



## LETTERS TO THE EDITOR

### The Crucial Role of Epidemiology in the Confrontation with COVID-19 in Guantánamo: A Comprehensive Analysis

*El papel crucial de la Epidemiología en el enfrentamiento a la COVID-19 en Guantánamo: Un análisis integral*

Yanier Espinosa Goire <sup>1\*</sup>, <https://orcid.org/0000-0003-1026-7932>

José Manuel Padilla González <sup>1</sup>, <https://orcid.org/0000-0001-8781-2885>

<sup>1</sup> University of Medical Sciences of Guantánamo. Guantánamo, Cuba.

\* **Corresponding author:** [espinosagoireyanier@gmail.com](mailto:espinosagoireyanier@gmail.com)

**Received:** 10/09/2024

**Accepted:** 30/12/2024

**How to cite this article:** Espinosa Goire Y, Padilla González JM. The Crucial Role of Epidemiology in the Confrontation with COVID-19 in Guantánamo: A Comprehensive Analysis. Med. Es. [Internet]. 2024 [cited access date]; 4(3):e244. Available in: <https://revmedest.sld.cu/index.php/medest/article/view/244>

#### Dear Director:

The SARS-CoV-2 pandemic has represented one of the most challenging health crises of the last hundred years, with profound impacts on human behavior, society, and healthcare systems globally. In this context, Cuba managed to implement effective strategies to control the pandemic, highlighting the collaboration between the scientific community, the government, and the population. <sup>(1,2)</sup> The purpose of this article is to analyze the fundamental role of Epidemiology in the province of Guantánamo, with an emphasis on the actions implemented and the results obtained.

Epidemiology, as a basic science, promoted interprofessional education, intersectoral cooperation, and preventive practices nationwide. Guantánamo,

Articles from MedEst Magazine are shared under the terms of the Creative Commons Attribution-NonCommercial 4.0 International license.

Email: [revmedest.mtz@infomed.sld.cu](mailto:revmedest.mtz@infomed.sld.cu) Website: [www.revmedest.sld.cu](http://www.revmedest.sld.cu)



for its part, was no exception. Primary Health Care (PHC) conducted active screening to classify the population according to risk factors, establishing a constant epidemiological surveillance system. <sup>(3,4)</sup> These measures allowed for early detection of cases and a rapid response to outbreaks.

A significant event was the 418-day "period of epidemiological silence" in the Yateras municipality, where no cases were reported between March 11, 2020, and February 19, 2021. This phenomenon, unique in the country, reflected the effectiveness of local measures, although the province subsequently faced an increase in cases, declaring itself in the autochthonous transmission phase on January 16, 2021.

The Guantánamo Center for Hygiene, Epidemiology, and Microbiology coordinated anti-epidemic efforts, including health inspections and epidemiological surveillance. The implementation of the Abdala vaccine in 89 clinical sites was noteworthy, prioritizing vulnerable groups such as pregnant women, infants, and kidney transplant patients. Furthermore, the center's Molecular Biology Laboratory streamlined diagnosis, reducing costs and risks associated with sample transport.

The participation of students from the University of Medical Sciences in active research, along with the reorganization of distance learning and biosafety training, demonstrated intersectoral integration and an interprofessional approach in the response to the pandemic.

The Guantánamo experience demonstrates that epidemiology is essential for addressing health crises. The combination of active research, epidemiological surveillance, mass vaccination, and interinstitutional collaboration made it possible to control the pandemic, even in challenging contexts. These findings highlight the importance of strengthening surveillance systems and training public health professionals to address future epidemiological challenges.

## **BIBLIOGRAPHIC REFERENCES**

---

1. World Health Organization. WHO statement regarding cluster of pneumonia cases in Wuhan, China [Internet]. 2020 [cited 09/07/2024]. Available in: <https://www.who.int/china/news/detail/09-01-2020-who-statement-regarding-cluster-of-pneumonia-cases-in-w>
2. Harriete-González F, Betancourt Pulsan A, Perera-García Y, Peña-Lobaina I, Albear-Caro Y. Perfil Epidemiológico de la COVID-19 en municipio Yateras, Guantánamo. Rev Inf Cient [Internet]. 2021 [cited 09/07/2024].



3. Villaverde-Marcé Y. Guantánamo no descuida protocolos para avanzar en el control de la COVID-19. ACN [Internet]. 2021 [cited 09/07/2024]. Available in: <http://www.acn.cu/salud/86215-guantanamo-no-descuida-protocolos-para-avanzar-en-el-control-de-la-covid-19>

1. 4. Bécquer L. Cuba avanza hacia la inmunización contra la covid-19 con tres vacunas propias. EFE [Internet]. 2021 [cited 09/07/2024]. Available in: <https://www.elcomercio.com/tendencias/salud/cuba-avanza-inmunizacion-covid19-vacunas-propias.html>

## STATEMENT OF AUTHORSHIP

**YEG:** Conception of the idea, critical writing, approval of the final version of the manuscript.

**JMPG:** Conception of the idea, critical writing, approval of the final version of the manuscript.

## CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest.

## SOURCES OF FUNDING

The authors did not receive funding for the development of this article.