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Student research against the coronavirus, in the Yerba de Guinea People's Council, Santiago de Cuba

Pesquisa estudiantil frente al coronavirus, en el Consejo Popular Yerba de Guinea, Santiago de Cuba

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ABSTRACT

Introduction: the new coronavirus can infect people of all ages. However, older adults with pre-existing medical conditions, such as asthma, diabetes and heart disease, appear to be more vulnerable.

Objective: to describe the results of the active student research against the coronavirus, developed in Clinic # 27, of the Yerba de Guinea Popular Council, belonging to the Carlos Juan Finlay Polyclinic, Songo-La Maya municipality, Santiago de Cuba province, in the period of January to May 2021.

Methods: a descriptive observational cross-sectional study was carried out in Clinic # 27, of the Yerba Popular Council of Guinea, belonging to the Carlos Juan Finlay Polyclinic, Songo-La Maya municipality, the universe was made up of 16 students from the University of Medical Sciences who reside in the area and 5 of them were intentionally chosen because they belonged to said office. The variables established by the Ministry of Public Health were used, through the model created for this purpose.

Results: 3 (60 %) of the students came from the Faculty of Nursing-Technology. High blood pressure and diabetes mellitus were the most frequent risks of those investigated with 122 (47. 2 %) and 86 (33. 3 %). Cough in 86 cases and fever in 76 appear as the most significant signs and only one confirmed case was reported in the month of February.

Conclusions: active student research carried out in the community has made it possible to immediately detect the symptoms associated with coronavirus in the population and prevent them through health promotion actions.

RESUMEN

Introducción: el nuevo coronavirus puede infectar a personas de todas las edades. Sin embargo, los adultos mayores con afecciones médicas preexistentes, como asma, diabetes y enfermedades cardiacas, parecen ser más vulnerables.

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Objetivo: describir los resultados de la pesquisa activa estudiantil frente al coronavirus, desarrollada en el Consultorio # 27, del Consejo Popular Yerba de Guinea, perteneciente al Policlínico Carlos Juan Finlay, municipio Songo-La Maya, provincia Santiago de Cuba, en el período de enero a mayo del 2021.

Método: se realizó un estudio descriptivo observacional de corte transversal en el Consultorio # 27, del Consejo Popular Yerba de Guinea, perteneciente al Policlínico Carlos Juan Finlay, municipio Songo-La Maya, el universo se conformó por 16 estudiantes de la Universidad de Ciencias Médicas que residen en la zona y se escogieron de forma intencional 5 de ellos, por pertenecer a dicho consultorio. Se utilizaron las variables establecidas por el Ministerio de Salud Pública, a través del modelo confeccionado al efecto.

Resultados: 3 (60 %) de los estudiantes procedían de la facultad de Enfermería-Tecnología. La hipertensión arterial y diabetes mellitus fueron los riesgos más frecuentes de los pesquisados con 122 (47,2 %) y 86 (33,3 %). La tos 86 casos y la fiebre 76 aparecen como los signos más significativos y solo se reportó un confirmado en el mes de febrero.

Conclusiones: la pesquisa activa estudiantil realizada en la comunidad, ha permitido detectar de manera inmediata, los síntomas asociados al coronavirus en la población y prevenirlos mediante acciones de promoción de salud.

INTRODUCTION

In December 2019, Wuhan (China) was the scene of the most important epidemic outbreak in recent times, the pathogen called SARS-COV-2 causing coronavirus disease (COVID-19).[1]

After the epidemic expansion from Wuhan to the In the rest of the world, the World Health Organization (WHO) declared a global health alert, classifying it as a pandemic.[2]

Coronaviruses are a large family of viruses that can cause diseases in both animals and humans. In humans, several coronaviruses are known to cause respiratory infections.[3]

They are characterized by attacking the respiratory system. Six types had previously been discovered capable of infecting humans, of which four cause a common cold, causing severity in patients. immunocompromised and the other two cause acute respiratory syndrome and Middle East syndrome.[4, 5]

Fever, cough and difficulty breathing are the most common symptoms, followed by gastrointestinal symptoms

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such as diarrhea, vomiting and abdominal pain and other infrequent ones such as ageusia and anosmia. Patients who develop acute respiratory distress syndrome can worsen very quickly and die from multiple organ failure. [4, 5, 6]

Massive active screening in communities has been used in Cuba for many diseases and is based on the dispensary program at the primary level of care, universal health coverage and access in the country, and broad participation of mass organizations in communities.[7]

Conceptually, active research is defined8 as the set of diagnostic actions aimed at identifying the individual health status in population groups, with the purpose of establishing existing risk factors and early discovering morbidity. hidden. Through active research, students of Medical Sciences allow health promotion and prevention actions to be carried out, necessary to control any type of epidemic, contribute to the reduction of morbidity and mortality in communities, strengthening ethical-moral values in the future. healthcare professionals. Therefore, the objective of this study is to describe the results of the active student research against the coronavirus, developed in Clinic # 27, of the Yerba Popular Council of Guinea, belonging to the Carlos Juan Finlay Polyclinic, Songo-La Maya municipality, Santiago province. of Cuba, in the period from January to May 2021.

METHOD

Type of study: a descriptive observational cross-sectional study was carried out in Clinic # 27, of the Yerba Popular Council of Guinea, belonging to the Carlos Juan Finlay Polyclinic, Songo municipality. La Maya, Santiago de Cuba province, in the period from January to May 2021.

Universe and sample: the universe was made up of 16 students from the University of Medical Sciences of Santiago de Cuba who reside in the area and a sample was chosen. intentional sample of 5 of them, taking into account the guidelines of the Medical University, to place the students in the residence offices or close to them. Students who participated in isolation centers or red zones, pregnant women, or those who had an illness that prevented them from participating in the research were excluded.

Variables and data collection. The data were collected through daily visits to the homes, according to the established variables:

Discrete Quantitative Variables (total of houses visited, total of closed homes, total of people who are present in the home at the time of the investigation, total of people aged 60 or over, total of people suffering from high blood pressure (HTN), total of people suffering from diabetes mellitus (DM), total of people suffering from arterial hypertension (HTN), total number of people suffering from diabetes mellitus (DM), total number of people suffering from bronchial asthma, total number of people suffering from kidney failure, total adults over

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60 years of age who live alone, total number of pregnant women, total number of people with general and respiratory symptoms) Discrete quantitative variables (total of people under 1 year of age, infants, according to months of age and total of people between 1 and 15 years of age, total of people between 16 and 59, according to years of age).

Nominal Qualitative Variable (sex, male or female, depending on biological). Statistical processing: percentage calculation was used to analyze the results.

Ethical standards: informed consent was requested from each of those included in the study to participate in the community process of active research. The ethical and bioethical requirements for safeguarding personal information were met; The basic principles were responsibly assumed: respect for people, beneficence, non-maleficence and justice.

RESULTS Clinic # 27 is located in the "Hermanos Díaz" agricultural farm, with a population of 622 patients, 363 female and 259 male, distributed in 203 homes. Before beginning the research, the students were trained on the general characteristics of COVID-19, common symptoms, transmission mechanisms, epidemiological alert stages, and individual and family control measures. In the research carried out, the students corresponding to the Faculty of Nursing-Health Technology predominated (3; 60%) and the rest to the Faculty of Medicine # 2. Regarding sex, superiority was reported in female students with (4; 80%)

Table # 1. Characterization of students according to Faculty of origin and sex. Clinic # 27, of the Yerba de Guinea Popular Council, Carlos Juan Finlay Polyclinic, Songo-La Maya, Santiago de Cuba. January to May 2021.

Faculties	Sex				Total	
	M	%	F	%	N.	%
Medicine # 2	1	20	1	20	2	40
Nursing-Technology.	-	-	3	60	3	60
Total	**1**	**20**	**4**	**80**	**5**	**100**

Source: Office records

Table # 2 shows that 122 respondents suffered from (HTN), the most frequent associated risk being 47.2%, followed by (86; 33.3%) with (DM). Regarding sex, females prevailed with HTN and DM, (70; 27.1%) and (47; 18.2%) respectively.

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Table # 2. Distribution of people investigated with associated risks, according to sex.

Associated Risks	Sex				Total	
	M	%	F	%	No.	%
arterial hypertension	52	20,1	70	27,1	122	47,2
Diabetes	39	15,1	47	18,2	86	33,3
Asthma	17	6,6	13	5	30	11,6
Pregnat women	0	0	4	1,5	4	1,5
Infant	1	0,4	2	0,8	3	1,2
Third agers alone	7	2,7	5	1,9	12	4,6
renal insufficiency	1	0,4	-	-	1	0,4
Total	**117**	**45,4**	**141**	**54,6**	**258**	**100**

Fuente: Office records

In table # 3, the main symptoms of the population surveyed in the study period were represented, cough predominated in 86 cases and fever with 76. It also shows that, in the month of April, the greatest number of symptoms was presented. , with 92. In the entire stage of the study, one confirmed case was reported in the month of April, it corresponded to a 30-year-old patient.

Table # 3. Distribution of identified symptoms related to COVID-19, according to months.

Symptoms	January	February	March	April	May	Total
Fieber	11	13	18	19	15	76
Breathing difficult	3	2	6	7	10	28
Runny nose	9	8	11	16	12	56
Headache	2	2	5	4	11	24
Cought	12	17	23	19	15	86
General malaise	9	10	12	17	14	62
Lack of smell	2	4	3	5	4	18
Lack of taste	2	3	2	5	4	16
Total	**50**	**59**	**80**	**92**	**85**	**366**

Office Records

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DISCUSSION

Regarding the origin of the students who participated in the student coronavirus research, in the present study, there was a slight predominance of students from the Faculty of Nursing-Health Technology. Results that diverge from other investigations, where the superiority was observed in the Medicine degree, such as those reported by: Díaz Rodríguez et al [9], (87.2%), Rodríguez Abrahantes et al [10] (77.08%), Machado Díaz et al. al [11], (72.8%), Blanco Aspiazu et al 12, (70.1%), Hernández Reyes et al 13, (67.6%) and Fernández Prieto et al [14].

The authors of the present study assume the above by Hernández Reyes et al [13], expressing that in the Universities of Medical Sciences, the largest enrollment of students corresponds to the Medicine career, in relation to the others. Regarding the sex of the 5 students, 4 were female, results that correspond with those obtained by: Díaz Rodríguez et al9, (60%), Blanco Aspiazu et al [12], (64.6%) and Fernández Prieto et al [14], (65.85%). Regarding the risks associated with covid-19, the bibliography shows several studies carried out on confirmed patients, but not on people investigated, (like the present study), where HTN and DM predominated), in women aged 47.2 % and 33.3 % respectively.

Of the articles consulted, no studies were found where both risks obtained the same value; In each case (of those confirmed and investigated), HTN was reported as the most predominant, always followed by DM, like those found in Rodríguez Martínez et al[14], where HTN and DM were reported in 90 and 42 people respectively; Cobas Planchez et al[15], a higher incidence in HTN with (36.76 %) and DM (20.58 %) and in Ferrer Castro et al[16], the highest percentage of patients had at least one associated chronic disease, slightly lower than what was reported by Acosta et al[17] (76 %). When analyzing the reported symptoms, a coincidence was observed in some bibliographies, referring to the same symptoms and degrees of significance, such as: Ferrer Castro et al [16], reported the signs and symptoms of patients where cough was mostly reported (60.0%). , fever (34.5%) and shortness of breath (21.8 %), quantitatively predominated respiratory symptoms; Urquiza Yero et al 18, cough (60 %), followed by fever (30 %) and Acosta et al[17], in their research carried out in a reference hospital in Peru, reported cough (82.4 %), fever and dyspnea , both with (76.5%).

The socio-demographic characteristics of the area surveyed contributed greatly to the low positivity

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rate in the population, a majority of whom work within the area, which allowed prevention actions to be carried out more efficiently and to control exit and access by people outside the community.

CONCLUSIONS

The active student research carried out in the community by the students of Medical Sciences in the confrontation with COVID-19 was of great significance for their training as future health professionals, their contribution allowed the control and immediate prevention of the signs and symptoms associated with coronavirus.

DECLARATION OF CONFLICT OF INTEREST

The authors declare that they have no conflict of interest in the preparation of the research.

FINANCING DECLARATION

The authors declare that they have not received funding to carry out this research.

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