



Nursing actions in the prevention control and treatment of COVID-19. “Orestes Falls Oñate” Polyclinic

Acciones de enfermería en la prevención, control y tratamiento del COVID-19. Policlínico “Orestes Falls Oñate”

Yahima Díaz González¹  

Ana Aurora Sosa Cruzata²  

Aliana Peña Méndez³  

Milagro Andino Cobas⁴  

Katherin Nuñez Díaz⁵  

Inti Martínez Ferrer⁶  

¹ Facultad de Ciencias Médicas de la Isla de la Juventud, Informática y Bioestadística. Nueva Gerona, Cuba.

² Policlínico “Orestes Falls Oñate”, Departamento de Enfermería. La Fe, Cuba.

³ Facultad de Ciencias Médicas de la Isla de la Juventud, Posgrado. Nueva Gerona, Cuba.

⁴ Policlínico “Orestes Falls Oñate”, Vicedirección docente. La Fe, Cuba.

⁵ Facultad de Ciencias Médicas de la Isla de la Juventud, estudiante. Nueva Gerona, Cuba.

⁶ Empresa comercializadora y distribuidora de medicamentos. Nueva Gerona, Cuba.

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Corresponding Author: Yahima Díaz González 

ABSTRACT

Introduction: COVID-19 developed through an outbreak of pneumonia of unknown etiology, a mutated SARS-CoV-2 coronavirus, in December 2019 in Wuhan, China, considered the epicenter. Initially, the disease lacked medical treatments, leading to an impressive spread of infections and rapid expansion around the world, resulting in numerous deaths and an unprecedented economic, social, and health crisis. The objective of this study was to characterize the actions taken by nursing staff in the prevention, control, and treatment of COVID-19 at the “Orestes Falls Oñate” Teaching Polyclinic. **Methods:** A descriptive cross-sectional study was conducted at the Orestes Falls Oñate Teaching Polyclinic during the period 2020-2022. The study population consisted of the 22 nursing staff members who worked in the polyclinic's clinics during the COVID-19 pandemic. **Results:** The predominant age group in the population was 20 to 39 years (35.4%), and females predominated (51.1%). The community council with the highest incidence was Los Paneles (55.4%). Nursing staff ensured comprehensive, safe, and effective care in prevention, diagnosis, treatment, and rehabilitation according to health needs, working with patients and their families. **Conclusions:** It is concluded that the actions for the promotion, control, and treatment of COVID-19 in Primary Health Care demonstrated the leading role of nursing staff, particularly their participation in the vaccination campaign.

Keywords: Nursing actions, human health, COVID-19.

RESUMEN

Introducción: La COVID-19 se desarrolló a través de un brote de neumonía de etiología desconocida, mutada de coronavirus SARS-CoV-2, en diciembre del 2019 en Wuhan, China, considerada como el epicentro. A sus inicios, la enfermedad carecía de tratamientos médicos provocando consigo la propagación impresionante de contagios y expandiéndose rápidamente alrededor de todo el mundo, trayendo consigo la muerte de varias personas, además de originar una crisis económica, social y de salud nunca antes vista. Caracterizar las acciones desarrolladas por el personal de enfermería en la prevención, control y tratamiento del COVID-19 en el Policlínico Docente “Orestes Falls Oñate” fue el objetivo del estudio realizado. **Métodos:** Se realizó un estudio descriptivo de corte transversal en el Policlínico Docente “Orestes Falls Oñate”, en el período 2020–2022. El universo estuvo constituido por el personal de enfermería (22) que trabajó en los consultorios que pertenecen al policlínico durante el periodo de la COVID-19. **Resultados:** El grupo de edad predominante de la población fue el de 20 a 39 años para un 35.4%, con respecto al sexo predominó el femenino para un 51.1%. El consejo popular de mayor incidencia fue Los Paneles (55.4%). El personal de enfermería garantizó la atención integral, segura y eficaz en la prevención, diagnóstico, tratamiento y rehabilitación según las necesidades de salud, al trabajar con los pacientes y sus familias. **Conclusiones:** Se concluye que las acciones de promoción, control y tratamiento de la COVID-19 en la Atención Primaria de Salud permitieron evidenciar el rol protagónico del personal de enfermería, destacándose la participación en la campaña de vacunación.

Palabras clave: Acciones de enfermería, salud humana, COVID-19.

INTRODUCTION

COVID-19 developed through an outbreak of pneumonia of unknown etiology, mutated from the SARS-CoV-2 coronavirus, in December 2019 in Wuhan, China, considered as the epicenter. In its beginnings, the disease lacked medical treatments and was erroneously classified as a non-contagious virus; the lack of knowledge caused the impressive spread of infections, expanding rapidly around the world, bringing with it the death of several people, in addition to causing an economic, social, and health crisis never seen before. Due to the increase in existing cases in several countries, the World Health Organization (WHO) decided to declare COVID-2019 as a global pandemic in March 2020.(1)

The Pan American Health Organization (PAHO),(2) in 2020 proposes several activities in Primary Health Care (PHC) in which it mentions that the main way to reduce contagion is self-care measures, such as social distancing of at least 2 meters between people, as well as the correct use of the mask and proper hand hygiene as the main recommendation. It is possible that due to lack of knowledge of biosafety measures, the population does not comply with proper care, which increases the risk of contagion, so it is considered important to provide adequate information and recommendations by the health team to stop the spread of the virus.(3)

The nursing professional has always played a fundamental role in APS in pre-pandemic times and during the pandemic, being part of the Comprehensive Health Care Team and taking on a role in decision-making in patient care management. The primary care nurse has a key role and multiple functions: ensures comprehensive care for health needs throughout life, works with patients and their families to address immediate and long-term care needs in interrelated aspects that influence physical state, mental and social well-being. In addition, they provide safe and effective care in prevention, diagnosis, treatment, and rehabilitation of the user. They must also coordinate and organize care with the health team (4,5).

The emergence of the COVID-19 pandemic, an infectious and emerging disease with high lethality rates, has shown the strength of nursing staff from their professional practice in relation to biosafety, patient care, pharmacotherapies, action protocols, and preventive and promotional work, as a fundamental link in confronting the disease. The number of deaths, deterioration and collapses in health systems in several countries, the global economic crisis, and the paralysis of major processes are alarming; however, the Cuban health system has demonstrated its organization in confronting the pandemic, showing results in relation to diagnosis and treatment, without collapsing hospitals or exhausting material or human resources. Nursing in Cuba has demonstrated its professionalism and its commitment to timely and humanized care for patients infected by this disease.(6,7)

The aforementioned considerations allow defining for this study the following objective: To characterize the actions developed by the nursing staff in the prevention, control, and treatment of COVID-19 at the "Orestes Falls Oñate" Teaching Polyclinic, in the period 2020-2022.

METHODS

A descriptive cross-sectional study was conducted at the "Orestes Falls Oñate" Teaching Polyclinic No. 1, in the period 2020-2022.

Universe: It consisted of the nursing staff (22) who worked in the clinics belonging to the polyclinic during the COVID-19 period.

The study variables were: age, sex, popular advice, and nursing actions. Techniques and procedures

Data collection was carried out through statistical records of COVID-19 cases from the Teaching Polyclinic "Orestes Falls Oñate", scientific articles, or interviews about events that occurred since the origin of COVID-19; regarding the temporal sequence, documents at least 5 years old were reviewed, and with this, it was possible to collect information relevant and consistent with the researched problem, unifying theoretical criteria and studies related to the professional practice of nursing staff in APS, which is a key piece in health promotion and helps in the prevention of contagion from this and many other infectious and viral pathologies.

The present study maintained a quantitative approach, since data collection was carried out through the application of an unstructured interview to the population and health workers belonging to this area, in addition to a statistical analysis of the data obtained. The execution of the information gathering was aimed at identifying the sociodemographic characteristics, knowledge, and prevention, control, and treatment needs, as well as the APS nursing practices in the care and

attention for COVID-19 in families. This being field research, which is a scientific procedure that provides new information and must be carried out at the place where the events occur, obtaining greater reliability in data recording.

Processing and Analysis of the Results

A database was created in Microsoft Excel 2007; this information was summarized as absolute numbers and percentages, and presented in tables. For the processing and analysis of the information, the SPSS program, version 22, was used.

Ethical elements of research

During the study, the ethical considerations established in scientific research were complied with for the collection, processing of information, as well as for the dissemination of the results.

RESULTS

Table 1. Distribution of prevalence of patients with COVID-19 by age groups. Teaching Polyclinic “Orestes Falls Oñate”, 2020 - 2022.

Age Groups	No	%
Less than 1 year	9	1.0
1-4 years	15	1.6
5-9 years	17	1.8
10-19 years	108	11.5
20-39 years	331	35.4
40-59 years	301	32.2
60-64 years	40	4.3
More than 65 years	115	12
Total	936	100

Source: Clinical History

The predominant age group was 20 to 39 years for 35.4 %, followed by the group of 40 to 59 years for 32.2% and 115 patients in the group over 65 years with 12 %.

The predominant sex was female, with 478 patients (51.1%).

Table 2. Distribution of prevalence of patients with COVID-19 by sex in the Teaching Polyclinic “Orestes Falls Oñate”, 2020 - 2022.

Sex	No	%
Male	458	48.9
Female	478	51.1
Total	936	100

Source: Epidemiological database.

The popular council with the highest incidence was Los Paneles with 519 patients for 55.4%, followed by Centro Histórico with 196 patients for 20.9%.

The nursing actions developed in the prevention, control, and treatment of COVID-19 were the following:

- Prevention: health education
- Control: active case finding and focus control
- Treatment: vaccination

Nursing actions played a key role and had multiple functions in the prevention, control, and treatment of COVID. They ensured comprehensive care for health needs, working with patients and their families to address immediate and long-term care deficiencies in interrelated aspects that influence physical condition, mental and social well-being. In addition, they provided safe and effective care in the prevention, diagnosis, treatment, and rehabilitation of patients. They also coordinated and organized care with the health team.

Table 3. Distribution of prevalence of patients with COVID-19 by Popular Council. Teaching Polyclinic "Orestes Falls Oñate", 2020 - 2022.

Popular Councils	No	%
Panels	519	55.4
Historic Center	196	20.9
The Little Tomb	37	4.0
The Mangos	9	1.0
Mella Crocodile	45	4.8
Others	130	13.9
Total	936	100

Source: Epidemiological database

DISCUSSION

Primary Health Care (PHC) offers a wide variety of services and care, in particular, among others, vaccination, prevention, control and treatment of communicable and non-communicable diseases, care and services that promote, maintain and improve the health of the health of the population.

Primary care has been shown to be the most efficient approach to addressing the risks and causes of multiple diseases. It has a specific role in health promotion and prevention, and it also responds with solutions to community needs, since through these it is considered essential to improve health security to prevent different epidemics, as proper community education can prevent health threats and contributes to resilience.

The epidemiological behavior of COVID-19 in Cuba showed that, in the two waves of the disease, the most affected age groups were 20 to 39 years, coinciding with the research conducted. The risk of contagion predominated in people of working age. Other studies(8 9,10) showed that the age group over 39 years was the most affected by the pandemic. The results obtained differ from other investigations(11,12) where there was a prevalence in the risk groups, which were children under 1 year of age and older adults.

The clinical characteristics of the first 425 cases of COVID-19 worldwide had a mean age of 59 years, with ranges between 15 and 89 years. Initially, no patients under 15 years of age were reported, and greater severity was observed in elderly patients and those with any comorbidity. This behavior coincides with what occurred in Cuba and the results obtained in the present investigation.

On the other hand, studies (11) published on the behavior of COVID-19 in Venezuela showed that, in May 2020, the curve of confirmed cases presented an abrupt change mostly related to imported cases from neighboring countries. The virus generally affected people under 40 years of age, with a significant proportion of asymptomatic cases and a low mortality rate from this disease.

Regarding sex, it depends on how exposed both sexes are to infection due to their daily activities and gender roles. In Cuba, it was suspected that the slight predominance of infections in men is linked to their greater mobility in their role as family provider, although in cases of local transmission events in hospitals and healthcare centers, women predominated, coinciding with the present study.

In research conducted(10,13), the pandemic did not show gender differences regarding the risk of contagion at the national level. However, at the international level, heterogeneous results are published. Initial reports in China (14) estimated that 60% of patients who tested positive for COVID-19 were male. In Cuba, 71.2% of females linked to the health sector were registered, associated with the role of caregivers.

In one study conducted in Havana (8), the female sex prevailed in positive cases, in behavior similar to the present study. 55.2% were women, and a greater risk of infection was observed in fertile and working age, which represented 37.6% of the identified cases. This requires a review by local authorities to promptly address the complications that COVID-19 may cause to female reproduction. These results resemble studies(8,9) that collected patient data and concluded that women predominated compared to men, similar to the present investigation, which highlighted a higher incidence in the female sex.

In Spain, for example, reported cases indicated that the proportion of men and women with confirmed infection was similar, but mortality was higher in men. The same was observed in stu-

dies conducted in China.(14,15) Worldwide, reported COVID-19 cases varied between women and men. In Colombia, the frequencies of confirmed infection cases were very similar between men and women. Mortality was also higher among men than among women. This same trend was observed in other studies(11,12 16) and in the present study.

This is probably due to differences in the way women and men become ill and in the types of most frequent diseases. Likewise, gender biases are present in the limited appreciation of biological, psychological, and social differences.

The behavior of COVID-19 in the health area “Orestes Falls Oñate” during the period 2020–2022 was similar to that reported at the national level. A trend toward an increase in positive cases, and consequently in the incidence rate, was maintained, indicating a higher risk of contagion.

Studies conducted in Cuba(8,9 10) reveal a distinctive element of COVID-19 related to the dispersion of cases in each of the municipalities. At the beginning of the pandemic, most positive cases were related to the place of residence, originating from highly vulnerable areas owing to population density, overcrowding, and commercial and service areas. In the present study, the distribution of cases was similar to that described above; the patients diagnosed with COVID-19 in this health area were associated with the aforementioned aspects, which influenced the transmission of the disease in the different popular councils of the municipality.

Nursing has been a fundamental pillar of society for many centuries and remains so today. In the present study, during the pandemic caused by SARS-CoV-2, nursing played a fundamental role in the care of patients infected with this disease. Nurses constituted the largest health workforce; however, the sudden increase in positive COVID-19 cases exposed the shortage of professionals relative to the number of inhabitants, coinciding with studies conducted in Latin America.(11,12) This further highlights the importance of this profession not only in terms of patient care and attention, but also in generating an impact by recognizing the importance of preventive public health initiatives and the responsibility of individuals to take an active role in maintaining and caring for their own health and that of their environment. Regarding vaccination services, the population's perception was positive, owing to the information received through mass media and the promotion actions carried out in family doctor and nurse's offices. PrevengHo Vir and biopharmaceuticals such as Nasalferon, Biomodulina-T, and Hebertrans were used to increase the immunity of the entire population to prevent SARS-CoV-2 infection in risk groups. The registration on 13 August 2020 of the vaccine candidate Soberana 01 in the Cuban Public Registry of Clinical Trials made it possible for the scientists who created it and for the Cuban people to realize the dream of Cuba becoming the first country in the world to vaccinate its entire population.

CONCLUSIONS

The actions carried out by the nursing staff were structured into three fundamental pillars: prevention, control, and treatment. They focused on health education, daily active screening, and emphasizing participation in the vaccination campaign. Community nursing work proved indispensable for maintaining the link with the population, ensuring adherence to biosecurity and pharmacotherapy protocols, and contributing to the resilience of the Teaching Polyclinic “Orestes Falls Oñate” during the fight against the pandemic.

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CONFLICT OF INTEREST

The authors declare that there was no conflict of interest.

AUTHORSHIP CONTRIBUTIONS

Conceptualization: Yahima Díaz González, Ana Aurora Sosa Cruzata, Aliana Peña Méndez, Milagro Andino Cobas

Data curation: Yahima Díaz González, Aliana Peña Méndez

Formal analysis: Yahima Díaz González, Ana Aurora Sosa Cruzata, Aliana Peña Méndez, Milagro Andino Cobas

Investigation: Yahima Díaz González, Ana Aurora Sosa Cruzata, Aliana Peña Méndez, Milagro Andino Cobas, Katherin Nuñez Díaz

Methodology: Yahima Díaz González, Aliana Peña Méndez; Project administration: Inti Martínez Ferrer; Resources: Inti Martínez Ferrer

Software: Yahima Díaz González, Aliana Peña Méndez, Inti Martínez Ferrer

Supervision: Yahima Díaz González, Ana Aurora Sosa Cruzata, Aliana Peña Méndez, Milagro Andino Cobas, Katherin Nuñez Díaz

Validation: Yahima Díaz González, Aliana Peña Méndez

Visualization: Yahima Díaz González, Ana Aurora Sosa Cruzata, Aliana Peña Méndez, Milagro Andino Cobas, Katherin Nuñez Díaz, Inti Martínez Ferrer

Writing – original draft: Yahima Díaz González, Aliana Peña Méndez, Katherin Nuñez Díaz; Writing – review and editing: Yahima Díaz González, Ana Aurora Sosa Cruzata, Aliana Peña Méndez, Milagro Andino Cobas, Katherin Nuñez Díaz