have tried to get the job done with what we can. We have seen complications from doing that kind of thing. And well, as we have matured in this, we have learned to say no, no, sometimes you can feel pressured to continue doing procedures with few materials." (RP, doctor working in the central region, personal communication, 2023).
	Ethical decisions: triage	"…Well, triage was based on your health status, short-term prognosis…so when patients arrived, obviously they looked bad and desaturated, with breathing difficulties, they were given priority." (MP, doctor working in the central region, personal communication, 2023).
	Physician welfare and protection	"…if you talk to the doctors at the health centers, they feel that they do not receive any security support from the health authorities, much less from the public security authorities." (TS, doctor working in the southern region, personal communication, 2022). "…there is a problem, there is a serious problem because unfortunately… right

https://doi.org/10.36105/mye.2025v36n1.05

		now it is one of the cities that are in the eye of the storm, the most vulnerable city in terms of violence, the dispute between two cartels that are fighting for the land here, so many young people who are specialists do not want to come to work." (MM, doctor working in the central-northern region), personal communication, 2023). "… many interns could not come because because of the insecurity itself they did not want to come, they rejected this position and we had six months without interns both at the health center and from the IMSS and it was in the midst of the pandemic unfortunately, so it affected the community a lot." (RV, doctor working in the northern region, personal communication, 2022).
	Fundamental right: health protection	"Patients needed a place to go and continue with ordinary things, so I saw that public health was focused only on COVID and left all other problems adrift." (TS, doctor working in the southern region, personal communication, 2022).

Source: own elaboration.

Similarly, from a **macro-level** perspective **applied to the national and international level,** different ethical principles and normative issues were identified. At the national level, ethical questions focused on issues related to equity and responsibility (Table 5).

With regard to equity, its primacy is an imperative to guide and inform the definition of priorities in health policies (30). To describe

https://doi.org/10.36105/mye.2025v36n1.05

a circumstance as equitable, we must identify what is morally good about the distributions, even if they are unequal or equal (31). In this context, it is important to note the difference referred to by Margareth Whitehead about inequities in the level and quality of health of different population groups and inequities in the provision and distribution of health services (32). Our findings during the interviews revealed situations focused on inequities in the provision and distribution of health services. In particular, it was highlighted that inequities in access arise when resources and facilities are unevenly distributed across the country, concentrated in urban and more affluent areas, while scarce in marginalized and rural areas (32).

Thus, reflecting on equity, as well as the factors that affect it and how social justice contributes to health justice and what relationships exist between health and development (31), were some of the most important issues from the point of view of the medical personnel interviewed.

Mention was also made of the principle of responsibility. This principle manifests our shared existence with others and, from this relationship, ties, commitments and obligations are generated (33). Therefore, responsibility for the promotion, prevention and care of health, both individual and collective, is a matter that concerns us all as part of our duties (34).

Although it is the obligation of the State to establish the necessary mechanisms to ensure that all people have access to health services, health is a responsibility that is indissolubly shared by the State, society and individuals (35). The physicians interviewed agreed on this shared responsibility and considered it a fundamental pillar, together with education, to raise awareness of health problems and promote solutions and healthier lifestyle changes.

https://doi.org/10.36105/mye.2025v36n1.05

Table 5. Ethical principles identified at a macro level of resource allocation in critical situations according to the physicians' point of view.

	Ethical principle	Speech in interviews
Macro level of resource allocation	Social justice: equity	"…well, the hospital, it is a first-level center, which practically has absolutely no resources to deal with an emergency, even a minor one, so the next closest center is about two and a half hours away, on the highway (if I can call it a highway)… Which was destroyed by these past rains…" (RV, doctor who works in the northern region, personal communication, 2022).
	Responsibility	"and because we are solving things wrongly, we are not able to make the government see the reality, because the government has to see the whole country, but if you don't tell them, hey, I don't have this here, then how are they going to find out" (BG, doctor working in the southern region, personal communication, 2023). "…the people who manage the resources of the health institution, …well, as long as they make the numbers work, they are not interested in what we have to do to provide medical care." (RP, doctor working in the central region, personal communication, 2023). "I imagine that these are issues of poor administration. There is also a bit of corruption in many areas, the problem is that they are poorly distributed and managed." (RP, doctor working in the central region, personal communication, 2023).

Source: own elaboration.

https://doi.org/10.36105/mye.2025v36n1.05

In terms of regulatory issues, we identified transparency and some public health consequences derived from decisions made during the COVID-19 pandemic, a situation that also has implications at the international level (Table 6).

Transparency in decision-making and public activities has two functions: i) citizens have the possibility of demanding political and legal accountability from public servants, preventing corruption and malpractices, which generates citizen confidence in public institutions; and ii) it allows citizens to participate directly through proposals and evaluations. In fact, transparency loses meaning if it is not accompanied by citizen participation (36). Therefore, transparency, accompanied by the disclosure of health information, is a determining factor in establishing effective health systems and provides citizens with tools to evaluate the performance and quality of health services (37).

Another normative questioning refers to some governmental health decisions that were criticized during the Pandemic by COVID-19. One of them was that many hospital centers became exclusively recipients of patients affected by this coronavirus, neglecting preventive programs and treatment for other pathologies, which increased excess mortality in Mexico (13). Similarly, the policy of not prioritizing vaccination of physicians working in private medical centers (38; 39; 40) resulted in Mexico being one of the countries with the highest number of deaths of medical personnel during the COVID-19 health emergency (41).

In this context, the physicians' point of view highlights the need to find a balance in decisions regarding the allocation and distribution of resources, since this balance stands as a fundamental pillar for the proper functioning of the public health system in Mexico. This importance lies in the fact that the health of a subject or of the entire population must be understood as a social component closely related to the conditions surrounding the individual (42). Therefore, an adequate distribution of resources not only ensures better access

https://doi.org/10.36105/mye.2025v36n1.05

to health services, but also has a direct impact on social issues of the population.

Finally, at a macro level applied to the international level, it was considered very important to reflect on the ethical implications of the governmental strategy of recruiting foreign physicians in order to reduce the lack of medical personnel in critical areas. The migration of foreign physicians could lead to a loss of health services in the countries of origin, and the underlying causes of the shortage of medical personnel in the receiving countries would not be addressed. Moreover, the recruitment of foreign physicians, while it may temporarily alleviate the lack of resources, is not a viable long-term strategy. The so-called "brain drain," a term coined by the British press in the 1960s (43), which refers to the term "highly skilled labor migration" (44), can be helpful when there is a shortage of qualified personnel in different countries and policy measures are needed to try to improve human resource development at the national level (44).

However, there is an urgent need for countries of origin to adopt short-term policies that strengthen educational and research systems to open up new labor niches and vital opportunities in order to reduce the loss of professionals (45). The latter could evoke the situation in Mexico, since due to the lack of safe working conditions many Mexican physicians would also migrate to other countries in search of better working conditions and quality of life, which would increase the global inequality in the distribution of human resources in health.

https://doi.org/10.36105/mye.2025v36n1.05

Table 6. Normative problems identified at a macro level of resource allocation in critical situations according to the physicians' point of view

Level of assignment	Regulatory issues	Speech in interviews
Macro level of resource allocation national level	Public Health Problem: response during the COVID-19 pandemic.	"...because COVID hospitals were formed, that is, hospitals that only received COVID patients, and all the resources went to them, but the other hospitals also received COVID patients, and we didn't even have mouth covers". (BG, physician working in southern region, personal communication, 2023). "...because the public hospital simply closed its doors, not only to those wounded by violence, but to patients in general, not only that, the health centers no longer accepted pregnancy control, that is, patients came from all the towns to check their pregnancy and they say from the health center, they don't see me, they don't attend me, they say they only attend patients from COVID, so there was a huge shortage in terms of common health problems". (TS, physician working in southern region, personal communication, 2022). "...as physicians, salubridad [referring to the Ministry of Health] did not give us any advantage to protect us, we had to go until it was our turn by age or surname to get the vaccinations for the whole population...but we had to actively fight to receive that vaccine." (TS, physician working in southern region, personal communication, 2022).

https://doi.org/10.36105/mye.2025v36n1.05

	Transparency[21]	"I think that based on this situational diagnosis, we should plan and evaluate the circumstances and consequences and all contribute to achieving the objective of comprehensive care for all our patients... And, above all, we should demand the right people, because this is where political, cultural and social issues come in, so that this really happens". (VA, physician working in the north-central region, personal communication, 2023). "We have a very important role in the decision making process of the people who are going to represent us, don't we all need to know the people who are going to represent us". (RV, physician working in the northern region, personal communication, 2022). "...the government and also the population because I tell you, we have really normalized things so much. We have normalized so much corruption. (GG, physician working in the central region of the country, personal communication, 2023).

[21] Curto-Rodríguez and Pascual-Fernández, refer that the starting point of transparency is found in the disclosure of information, which has its origin in the 18th century, with the vision of a state without secrets, promoting impartiality and the fight against corruption (46). But it is also understood as key in accountability, accessing diverse data, in addition to its understanding and management with formats available to citizens (47).

https://doi.org/10.36105/mye.2025v36n1.05

Macro level of resource allocation international level	Hiring foreign doctors	"For example, this government hires or brings in Cuban doctors and I think they were brought in because of the pandemic, but the salary offered to foreigners was not the same as the salary offered to national doctors..., because they did not go in to attend patients and sometimes, I mean, it was just like, ah, there is the doctor or the physician, but they do not have enough experience or practice to attend a patient". (MM, physician working in north-central region), personal communication, 2023). "...there is a lot of brain drain, a lot of people who were doing transplants...or pathology in all areas are leaving...there is a brain drain everywhere in Mexico because there are not adequate conditions to work". (GG, physician working in central region of the country, personal communication, 2023). "In any algorithm of resuscitation of care for a rescue or whatever, the one who should feel safe first is the one who offers the health service. So I don't understand why the government insists on sending doctors to places where you are not going to feel safe". (GG, physician working in the central region of the country, personal communication, 2023).

Source: own elaboration.

https://doi.org/10.36105/mye.2025v36n1.05

7. Limitations

Some limitations of our study are the small number of participating physicians, who, although they were deliberately selected and provided very valuable information, it is not possible to guarantee that the responses are typical or homogeneous (17). The results are limited to a cohort of eleven physicians, however, since they are physicians working in some of the economic areas of the country and in some with more violence and scarcity of resources, we obtained opinions that reflect all possible characteristics. Although it is not possible to generalize their opinions to all medical personnel. During the interviews we reached a point of thematic saturation for the topics of our interview guide.

8. Conclusions

The purpose of our study was to contribute to the knowledge and reflection on the experiences faced by medical personnel in critical situations. After the analysis, we have concluded that medical personnel perform a complex job with significant ethical and normative challenges that are intensified during critical situations. Therefore, our work brings new perspectives to the study of these issues as we present a view that interrelates two critical circumstances-violence and the COVID-19 pandemic-rather than addressing them individually. Promoting a more comprehensive opportunity for reflection and learning for society, health professionals and decision makers to foster changes and improvements in health policies.

Funding

Ivette M. Ortiz Alcántara's PhD studies are funded by a Swiss Government Excellence Scholarship. Federal Scholarship Commission for Foreign Students.

https://doi.org/10.36105/mye.2025v36n1.05

Conflict of interest

There are no conflicts of interest.

Ethical statements

Studies involving human subjects were reviewed and approved by the Ethics Committee (CEBES) of the Institute for Biomedical Ethics and the History of Medicine, University of Zurich (none of the authors of this article participate in CEBES). Identification number: 2022-06_CEBES-Review_Mexico-Study_Ortiz. Participants gave written informed consent to participate in this study in addition verbal consent was requested to start the recording at the time of the interview.

Acknowledgments

We thank the medical staff who generously shared valuable information and contributed significantly to this study. We also extend our special acknowledgement to Julian W. März, Sebastian Wäscher and Tania Manriquez for their collaboration in the development of the interview script. We also thank Joanna Ortiz and Ana Yunuen Castillo for their invaluable help in refining the style of this manuscript.

References

1. Consejo Nacional de Evaluación de la Política de Desarrollo Social (CONEVAL). Estudio sobre el derecho a la salud 2023: un análisis cualitativo. Ciudad de México: CONEVAL; 2023:29. Available at: https://www.coneval.org.mx/EvaluacionDS/PP/CEIPP/IEPSM/Documents/E_Derecho_Salud_2023.pdf
2. Ortiz IM, Holzer F. El ejercicio médico y la asignación de recursos humanos en salud en regiones violentas. Medicina y Ética. 2023; 34(3):763-803. https://doi.org/10.36105/mye.2023v34n3.04
3. Sepulveda J. La respuesta de México al COVID-19: Estudio de caso. Instituto de Ciencias de la Salud Global, Universidad de California, San Francisco; 2021. Available at: https://globalhealthsciences.ucsf.edu/wp-content/uploads/2024/02/la_respuesta_de_mexico_al_covid_esp.pdf

4. Jonsen A. Bioethics and the Health Care System. En: Bioethics Beyond the Headlines: Who Lives? Who Dies? Who Decides? Rowman & Littlefield Publishers, Inc. 2005.
5. Gomez O. Sistema de salud en México. Salud Publica Mex [Internet]. 2011; 53(suppl):s220-s232. Available at: https://www.researchgate.net/publication/262501775_Sistema_de_salud_de_Mexico
6. Consejo Nacional de Evaluación de la Política de Desarrollo Social (CONEVAL). Nota técnica sobre la carencia por acceso a los servicios de salud, 2018-2020. 2021. Available at: https://www.coneval.org.mx/Medicion/MP/Documents/MMP_2018_2020/Notas_pobreza_2020/Nota_tecnica_sobre_la_carencia_por_acceso_a_los_servicios_de_salud_2018_2020.pdf
7. Blog IMER. Cuatro de cada 10 pasantes de medicina sufren agresiones: ONG [Internet]. 2022 [citado 2024 May 2]. Available at: https://noticias.imer.mx/blog/cuatro-de-cada-10-pasantes-de-medicina-sufren-agresiones-ong/
8. Colectivo Nosotrxs y Médicos en Formación. Encuesta Nacional de Médicos en Formación. 2021. Available at: https://www.medsenformacion.org/_files/ugd/f4acf5_e198f35484a84f13ad09467f5f3ff861.pdf
9. Vargas L, Vélez-Grau C, Camacho D, Richmond T, Meisel Z. The Permeating Effects of Violence on Health Services and Health in Mexico. J Interpers Violence [Internet]. 2022; 37(13-14). https://doi.org/10.1177/0886260521990832
10. Abu Sa'Da C, Duroch F, Taithe B. Attacks on medical missions: Overview of a polymorphous reality: The case of Médecins Sans Frontières. Int Rev Red Cross [Internet]. 2014; 95(890):309-330. https://doi.org/10.1017/S1816383114000186
11. Consejo Nacional de Evaluación de la Política de Desarrollo Social (CONEVAL). Estudio sobre el derecho a la salud 2023: un análisis cualitativo. Ciudad de México: CONEVAL; 2023. Available at: https://www.coneval.org.mx/EvaluacionDS/PP/CEIPP/IEPSM/Documents/E_Derecho_Salud_2023.pdf
12. Holzer F, Alcántara IMO, Eichinger T, März JW. Proportionality and Mexico's pandemic management during the COVID-19 crisis. Dev World Bioeth. 2023;1–8. https://doi.org/10.1111/dewb.12429
13. Karlinsky A, Kobak D. Tracking excess mortality across countries during the COVID-19 pandemic with the World Mortality Dataset. Epidemiol Glob Health. 2021. Available at: https://elifesciences.org/articles/69336
14. Latinus. Juez ampara a médicos privados para que sean vacunados contra la COVID-19. 2021. Disponible en línea: https://latinus.us/2021/05/04/juez-ampara-medicos-privados-sean-vacunados-COVID/
15. Velázquez Leyer R. Mexico's Social Policy Response to COVID-19: A Path of Minimal Action. CRC 1342 COVID-19 Social Policy Response Series. 2021;5. Available at: https://www.ssoar.info/ssoar/bitstream/handle/document/71809/ssoar-2021-velazquez_leyer-Mexicos_Social_Policy_Response_to.pdf?sequence=1&isAllowed=y&lnkname=ssoar-2021-velazquez_leyer-Mexicos_Social_Policy_Response_to.pdf
16. McGrath C, et al. Twelve tips for conducting qualitative research interviews. Med Teach. 2019; 41(9):1002-1006. https://doi.org/10.1080/0142159X.2018.1497149

17. Maxwell, J,A. Qualitative Research Design: An Interactive Approach. 3rd ed. Thousand Oaks, California: SAGE Publications 1941. 2012.
18. Canadian Medical Association. COVID-19 and Moral Distress. (El contenido de este documento fue adaptado del Champlain Centre for Health Care Ethic). Canadian Medical Association. 2020. Available at: https://www.cma.ca/sites/default/files/pdf/Moral-Distress-E.pdf
19. Koppmann A, Cantillano V, et al. Moral Distress and Burnout Among Health Professionals during COVID-19. Rev Med Clin Condes. 2021; 32(1):75-80. Available at: https://www.elsevier.es/es-revista-revista-medica-clinica-las-condes-202-articulo-distres-moral-y-burnout-en-S0716864020301000
20. Beauchamp T, Childress J. Principles of Biomedical Ethics. 5th ed. Oxford: Oxford University Press. 2001.
21. Kherbache A, Mertens E. Moral Distress in Medicine: An ethical analysis. J Health Psychol. 2021 May;27(2):135910532110145. https://doi.org/10.1177/13591053211014586
22. González L, Gallardo E. Calidad de la Atención Médica: la diferencia entre la vida o la muerte. Rev Dig Univ. 2012; 13(8). Available at: https://www.revista.unam.mx/vol.13/num8/art81/art81.pdf
23. Borry P, Schotsmans P, Dierickx K. What is the role of empirical research in bioethical reflection and decision-making? An ethical analysis. Med Health Care Philos. 2004; 7(1):41-53. Available at: https://www.researchgate.net/publication/8567205_What_is_the_role_of_empirical_research_in_bioethical_reflection_and_decision-making_An_ethical_analysis
24. Kirkpatrick. Allocation and Triaje in COVID-19. JACC. 2020 ; 76(1):85-92. Available at: https://www.sciencedirect.com/science/article/pii/S0735109720352232
25. Vinay R, Baumann H, Biller-Andorno N. Ethics of ICU triaje during COVID-19. Br Med Bull. 2021; 138(1):5-15. https://doi.org/10.1093/bmb/ldab009
26. Cookson R, Dolan P. Principles of justice in health care rationing. J Med Ethics. 2000; 26(5):323-9. https://doi.org/10.1136/jme.26.5.323
27. Medina-Arellano MJ, Palacios-González C, Santos-Preciado JI. Guía bioética de asignación de recursos de medicina crítica del Consejo de Salubridad General en México. Salud Publica Mex. 2020; 62:607-609. https://doi.org/10.21149/11747
28. Jöbges S, Vinay R, Luyckx VA, Biller-Andorno N. Recommendations on COVID-19 triaje: international comparison and ethical analysis. Bioethics. 2020; 34(9):948-959. https://doi.org/10.1111/bioe.12805
29. Health promotion glossary of terms 2021. Geneva: World Health Organization; 2021. Available at: https://iris.who.int/bitstream/handle/10665/350161/9789240038349-eng.pdf?sequence=1
30. Becerra F. Presentación. Equidad en salud: mandato esencial para el desarrollo sostenible. Rev Panam Salud Publica. 2015; 38(1). Available at: https://www.scielosp.org/pdf/rpsp/v38n1/v38n1a01.pdf
31. Ferrer M. Equidad y justicia en salud. Implicaciones para la bioética. Acta Bioeth. 2003; 9(1). Available at: https://www.scielo.cl/scielo.php?script=sci_arttext&pid=S1726-569X2003000100011

32. Whitehead M. Los conceptos y principios de la equidad en la salud. Washington. Organización Panamericana de la Salud. Centro de Documentación e Información. Programa de Desarrollo de Políticas de Salud. Serie Reprints; 1991:9.
33. Santillán M. La responsabilidad ética. Veritas. 2019; (42):49. https://doi.org/10.4067/S0718-92732019000100049
34. Bergel SD. Responsabilidad social y Salud. Rev Latinoam Bioet. 2007; 7(12):10-27. Available at: https://www.redalyc.org/pdf/1270/127020800002.pdf
35. Medina M. Bioética y Derecho a la Salud en Derechos el Pueblo mexicano. México a través de sus constituciones. Universidad Nacional Autónoma de México-Instituto de Investigaciones Jurídicas, Cámara de Diputados del H. Congreso de la Unión, M.A Porrúa. 2016. Available at: https://archivos.juridicas.unam.mx/www/bjv/libros/12/5628/16.pdf
36. Beltrán-Aguirre J. Transparencia en la política de priorización de pacientes para recibir asistencia sanitaria. Rev Esp Transparencia. 2018; 7(2):29-47. Available at: https://revistatransparencia.com/ojs/index.php/ret/article/view/16/48
37. Hernández A. Transparencia y salud: el alcance de los recursos de revisión interpuestos por los ciudadanos. Guadalajara, México: ITESO. 2014. Available at: https://rei.iteso.mx/bitstream/handle/11117/3923/9786079361112.pdf?sequence=2&isAllowed=y
38. Latinus. Juez ampara a médicos privados para que sean vacunados contra la COVID-19. 2021. Available at: https://latinus.us/2021/05/04/juez-ampara-medicos-privados-sean-vacunados-COVID/
39. Latinus. Reclamos por no vacunar a médicos privados contra la COVID deben abordarse de oficio: Suprema Corte. 2022. Available at: https://latinus.us/2022/05/26/suprema-corte-determina-sector-salud-privado-debe-ser-considerado-prioritario-vacunacion-COVID/
40. Murillo E. Decide SCJN que médicos privados tienen derecho a vacuna antiCOVID. La Jornada. 2022. Available at: https://www.jornada.com.mx/notas/2022/05/26/politica/decide-scjn-que-medicos-privados-tienen-derecho-a-vacuna-antiCOVID/
41. Amnistía Internacional. Global: análisis de Amnistía Internacional revela que más de 7 mil personas trabajadoras de la salud han muerto a causa de COVID-19. 2020. Available at: https://amnistia.org.mx/contenido/index.php/global-analisis-de-amnistia-internacional-revela-que-mas-de-7-mil-personas-trabajadoras-de-la-salud-han-muerto-a-causa-de-COVID-19/
42. de los Ríos ME. Justicia y escasez: el problema bioético de la distribución de recursos para la salud. Rev Colomb Bioet. 2013; 8(1):175-188. Available at: https://www.redalyc.org/pdf/1892/189228429012.pdf
43. Maltos M. Fuga de cerebros, la diáspora del conocimiento. Ciencia UNAM. 2013. Available at: https://ciencia.unam.mx/leer/150/Fuga_de_cerebros_la_diaspora_del_conocimiento
44. Conferencia Internacional del Trabajo, 106.ª reunión. Informe IV. Migración laboral: nuevo contexto y desafíos de gobernanza. Ginebra: Oficina Internacional del Trabajo. 2017. Available at: https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_550278.pdf

45. Organización Panamericana de la Salud. Migración calificada en salud, impacto financiero, reconocimiento de títulos: retos y perspectiva en los países de la región andina. Lima: OPS. 2013. Available at: https://www.observatoriorh.org/sites/default/files/webfiles/fulltext/2013/migracali_subreg_andina_2013.pdf
46. Curto-Rodríguez R, Pascual-Fernández P. ¿Se está elevando al cuadrado la lucha contra la corrupción en los estados mexicanos? Comunicación de datos públicos reutilizables. Gestión y Política Pública. 2021; 30(3):115-145. Available at: https://www.gestionypoliticapublica.cide.edu/ojscide/index.php/gypp/article/view/962/337
47. Cadena-Inostroza C, Morales-Fajardo ME, Ramírez Aceves MMC. La opacidad de la transparencia: Instituto de Salud del Estado de México, 2018-2022. RC Rendición de Cuentas. 2023; (2). https://doi.org/10.32870/rc.v1i2.46

This work is under international License Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0)