

LOCAL HISTORY OF HEALTH

The successful response of Consolacion del Sur inhabitants to COVID-19 in Camilo Cienfuegos community

La exitosa respuesta de los consolareños a la COVID-19 en la comunidad Camilo Cienfuegos

Rolando Jesús González Cabrera¹, Juan Carlos Hernández Martín²

¹ University of Pinar del Río Hermanos Saíz Montes de Oca. Municipal Museum of Consolación del Sur. Pinar del Río, Cuba.

² University of Pinar del Río Hermanos Saíz Montes de Oca. Center Municipal University Student of Consolación del Sur. Pinar del Río, Cuba.

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ABSTRACT

Introduction: the emergence of Covid-19 pandemic resulted in more than 180 countries being affected today. Cuba has not been exempt from this situation and its first epidemiological event took place in Camilo Cienfuegos community, Consolacion del Sur municipality, Pinar del Río province, which tested the mobilization capacity of the medical personnel, and of the sectors that in one way or another collaborated in the period of quarantine between March 31 and May 1, in order to avoid the spread and the onset of new cases.

Objective: to characterize the behavior of Camilo Cienfuegos community during Covid-19 period of quarantine.

Methods: empirical methods such as observation, documentary review and interviews with members of the medical team and community leaders were applied.

Development: a characterization of the community in the quarantine process was accomplished complying with the indications of the Municipal Defense Council to cope with and prevent the onset of Covid-19 new cases.

Conclusions: the historical characterization of Camilo Cienfuegos community allowed the Municipal Defense Council to have a testimonial tool on the treatment of Covid-19, which facilitated the further requests or enquiries of posterior episodic situations of this disease in the province and the country, as well as its importance for decision making in coping with this pandemic.

Keywords: COVID-19; SAR-COV-2; Pandemics; Community Participation; Patient.

RESUMEN

Introducción: la aparición de la pandemia de la COVID-19 trajo como resultado que más de 180 países estén afectados. Cuba no ha estado ajena a esta situación. El primer evento epidemiológico registrado en la comunidad Camilo Cienfuegos, municipio Consolación del Sur, provincia Pinar del Río, que puso a prueba la capacidad de movilización del personal médico, y de los sectores que de una u otra forma colaboraron en la puesta en cuarentena entre el 31 de marzo y el 1º de mayo, para evitar la propagación.

Objetivo: caracterizar el comportamiento de la comunidad Camilo Cienfuegos durante la cuarentena por la COVID-19.

Métodos: se utilizaron métodos empíricos, la observación, revisión documental, entrevistas a miembros del equipo médico y a dirigentes de la comunidad.

Desarrollo: se logró una caracterización de la comunidad en el proceso de la cuarentena a partir de su indicación por el Consejo de Defensa Municipal, para el enfrentamiento y la prevención del surgimiento de nuevos casos de la enfermedad.

Conclusiones: la caracterización histórica de la comunidad Camilo Cienfuegos permitió al Consejo de Defensa Municipal disponer de una herramienta testimonial sobre el tratamiento de la COVID-19, lo que facilitó su aplicación o consulta a posteriores situaciones episódicas de la enfermedad en la provincia y el país. Así como su importancia para la toma de decisiones en el enfrentamiento a la pandemia.

Palabras clave: COVID-19; SAR-COV-2; Pandemia; Participación De La Comunidad; Paciente.

INTRODUCTION

The triumph of the Revolution of January 1959, created in the country a coherent project to protect the people against catastrophes or other phenomena that required the coordinated action of different factors under the direction of the government.

For example, the San Francisco hurricane in October 1870 caused some 800 deaths. The Five Days Hurricane of October 1910 caused more than 100 deaths. The hurricane of the 26th, as it was called (October 1926), about 650 dead. The hurricane of Santa Cruz del Sur in November 1932 caused 3 500 deaths and that of 1944 about 300.

The last of these great tragedies took place in 1963 with Flora hurricane, which caused 2,000 deaths. From then on, Commander in Chief Fidel Castro Ruz and the top leadership of the Revolution designed the creation of the Civil Defense, a system of state measures that are carried out from peacetime and during exceptional situations to protect the population and the economy.

Due to the characteristics of the westernmost area of Cuba, in Consolacion del Sur the Municipal Defense Council has built up great experience in dealing with exceptional situations, especially hurricanes, floods, epidemiological events in animals, plants and lately in human beings. However, the current problem - the novel coronavirus and its disease Covid-19, has demanded special efforts for its containment, turning its struggle into an unparalleled exercise for the Civil Defense.

"Coronaviruses are a genus of vertebrate RNA viruses of Coronaviridae. They are enveloped viruses with a single-stranded RNA genome with positive polarity and helical symmetry. The genome size of coronaviruses ranges from 16 to 31 kilobases, a virus of extraordinary length. The name coronavirus derives from the appearance of the envelope under the electron microscope as being crowned with a ring of rounded structures" (1)

What is the coronavirus - SARS-CoV-2?

Coronaviruses are a family of viruses that can cause illnesses such as the common cold, severe acute respiratory syndrome (SARS), and Middle East respiratory syndrome (MERS). In 2019, a new coronavirus was identified as the cause of a disease outbreak that originated in China. Coronavirus proteins that contribute to the structure of the virus are the S protein, the E1 and E2 (envelope), the M (membrane), and the N protein (nucleocapsid). In the specific case of SARS (severe acute respiratory syndrome), a defined receptor-binding domain directs the adherence of the virus to its cellular receptor, angiotensin-converting enzyme 2 (ACE-2). (2)

This virus is now known as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The disease it causes is called coronavirus disease 2019 (COVID-19). In March 2020 the World Health Organization (WHO) declared this outbreak of COVID-19 to be a pandemic.

"In December 2019, 27 cases of pneumonia of unknown etiology were identified in Wuhan city, Hubei province in China. A novel coronavirus had been identified as the causative agent (SARS-CoV-2) causing the disease COVID-2019, so named by the World Health Organization (WHO)." (3)

Sabino-Silva et al., postulate that "there are at least three routes by which Covid-19 may be present in the saliva of the infected: SARS-CoV-2 presence in the upper and lower respiratory tract, in the blood, which can access the mouth through crevicular fluid, and by infection of a salivary gland through release of particles in saliva via salivary ducts, as it has been shown that SARS-CoV-2 was able to infect salivary gland epithelial cells in animals." (4)

Context in which the Municipal Council for the Defense of Consolacion del Sur municipality is activated

November 17th, 2019 would be the date of the first positive case in the world of the novel coronavirus; a 55-year-old person from Wuhan, People's Republic of China. From that event a rapid spread of the disease takes place, reported in a short period of time in more than 180 countries.

On March 12th, 2003, the World Health Organization's (WHO) Global Alert and Response Center issued a global alert about a pneumonia outbreak in some hospitals in Asia, affecting patients and health care workers caring for them, as well as their close contacts.

The Civil Defense in Cuba oriented the people about this disease. Emphasizing key measures to prevent it: social isolation, wearing face masks, disinfection through hand washing and the different surfaces where SARS-CoV-2 virus could lodge.

On March 21st, the Minister of Public Health, Jose Angel Portal Miranda, MD., reported new positive cases of Covid-19 in Cuba, and in a few days, when updating the people on the situation of Covid-19, he announced the first local transmission event in the country, in Matanzas province, related to one of the positive cases diagnosed on March 21st.

A few days later, Consolacion del Sur appeared as one of the municipalities in the country with the highest contagion by Covid-19, with the first case taking place in the community of Camilo Cienfuegos on March 21st. From that date on, others appeared indistinctly until April 9th, when 13 people tested positive for the new coronavirus.

The objective was to characterize the behavior of Camilo Cienfuegos community during Covid-19 quarantine.

METHODS

It is a historical study using the dialectical materialist method of research used as a methodological basis that defines the use of general scientific methods, which will be present throughout the research, facilitating the analysis in the object of the components and contradictions present.

Historical and logical: used to look into the evolution, trends and generalizations of the development of Covid-19 in the study community, in addition to being able to determine the antecedents and signs in the international and national context.

Within the empirical qualitative methods, the ethnographic method was applied, which allowed to know in the diagnostic stage the characteristics of the community under study, its traditions, and its lifestyles. The Participation Action Research method as a type of collective introspective inquiry, undertaken by the participants, is present in the need to originate the active participation of the persons involved in order to achieve the transformation of the subject and the community.

Empirical level methods, through the application of the analysis of documents and the available literature reviewed, along with the deepening of theoretical and methodological referents and basics. Observation, to assess the preparation of the inhabitants of Consolacion del Sur communities for Covid-19 and the impact on their practices. Interviews were used to find out the opinion of the inhabitants of the community and of the medical team that participated in the quarantine.

DEVELOPMENT

The epidemiological event in Camilo Cienfuegos community

To the east of Consolacion del Sur of the municipality there is El Canal People's Council, where some time ago there was a rural community known as San Carlos. The renovation work of the Revolution gave to the old surrounding area a modern image and a comfortable environment. Its inhabitants, once tenant farmers and squatters, were given decent work in agricultural and livestock plans.

The community was named Camilo Cienfuegos, 13 multi-family buildings and five settlements were built: Baracaldo, Cuatro Caminos, La Yaya, Los No Alineados and Nuevo Amanecer, with commercial and gastronomic services, healthcare facilities, educational institutions and other no less important services.

A married couple from Mexico arrived in Cuba on March 8th, 2020 and arrived in Camilo Cienfuegos community. In accordance with the sanitary guidelines established in the country, as soon as the first surveys and tests were carried out on the new arrivals and their contacts, the presence of the new coronavirus (SARS-CoV-2) appeared in several of the local residents. At the end of March, the municipality of Consolacion del Sur stands out in the province as the territory with the most confirmed positive patients for Covid-19.

Camilo Cienfuegos Community

This confirms the second local epidemiological transmission event in Cuba. Since March 31st, the community of Camilo Cienfuegos is declared in quarantine, the Defense Zone 21-07-07 / El Canal and the municipal defense council are activated.

On March 31st, 2020, the following headline appeared in Granma newspaper, official organ of the Communist Party of Cuba, under the title "*Cuba decrees restrictive isolation measures in Camilo Cienfuegos community, Pinar del Río*".⁽⁵⁾

The epidemiological event was a challenge. For the first time in the country, an event of this magnitude was taking place, with the isolation of a community and two management posts to be in charge of the defense zone. In addition, there was limited knowledge with respect Covid-19 disease.

Testimony of Frank Rabelo, MD, who was the head of the first healthcare team working in Camilo Cienfuegos community an interview conducted in 2020

"We started April the 1st in "the community" with high expectations. It was the first time that the country isolated a community. The isolation restriction zone included Camilo Cienfuegos community, Nuevo Amanecer and Los No Alineados settlements, 366 houses and a population of 1,430 inhabitants".

Maintaining vitality in the area

The population of "*the community*" isolated in quarantine in Consolacion del Sur municipality which is mostly composed of workers from Camilo Cienfuegos Livestock Enterprise, one of the largest units of its type in western Cuba, which provides one third of the milk processed at Raul Fornell Delgado Dairy Company in Pinar del Río.

Testimony of Manuel Pagarizabal: head of Camilo Cienfuegos Livestock Enterprise. CONSURVISIÖN for the weekly magazine / Telenoticias / Sistema Informativo de la Televisión Cubana -2020 April 4th a verbatim transcription by Rolando Jesús González Cabrera

"When the restrictive measures of quarantine isolation were applied as part of the COVID-19 confrontation plan, the labor force of the most productive units in this entity was affected, which demanded the reorganization of a productive structure to minimize job losses.... More than 30 milkmen from the Loma de Candelaria and La Barbarita production units, the most productive in the entity, live in the isolation zone".

Testimony of Manuel Carmona Inguanzo, Chief of the Defense Zone 21-07-07 El Canal

It was also necessary to maintain the vitality of the area under isolation restriction *"It is not usual, it was necessary to create a working group of the Defense Zone within the delimited area and with isolation restriction, and this working group is represented by a member of the Defense Council and other colleagues, about twelve, who are doing the work within the community... visiting house to house, reiterating a lot about the epidemiological and isolation situation"*.

Health care measures

Based on the pre-epidemic plan conceived by the Municipal Healthcare Direction and the Municipal Defense Council, a team was activated for the quarantined area, comprised of six physicians, seven nurses and two residents living in the community. A student of sanitation and epidemiology specialty, a graduate of physical rehabilitation, a psychologist, a graduate of clinical-laboratory who carried out rapid tests on patients and contacts and a general assistant.

The press validates the strategies to cope with COVID-19

The success of the strategy to cope with Covid-19 conceived by the Municipal Defense Council and the Defense Zone 21-07-07 in Camilo Cienfuegos community was echoed in the press a week after its implementation. On Monday, April 6th, an article in Juventud Rebelde newspaper with the headline, *"Responsibility and discipline in Camilo Cienfuegos community, Consolacion del Sur municipality"*, evaluates the behavior of the first population isolated by Covid-19 transmission all over the country:

COVID-19: when the discipline keeps a community in quarantine activated

"An atmosphere of calm reigns in Camilo Cienfuegos community, the streets are empty most of the time. People take the opportunity to be at home with their families, talk, make arrangements and, most importantly, take care of themselves. It would seem that the whole neighborhood is asleep, but it is not. It is only a responsible, disciplined and cooperative population that today stands firm in the fight against Covid-19".⁽⁷⁾

Testimony of Manuel M. Carmona Inguanzo: chief of the Defense Zone 21-07-07 El Canal. Interview by journalist Pedro Lázaro Rodríguez Gil, correspondent of Tele Pinar in Consolacion del Sur – Verbatim transcription by Rolando Jesús González Cabrera

"Measures were implemented, because as I was saying it is a new unprecedented thing, that the distribution of food, we had to exchange nuclei that are inside and did not have the booklet inside, others that are outside and had the booklet inside, we had to make a quick census, and a work with the Oficoda (Government Office of Consumer Registry) to be able to guarantee food supply."

On April 2, journalist Ronald Suárez Rivas, from Granma newspaper, published an article entitled *"Consolación del Sur, a Cuban community in isolation"* He states: *"As in almost all over Cuba, in Camilo Cienfuegos community people also go out to the balconies of the buildings at nine o'clock at night, to give a round of applause to the doctors and healthcare personnel who have been fighting for days against Covid-19"*.⁽⁸⁾

On April 15, the courageous healthcare team coping with Covid-19 in Camilo Cienfuegos community during the first two weeks of April is relieved of their duties.

On April 15, the first medical team that successfully fought the epidemiological situation in Camilo Cienfuegos restriction zone was relieved, under a passionate round of applause and shuddering voices of gratitude coming from every apartment in the thirteen buildings of "the community".

After the application of the rapid test, in which all were negative, they are removed to a special isolation center for a period of fourteen days.

However, to understand the dimension of the achievement of that healthcare working group, nothing replaces the testimony of the first doctors of medicine who served in the isolation zone, at the risk of their own lives.

Testimony of Frank Ravelo, MD., head of the first healthcare team that worked in Camilo Cienfuegos community

"We began April 1st in "the community" with great expectation. It was the first time in the period of the Revolution that a population was isolated. A population comprised of 1430 inhabitants with its characteristics, 13 buildings, and two internal neighborhoods. They work mainly in the milking of the cattle, they get up at two in the morning to milk, return at six in the morning, then at two in the afternoon they go out again to milk".

A young couple, both Doctors of Medicine recounts their experiences in the service provided to Camilo Cienfuegos Community during the isolation period.

Testimony of Rosmely Inoue, MD., a First degree Specialist in Comprehensive Medicine and her husband Alejandro Gomes Marimón, MD., also First degree Specialist in Comprehensive Medicine, both work in Camilo Cienfuegos community

"...when we were given the task we did not think much about it, we were on duty, and the professor told us that they needed the support of doctors of medicine in the "community", given the number of cases and the respiratory processes that were occurring in the area. We said to ourselves: "if we have to go, let's go", and that's where we went. The next day we went again and that is when the community was confirmed in quarantine".

A key component in the exceptional situation experienced in Camilo Cienfuegos Community was the presence of specialists to carry out specialized tests to detect the presence of Covid-19. In these circumstances, this work constitutes a brave deed, since the health and lives of these specialists were at risk.

Testimony of Mirian Martinez Martinez, Clinical Laboratory graduate, who worked in Camilo Cienfuegos community, interviewed in 2020

"My name is Mirian Martinez Martinez, a Clinical Laboratory graduate. It was a very risky experience, I felt safe at the moment I was going to perform the tests, I also felt sad when I was already at the moment of doing the quick test to the patient, because they transmitted me the anxiety, especially in the fifteen minutes of waiting for the result of the test, I suffered it together with them". "The round of applause at nine o'clock...that emotion...that's very important! Very important! "

Referring to the departure of the quarantine from this locality, an article published in Guerrillero newspaper pointed out: *"This May 1st, the entire locality celebrated the International Day of Workers and, from the balconies, the neighbors applauded Cuba, which is not tired in this battle against an invisible enemy and little by little hits it with the citizens' conscience as a weapon".* ⁽⁹⁾

The El Canal Defense Zone in Camilo Cienfuegos Community in Consolacion del Sur municipality has been free of autochthonous transmission or isolated cases of Covid-19 for more than 15 days, which is why the authorities of the territory decreed the cessation of the quarantine restrictive measures in the area.

In this regard, an article published in the press on May 2 states: *"Although the danger will only be definitely over when Covid-19 contagion ceases to be a worldwide threat, Camilo Cienfuegos community breathes, since this Friday, a sigh of relief. The quarantine has ended in the small town in the south of Pinar del Río, after 31 days in which its 1 400 inhabitants had to take refuge inside their homes to prevent the new coronavirus from spreading".* ⁽¹⁰⁾

Regarding the extent of Covid-19 in the community in general, the press reported: *"In total, ten cases tested positive for the disease here, in the second local autochthonous transmission event reported in the country. More than 400 residents were initially transferred to isolation centers, in the midst of efforts to contain Covid-19".* ⁽¹¹⁾

Thus, a community put to the test the achievements of Cuban medicine in coping with a pandemic that began in China and that, thanks to the efforts of all, was able to face isolation, becoming an example for the whole country.

Only five months after that event, Consolacion del Sur municipality entered the autochthonous transmission phase in November, registering 173 cases of Covid-19 up to December 5, where a series of measures have been implemented taking into account the experiences of Camilo Cienfuegos community.

In these crucial days, when we are coping with one of the most aggressive pandemics of recent times, the Covid-19, and the newscasts report the tens and thousands of deaths in the so-called "first world" due to the absence of a prophylactic project and a coherent primary care scheme; the lack of medical insurance to cover the cost of treatment to remedy the disease caused by the new virus, and the high price of a coffin, in case of a fatal case, Fidel and his humanist vocation come to mind. Early on, during the trial for the Moncada events, he declared the renovation that the Revolution would carry out to offer the people the dignified the place they deserved.

The authors agree that the experience of the epidemiological event in the referred community demonstrated that prevention is the cornerstone for coping with and control the disease, that the inter-sector actions are necessary; with total adherence to the strategies defined by the Cuban government to contain the risk of spreading the disease, which are considered effective, that community participation strengthens the actions implemented, the effectiveness of having trained personnel and of reinforcing biosecurity measures. All of these are considered among the main strategies of Primary Health Care for the accomplishment of its objectives.

CONCLUSIONS

On May 1st, 2020, the quarantine was lifted for Camilo Cienfuegos community of Consolacion del Sur municipality, that day, as in all of Cuba, the proletarian commemoration was celebrated from the intimacy of home, decorating the facades with flags and slogans allegorical to the date. However, Consolacion del Sur people had a special motivation to celebrate, after some days of uncertainty, hard and intelligent work of the Municipal Defense Council, the Defense Zone 21-07-07, the Municipal Healthcare Direction and the extreme discipline of people, the new coronavirus could be contained in the municipality as soon as it wanted to harm us. That day we celebrated the first victory of a Cuban community over the lethal disease!

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Conflicts of interest

The authors declare that there is no conflict of interest.

Authors' contribution

The authors contributed to the development of the research from the information gathering process to the writing of the final report.

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