

Perception about COVID-19 in health workers versus other activities, Casanare-Colombia, 2020

Percepción acerca de COVID-19 en trabajadores de la salud versus otras actividades, Casanare-Colombia, 2020

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Abstract

Introduction. From march 11 the World Health Organization classified COVID-19 as a pandemic. In Colombia, department of Casanare declared sanitary emergency from 16 march and the President of the Republic declared economical, social and ecological emergency on march 17; five days later the first case at department was confirmed. **Objective.** To survey knowledges, attitudes, and practices (KAP) on department's population. **Methods.** Descriptive cross-sectional on Knowledge-Attitudes-Practices (KAP) plus socio-demographic characterization on population (435,195 dwellers). Sampling by city and decennial age-group using Statcalc, Epi-Info® 7.2.2.2. Data gathering executed with Google Forms tool through WhatsApp, Facebook social networks. Descriptive analysis with Epi Info™ 7.2.2.2 and Stata® 13. **Results.** Survey rendered 1,120 responses, resulting as follows: (69.6%) women; age 36 ± 12 yr-old; 919 (82.1%) were 20-49 yr-old, 582 (50.2%) married / consensual union. By activity: 251 (22.4%) health workers, 869 (77.6%) others. Education: 565 (50.4%) professionals, 157 of the latter postgraduates (27.8%); recognized ethnic group 113 (10.1%). Knowledges: description as viral / infectious disease 695 (62.1%); contagion through sneezing 1077 (96.2%); it's a cold 155 (13.8%); mild cough 965 (86.2%); attention route unknown 334 (29.8%). Attitudes: 657 (58.6%) left home for food, work or chores; prevention is for everyone, 985 (85.5%). Practices: 825 (95.0%) informed by TV / radio; main measure not leaving home 1,109 (99.0%); no health consultation in the last 30 days 890 (79.5%); in the presence of symptoms 896 (80.0%) chose to call the attention line; 809 (72.2%) should be in isolation / quarantine to prevent the disease and 796 (71.1%) believed that the authority should do Inspection / Surveillance / Control and maintain isolation. **Discussion.** On COVID-19, population exhibited basic knowledge, good attitude and cooperative, even demanding position with local, regional Executive. It is recommended to maintain / strengthen Inspection / Vigilance / Control actions and Information / Education / Communication to citizens.

Keyword: COVID-19, coronavirus, health knowledge, attitudes, practice, Colombia.

Resumen

Introducción. En 2020-03-11 la Organización Mundial de la Salud categorizó COVID-19 como pandemia mundial. En Colombia, el departamento de Casanare declaró la emergencia sanitaria en 2020-03-16 y el Presidente de la República declaró emergencia económica, social y ecológica el 2020-03-17; cinco días después se confirmó el primer caso departamental. **Objetivo.** Indagar conocimientos, actitudes y prácticas (CAP) del departamento sobre COVID-19. **Métodos.** Estudio descriptivo transversal de conocimientos, actitudes y prácticas (CAP) más caracterización sociodemográfica en población departamental (435.195 habitantes). Muestreo por municipio y grupo etario decenal mediante Statcalc, Epi-Info® 7.2.2.2. Captación de datos ejecutada con herramienta de Formularios Google vía redes sociales WhatsApp y Facebook. Análisis descriptivo con Epi Info™ 7.2.2.2 y Stata® 13. **Resultados.** Fueron diligenciadas en total 1.120 encuestas arrojando los siguientes resultados: *Socio-demografía:* 541(48,9%) eran residentes en Yopal, 779(69,6%) mujeres, edad 36±12 años, 919(82,1%) entre 20-49 años, 582(50,2%) casados/unión libre, 251(22,4%) se identificaron como trabajadores de la salud y 869 (77,6%) desempeñaban otras actividades, 565(50,4%) profesionales, de ellos, 157(27,8%) con posgrado, 113(10,1%) se reconocieron como pertenecientes a una etnia. *Conocimientos:* todos escucharon hablar de la enfermedad, 695 (62,1%) personas la describieron como una enfermedad viral/infecciosa; 1.077(96,2%) que se contagia por estornudos; para 155(13,8%) es una gripe; 965(86,2%) identificaron como signo temprano la tos leve y 334(29,8%) desconocían la ruta de atención. *Actitudes:* 657(58,6%) salieron por comida o trabajo en las últimas 24 horas; 985(85,5%) consideraron que la responsabilidad de prevención es de todos. *Prácticas:* 825(95,0%) manifestaron informarse por medio de la radio/televisión; 1.109 (99,0%) eligieron no salir de casa como la principal medida preventiva, 890(79,5%) no tuvieron consulta de salud en los últimos 30 días; ante la presencia de síntomas 896(80,0%) escogieron llamar a línea de atención; 809(72,2%) se debe estar en aislamiento/cuarentena para prevenir la enfermedad y 796 (71,1%) opinaron que la autoridad debe hacer Inspección/Vigilancia/Control y mantener el aislamiento. *Discusión.* La población mostró sobre COVID-19 conocimiento básico, buena actitud, posición cooperativa y exigencia a la autoridad. Se recomienda mantener/fortalecer las acciones de inspección, vigilancia y control (IVC) y la información, educación y comunicación a los ciudadanos.

Palabras clave: COVID-19, coronavirus, conocimientos, actitudes y práctica en salud, Colombia.

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Introducción

In December of 2019, the health authorities of the city of Wuhan, capital of the Hubei province of the Popular Republic of China, detected a cluster of cases of pneumonia of unknown origin, linked to the South China Seafood Market Square(1). After tests and isolations, they found a virus from the large family of type 2 coronaviruses -β-coronavirus- that causes a severe acute respiratory syndrome, abbreviated SARS-CoV-2 (from the English severe acute respiratory syndrome coronavirus) later named by the World Health Organization (WHO) as the coronavirus disease (Coronavirus Disease 2019, COVID-19)(2), responsible for the greatest social and health crisis since the First World War (1), given its rapid progress and

mortality, especially in older adults, in countries such as Italy, Spain and the United States. From the first of march there were 3,000 deaths worldwide (3); for April 28, they already exceeded 200 thousand(4).

Virologically, SARS-CoV-2 is 79% similar in structure to previous coronaviruses (1,5) Causes of the severe acute respiratory syndrome (SARS-CoV) epidemics in 2002 (6) and Middle East respiratory syndrome (MERS-CoV) in 2012 (7). Coronaviruses, for the most part, are zoonotic pathogens that have been detected in markets where live exotic animals as snakes, poultry, pangolins or bats are slaughtered for human consumption.(1). Clinically, the signs and symptoms of the disease can be mild, moderate or severe, such as fever, dry cough and fatigue; other less common symptoms are oppressive choking, dyspnea,

myalgia, headache, diarrhea, loss of taste or smell, and skin rashes(8), with an incubation period between 2-7 days, although it can reach up to 14 days (5); adults represent the population with the highest infection rate; however, newborns, children, or the elderly can also become infected with SARS-CoV-2(9, 10); up to 80% of infected subjects may be asymptomatic(8). Epidemiologically, human-to-human transmission is clear, with an estimated R_0 at the time of 1.4 to 2.5, against seasonal influenza (R_0 1.19 to 1.37) or measles (R_0 12 to 18) and an incubation time of 9 to 18 days(1).

In terms of health, the global scientific, social and military response has been extremely powerful, to the point of implementing for the first time in contemporary history measures of social distancing, city closure (lockdown) and individual self-care measures such as periodic hand washing, use of masks on symptomatic subjects and teleworking or working from home, in addition to achievements such as the early publication of the complete genome of the pathogen and the development of highly specific diagnostic tests (1), at the cost, it must be pointed out, of a colossal financial and economic impact and disruption of the daily life of today's megacities.

In Colombia, the Ministry of Health and Social Protection (MSPS) and the National Institute of Health (INS) issued guidelines for the early detection, control and care of COVID-19, and the implementation of contingency and response plans (eleven); on march 6, the first case of COVID-19 in the country was announced and preventive health measures were adopted(12); on march 11 the WHO categorized COVID-19 as a global pandemic. On march 12, a health emergency was declared in the country for its cause and measures were adopted to deal with it(13). The 16 of march, through decree 109 of 2020, the Government of Casanare declared a health emergency in its territory and adopted measures to face the crisis; Among others, it formed a Technical Advisory Committee (CTA) made up of representatives of the academy, the public and private health sector and the unions, with the main function of making recommendations on the measures adopted(14).

The Presidency of the Republic declared a state of economic, social and ecological emergency throughout the national territory the 17 of march of 2020 (15); and, in parallel, given the set of protocols for action in Public Health and epidemiological surveillance(16, 17), the INS issued an annex to the protocol for intensified public health surveillance of the event of public health interest Acute Respiratory Infection (ARI) associated with COVID-19 (18) within the framework of the containment and mitigation phase of the pandemic.

The 22 of march the first departmental case was confirmed (19). Faced with an amazing "fluid" situation, changing from day to day, among its activities, the CTA proposed this research with the aim of investigating knowledge, attitudes and practices (KAP)(20, 21) of the departmental population about the disease, in order to verify the knowledge gaps, the needs for education / prevention and epidemiological and laboratory surveillance in the department, and thus strengthen information, education and communication actions,

aimed at the community to control and prevent COVID-19 infection, influenza-like illness (ILI), or other serious acute respiratory infections (SARI).

Methods

A descriptive cross-sectional survey study was carried out (22, 23) KAP of the population about COVID-19 disease (24). According to Briceño-León(25), when commenting on the studies of perception, knowledge or attitudes as opposed to those of culture and social representation (CSR), when the population knows very little about a situation or does not have financial resources, as is happening due to COVID-19, it can go better an initial KAP, supplemented by one of CRS 6-12 months later or, for that matter, at the next peak of respiratory contagion.

Study place: the department of Casanare located in eastern Colombia, in the Orinoquía region (44,640 km²; 04°17'25 " to 06°20'45 'north; 69°50'22' 'to 73°04'33' 'west); politically and administratively it is divided into 19 municipalities; and, its economy is based mainly on livestock-agricultural production and oil exploitation. According to the projections of the National Population and Housing Census -CNPV-2018 of DANE for 2020 its population is 435,195 inhabitants(26).

Using the Statcalc subroutine of the Epi-Info® 7.2.2.2 statistical program, a sample was sampled from the departmental population of 355,638 inhabitants > 10 years (81.7%), with an expected frequency of 50%, with a margin of error of 5% and a confidence level of 95%, resulting in a sample of 384 surveys to be applied, a value corrected to 412 surveys by expecting 10% losses.

The categories considered and their variables studied were: a) Sociodemographic characterization: municipality of residence, sex, age, ethnicity, educational level, marital status and economic, educational or tasks performed; b) Knowledge: name of the disease, description of the condition, form of contagion, susceptible, early symptoms, prevention measures, knows what the disease could have and route of care; c) Attitudes: leaving in the last 24 hours, transportation used, trips in the last 30 days, responsibility for prevention, and d) Practices: how you obtain information, health worker visit, health care consultation in the last 30 days, what to do to prevent the disease, what should the authority do and what to do in case of symptoms.

Information collection techniques and instruments: for data collection, as a primary source of information, a survey was prepared with the free access Google Forms tool, consisting of 38 questions, of which 23 were selected from a single option, 9 multiple-choice and 6 open, with restricted access to children under 10 years of age and a single answer option, all questions with the condition of mandatory completion. The survey was promoted and distributed through the social networks WhatsApp and Facebook for 4 days from 2020-03-28 at 10:45 p.m. until 2020-04-01 at 20:00, with a total of 1,120 surveys collected.

The database was refined as follows: spelling correction and word typing in all open questions and open questions were recoded, based on the frequency of the words used: description of the disease, what to do and duty of the authority.

Data analysis was done with Epi Info™ 7.2.2.2 and STATA® 13 using descriptive statistics.

Ethical considerations

This research was conducted under international guidelines and recommendations and current national regulations for ethical issues (27). For the application of the virtual survey, access was restricted to children under 10 years of age through a filter on the age variable, which did not allow to continue if the registered value was less than 10.

In the same way, this research was governed under the protection of Law 1581 of 2012 regarding the protection of personal data, (Article 6, Treatment of sensitive data), that is, no personal data or email was recorded.

Results

A total of 1,120 completed surveys were obtained, almost 3 times what was projected; 69.6% (779 / 1,120) of the female sex, with an average age of 36 ± 12 , median 36, mode 42, minimum value 11 and maximum 87 years; distributed according to marital status, 479 (42.8%) single, 562 (50.2%) married / free union, 58 (5.2%) separated / divorced and 21 (1.9%) widowed; according to educational level, 39 (3.5%) primary, 201 (17.9%) secondary, 313 (27.9%) technical, 408 (36.4%) professional, 157 (14.0%) postgraduate and 2 (0.2%) none; 10.1% (113 / 1,120) recognized themselves as belonging to an ethnic group, of them, 44 (38.9%) Afro-Colombian, 43 (38.1%) Raizal, 19 (16.8%) indigenous, 4 (3.5%) ROM-Gitano and 3 (2.7%) palenquero; by age group, 48 (4.3%) from 10 to 19 years old, 288 (25.7%) from 20 to 29 years old, 354 (31.6%) from 30 to 39 years old, 277 (24.7%) 40 to 49 years old, 113 (10.1%) from 50 to 59 years old and 40 (3.6%) aged 60 and over (table 1); and, according to occupation, 22.4% (251 / 1,112) health workers (figure 1).

Knowledge

When inquiring if they knew or had heard of COVID-19, 1,117 (99.7%) said they did know it; by the form of contagion, 1,077 (96.2%) sneezes, 19 (1.7%) coughs, 15 (1.3%) handshakes, 6 (0.5%) touched contaminated objects and one (0.1%) hugs, kisses and don't know respectively (table 2).

Regarding the statements regarding: consider if COVID-19 is just another flu, 965 (86.2%) don't / don't know; only gives to travelers abroad, 1,107 (98.8%) don't / don't know; about whether young people and children die from coronavirus, 964 (86.1%) yes; you know how many cases there are in Colombia, 1,036 (92.5%) yes; recognized as early symptoms, 965 (86.2%) mild cough, 143 (12.8%) shortness of breath, 5 (12.8%) fever, one (0.1%) back pain

and 6 (0.5%) don't know; could have the disease and not know it: 875 (78.1%) yes; knows the care route: 786 (70.2%) yes (table 2). The description of the disease is presented in the Figure 2.

Attitudes

The 39.6% (443 / 1,120) stated that they had not left in the last 24 hours, among the 60.4% (667 / 1,129) who declared that they had left in the last 24 hours did so: 489 (72.2%) buy food, 168 (24.8%) work, 5 (24.8%) go back, 4 (0.6%) walk the dog and see the doctor respectively, 3 (0.4%) the farm and 2 (0.3%) the pharmacy and the park respectively; the transport used at the start: 245 (21.9%) on foot, 228 (20.4%) motorcycle, 172 (15.4%) private car, 31 (2.8%) bicycle, 21 (1.9%) public transport / taxi and 3 (0.3%) institutional vehicle / ambulance. About one trip in the last 30 days, 169 (15.1%) traveled outside the department and 9 (0.8%) traveled outside the country; 958 (85.5%) considered that the responsibility to prevent the disease belongs to everyone, 159 (14.2%) to each one, (2 / 0.2%) to the authority and one (0.1%) of the neighbors (table 2).

Practices

When finding out how to obtain information about the disease, the order of selection was: (695; 62.1%) radio, (364; 32.5%) television, (14; 1.3%) others, (13; 1.2%) work, (10; 0.9%) college / university, (8; 0.7%) government, (5; 0.4%), friends and Facebook respectively, (4; 0.4%) newspaper and (1; 0.1%) Instagram or WhatsApp.

Regarding attendance in the last 24 hours at an event or place with more than 20 people gathered: 66 (5.9%) said yes. Regarding what measures help to prevent contagion: 1,109 (99.0%) do not leave the house, 9 (0.8%) wash their hands, one (0.1%) wear a mask and do not know, respectively; had a visit from a health worker in the last 30 days: 932 (83.2%) did not; attended a health care consultation in the last 30 days: 230 (20.5%) yes.

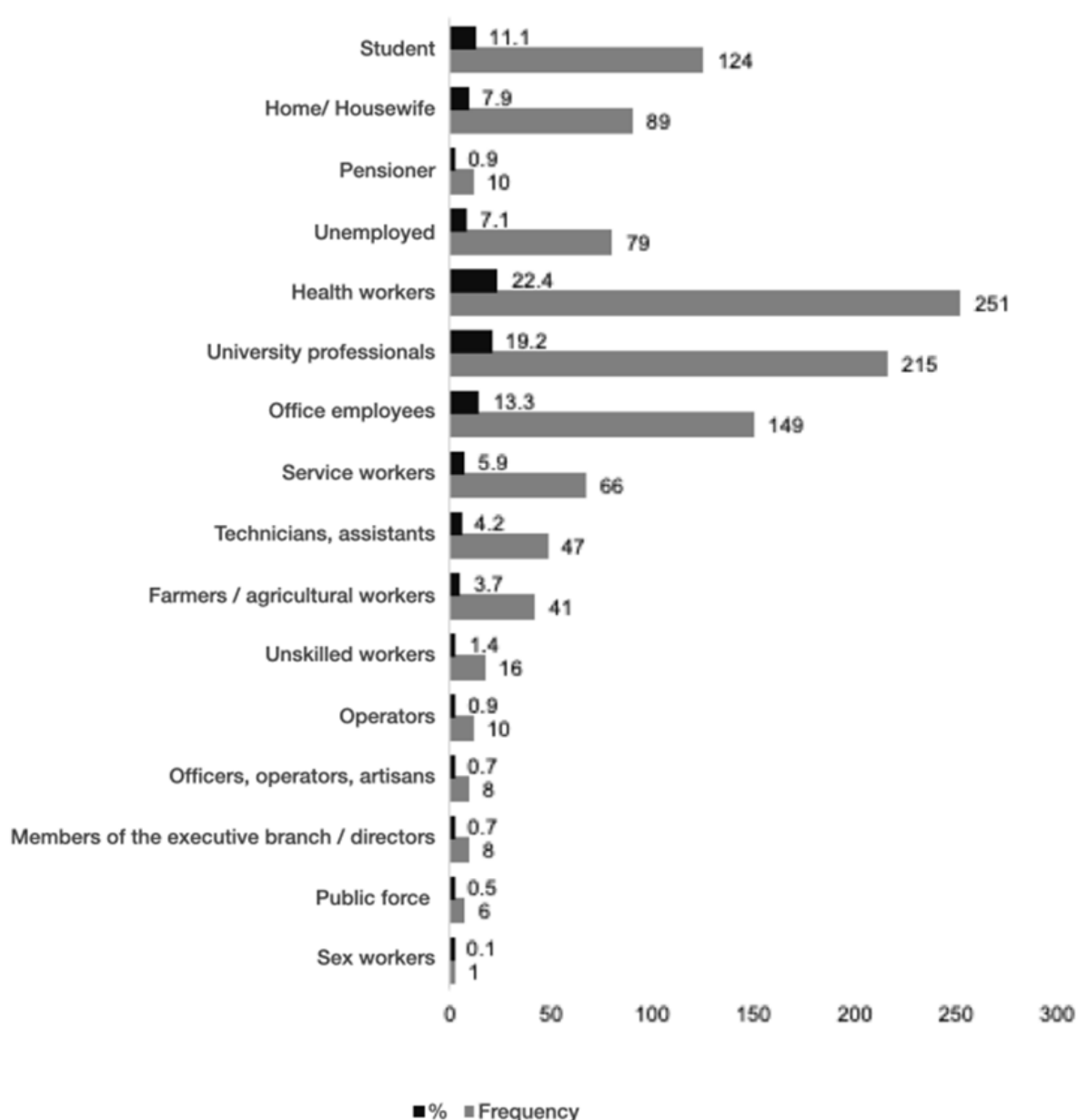
When asking what to do in the event of symptoms of respiratory disease: 896 (80.0%) contact the hotline, 126 (11.3%) call their health service provider (EPS), 72 (6.4%) go to the doctor for emergencies and 26 (2.3%) do not know; what to do to prevent the disease: 809 (72.2%) isolation or quarantine, 166 (14.8%) compliance with standards, measures and protocols, 56 (5.0%) hand washing, use of personal protection items (EPP), 42 (3.8%) self-care, 33 (2.9%) collaboration / prevention, 6 (0.5%) education, 2 (0.2%) prayer / prayers, one (0.1%) medical / hospital assistance, 2 (0.2%) did nothing and 3 (0.3%) did not know.

Finally, when inquiring about what the authority should do: 609 (54.4%) inspection, surveillance and control (IVC), 187 (16.7%) isolation / quarantine, 118 (10.5%) information, education and communication (IEC), 69 (6.2%) compliance with standards, measures and protocols, 44 (3.9%) promotion and prevention, 43 (3.8%) give government / state aid, 28 (2.5%) diagnostic tests, 5 (0.4%) promote self-care / PPE use and 17 (1.5%) do not

Table 1. Sociodemographic characteristics, health workers vs other activities, KAP COVID-19, Casanare-Colombia

Variables	Health workers		Other occupations	
	Frequency	%	Frequency	%
Sex				
Female	204	81,3	575	66,2
Male	47	18,7	294	33,8
Marital status				
Single	99	39,4	380	43,7
Married	77	30,7	208	23,9
Free Union	60	23,9	217	25,0
Separated / divorced	12	4,8	46	5,3
Widower	3	1,2	18	2,1
Education level				
Professional	93	37,1	315	36,2
Technical	106	42,2	207	23,8
High school	5	2,0	196	22,6
Postgraduate	44	17,5	113	13,0
Primary	1	0,4	38	4,4
None	2	0,8	0	0,0
Ethnic group or race				
Others	234	93,2	773	89,0
Afro-Colombian	11	4,4	33	3,8
Raizal	5	2,0	38	4,4
Indigenous	1	0,4	18	2,1
ROM - Gypsy	0	0,0	4	0,5
Palenquero	0	0,0	3	0,3
Age group				
10 to 19	3	1,2	45	5,2
20 to 29	48	19,1	240	27,6
30 to 39	99	39,4	255	29,3
40 to 49	77	30,7	200	23,0
50 to 59	20	8,0	93	10,7
60 and over	4	1,6	36	4,1
Municipality				
Yopal	119	47,4	422	48,6
Villanueva	27	10,8	132	15,2
Peace of Ariporo	17	6,8	25	2,9
Tauramena	7	2,8	31	3,6
Sacama	4	1,6	33	3,8
Aguazul	7	2,8	29	3,3
Monterrey	11	4,4	25	2,9
The Salina	0	0,0	31	3,6
Peanut	3	1,2	26	3,0
By e	6	2,4	20	2,3
Tamara	6	2,4	19	2,2
San Luis de Palenque	7	2,8	16	1,8
Orocue	6	2,4	12	1,4
Chameza	8	3,2	9	1,0
Hato Corozal	5	2,0	12	1,4
Sabanalarga	4	1,6	10	1,2
Nunchía	5	2,0	7	0,8
Receiver	6	2,4	5	0,6
Trinity	3	1,2	5	0,6

Figure 1. Distribution according to economic, educational or tasks performed, KAP COVID-19, performed, Casanare-Colombia



know (Table 2).

Discussion

After reviewing the literature on the date of this study, JM Clements (28), BL Zhong et al (29), B. Honarvar et al (30) or M. Saqlain et al (31) reported that people have knowledge of the disease, appropriate practices and a positive attitude towards COVID-19, whether they are residents or health workers, but at the same time, they emphasized the need to launch well-structured training programs to increase knowledge existing, aimed at the community in general and health workers in particular, regardless of their profession or studies. Taking into account the time of the survey, it is important to note that in the course of those days and at the date of preparation of this report there have been changes in the approach to the pandemic in the country: for 2020-04-13, 38,989 had been

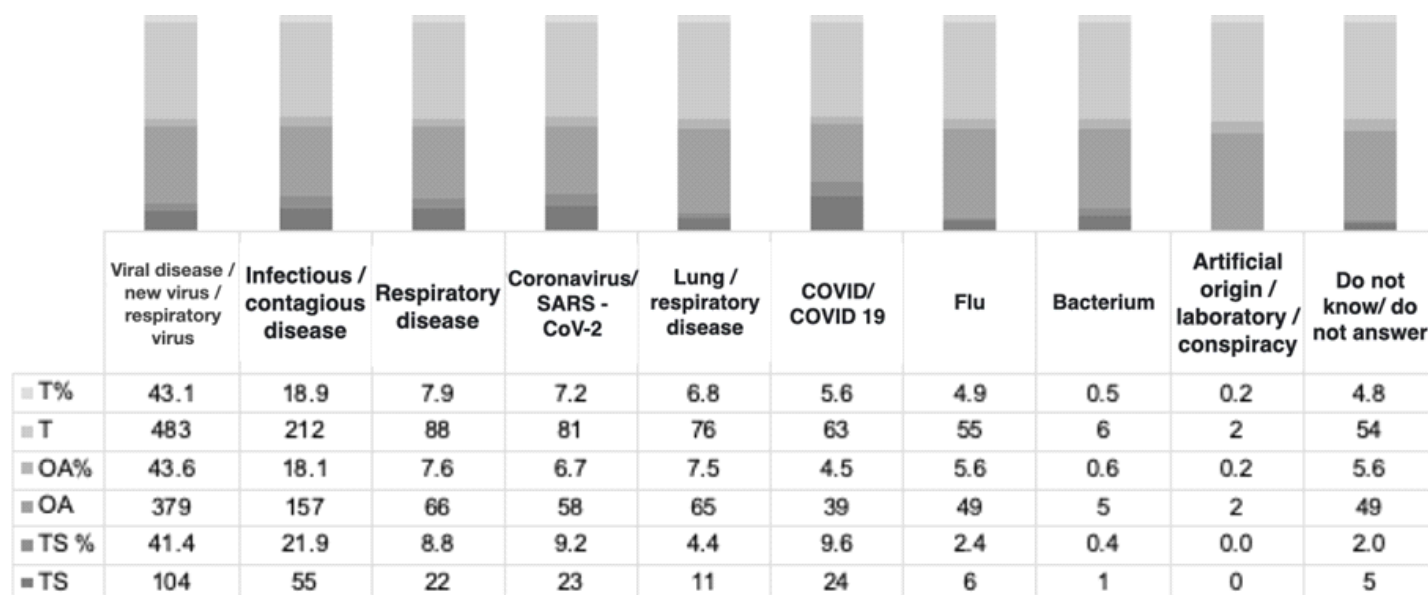
discarded cases and confirmed 2,776 cases, with 109 deaths(18) and 7 cases located in Casanare (32).

The survey included the participation of all municipalities, almost half resident in its capital, Yopal, which concentrates the largest proportion of the department's population(26). The respondents were typically women, young adults, married or in common union, characteristics similar to those reported by Zhong et al.(29), or qualified or educated workers, who do not recognize themselves within a particular ethnic group. A fifth of the respondents were health workers, which could be attributed to the fact that the initial distribution was made through contacts of the CTA members, made up mostly of professionals from the health sector from the department of Casanare; detail to be taken into account in light of the employment situation and possible need for personal protection elements (PPE) and biosafety.

Table 2. KAP against the disease, health workers against other activities, CAP COVID-19 survey, Casanare-Colombia

Variables	Health T.		Other	
	F	%	F	%
Know or have heard of the coronavirus				
Si	251	100	866	99,7
No	0		3	0,3
Form of contagion				
Sneezing	239	95,2	838	96,4
Cough	6	2,4	13	1,5
Handshake	3	1,2	12	1,4
Touching contaminated object	2	0,8	4	0,5
Hugs	1	0,4	0	0
Kisses	0	0	1	0,1
Does not know	0	0	1	0,1
The coronavirus is just one more flu				
Yes	38	15,1	117	13,5
No do not know	213	84,9	752	86,5
The coronavirus only gives to those who travel abroad				
Yes	1	0,4	12	1,4
No do not know	250	99,6	857	98,6
Young people and children die from coronavirus				
Yes	219	87,3	745	85,7
No do not know	32	12,7	124	14,3
Do you know how many cases of coronavirus we have in Colombia?				
Yes	237	94,4	799	91,9
No do not know	14	5,6	70	8,1
You know how many cases of coronavirus we have in Casanare				
Yes	242	96,4	808	93,0
No do not know	6	2,4	61	7,0
28-You know how many deaths there have been in Colombia				
Yes	235	93,6	794	91,4
No	16	6,4	75	8,6
Early symptoms				
Mild cough	226	90	739	85
Difficulty breathing	23	9,2	120	13,8
Fever	1	0,4	0	0,0
Back pain	1	0,4	4	0,5
Does not know	0	0	6	0,7
Know that you could have the coronavirus and not know it				
Yes	223	88,8	652	75,0
No / Does not know	28	11,2	217	25,0
Learn about the respiratory symptoms care route - COVID-				
Yes	218	86,9	568	65,4
No / Does not know	33	13,1	301	34,6
In the last 24 hours you left your home				
To buy food	88	48,1	401	81,0
To work	2	1,1	75	15,2
To make a return	91	49,7	5	1,0
To walk the dog	1	0,5	3	0,6
To the doctor	0	0	4	0,8
To the farm	0	0	3	0,6
To the pharmacy	1	0,5	2	0,4
To the park	0	0	2	0,4
Transportation used in the last 24 hours				
Walking	60	23,9	185	21,3
Motorcycle	63	25,1	165	19
Particular car	49	19,5	123	14,2
Bike	4	1,6	27	3,1
Public transport / Taxi	4	1,6	17	2
Institutional vehicle	0	0	2	0,2
I did not go out	71	28,3	349	40,2
22-In the last 30 days you have traveled outside the department				
Yes	39	15,5	130	15
No	212	84,5	739	85

Variables	Health T.		Other activities	
	F	%	F	%
In the last 30 days you have traveled outside the country				
Yes	2	0,8	7	Si
No	249	99,2	862	No
Whose responsibility is it to prevent the disease?				
Everybody	214	85,3	744	85,6
Each	37	14,7	122	14
The authority	0	0	2	0,2
The neighbors	0	0	1	0,1
How you get information				
Radio	159	63,3	536	61,7
TV	75	29,9	289	33,3
Other	3	1,2	11	1,3
Job	9	3,6	4	0,5
University/college	3	1,2	7	0,8
Govenment	1	0,4	7	0,8
Friend	0	0	5	0,6
Facebook	1	0,4	4	0,5
Newspaper	0	0,0	4	0,5
Instagram	0	0,0	1	0,1
WhatsApp	0	0,0	1	0,1
21-In the last week you were at an event or attended a place				
No	234	93,2	820	94,4
Yes	17	6,8	49	5,6
Which help prevent contagion				
Do not leave home	250	99,6	859	98,8
Handwashing	1	0,4	8	0,9
Wear a mask	0	0,0	1	0,1
Does not know	0	0,0	1	0,1
In the last 30 days you have been visited by a worker from				
Yes	84	33,5	104	12
No	167	66,5	765	88
In the last 30 days, have you had a health care visit				
Yes	73	29,1	157	18,1
No	178	70,9	712	81,9
In case of presenting symptoms of respiratory disease you should				
Contact the call attention line	220	87,6	676	77,8
Call my EPS	22	8,8	104	12
Go to the doctor for emergencies	8	3,2	64	7,4
Does not know	1	0,4	25	2,9
What can you do				
Isolation / Quarantine		63,7	649	74,7
Compliance with standards / measures / protoccc	45	17,9	121	13,9
Hand washing / PPE	26	10,4	30	3,5
Self care	12	4,8	30	3,5
Collaboration / Prevention	6	2,4	27	3,1
Education	2	0,8	4	0,5
Prayer / Prayers	0	0	2	0,2
Medical / hospital assistance	0	0,0	1	0,1
Do nothing	0	0,0	2	0,2
Do not know not answer	0	0,0	3	0,3
What should the authority do				
Inspection / Surveillance / Control	132	52,6	477	54,9
Isolation / Quarantine	42	16,7	145	16,7
Information / Education / Communication	34	13,5	84	9,7
Compliance with standards / measures / protoccc	18	7,2	51	5,9
Promotion and prevention	13	5,2	31	3,6
Government / state aid	6	2,4	37	4,3
Diagnostic tests	4	1,6	24	2,8
Self-care / PPE Wear	1	0,4	4	0,5
Do not know not answer	1	0,4	16	1,8

Figure 2. Description of the disease, health workers vs other activities, KAP COVID-19, Casanare-Colombia

A remarkable level of information was found on COVID-19, modes of contagion, understanding of the seriousness of the matter, general symptoms not far from what constitutes the current case definition, as well as contagion prevention measures (18). For those surveyed, it is clear that compliance with regulations, hand washing and the use of PPE, such as face masks, are important guidelines in their self-care, and that this, by itself, can be protective but insufficient. An interesting aspect to consider, based on the respondents, was the absence of public events or gatherings or having traveled outside the department or the country in the last month; In this regard, the hypothesis that there will be a low level of contagion or mortality as a result of exposure to the coronavirus before the activation of the Mandatory Preventive Isolation could be ventured; It is expected that infections or mortality may be, initially, from cases from neighboring departments such as Meta, Boyacá, Arauca or Los Santanderes.

There is an awareness that anyone can have the virus without knowing it. The surveyed sample learned mainly through radio broadcasting, as opposed to the normal use of cellular devices (smartphones) or Internet connections through multiple devices (computer, tablet).

However, despite the awareness that all citizens have a responsibility to prevent the disease, coinciding with what has been stated in other KAP studies on communicable diseases (33-36), and that they have the possibility of communicating in search of help through hotlines, a lack of support by health workers or services is revealed, especially with regard to promotion and prevention actions against COVID-19; It is clear that there is still room for improvement in terms of redundant customer service lines or information, education and communication to citizens, and that they should continue to be used if isolation continues or is prolonged.

This survey was carried out within the first week of the beginning of the declaration of economic, social and

ecological emergency in the department and in the country (14, 15); however, needs such as getting food or medical attention or work-related circumstances force people to break out of isolation and leave their homes. Hence also the use of individual, pedestrian or vehicular means of transport - motorcycle, car or taxi, the most common. This, despite the clarity regarding isolation and, above all, compliance with standards, measures or protocols, which involve other measures of a collective and individual nature; It was important to note both the claim to the authority for greater strength, greater capacity and effort when executing IVC and when conducting IEC, as well as for the implicit apathy in waiting for government / state help.

An implicit strength of this study is to demonstrate the possibility of communications or notices emanating from the government or authorities through electronic and social networks; this is affirmed because the present survey was 100% digital; A different matter is the IEC that the residents receive through the mass media. Another strength is its predetermined and defined objective in the exploration of the knowledge, attitudes and practices of citizens in the face of COVID-19, through which it was evidenced that there is an interest and a positive attitude on the part of the respondents in general to receive information, to find out and be aware of the situation, and they would like to see more action and intervention from the government chosen by them. A third strength is the confirmation of the population and age distribution,(9); This can allow decision makers in health to adjust the corresponding actions according to the population and circumstances.

However, the study also has its limitations, fundamentally derived from the haste in preparing this study, given the rapid progress and severity of the contingency caused by COVID-19, and the need to have good lines of communication, mainly through wireless communication or by installed network, taking into account the

development that each municipality has, both in its superstructure and in its connectivity infrastructure (37). Inherently, every KAP study is descriptive by definition, with the biases and vulnerabilities that such a design entail.

Finally, that a KAP survey has a natural constriction in its number and scope of questions; In this regard, P. Wang et al(3) They posed these and other questions in the middle of an expert panel: 1) What should healthcare providers know about the tests available to detect SARS CoV-2? What is known about their performance? Can they detect the virus in incubation or recovery periods? 2) How should false negatives be handled? 3) Who should offer these tests and where should they be done? 4) What security measures do health service providers need? Similar questions can be asked, or others, from the perspective of the local population.

This unprecedented experience in the region can also serve the local and departmental government to reinforce aspects such as the local operation of the epidemiological surveillance system, its complementation with public health laboratory surveillance, the capacity to handle and send or return samples taken. the residents, the cohesion of care services and diverse complexity and their professionals, the speed of supply and replacement of PPE, the theoretical and observed spread of COVID-19 in the department, or the considerations on the management of patients recovered in favor of the detection of symptoms or early signs of relapse or progression towards chronic damage. There are many tasks to be executed, very little time available for it.

In conclusion, this KAP research demonstrates the knowledge that the Casanareña population has about COVID-19 and the hygienic and sanitary measures to face the disease, in the absence of an effective vaccine or medicine against the causative virus; and, in general, it highlights a good attitude and a cooperative and even rationally demanding position towards the local and departmental government in the midst of an unprecedented emergency in the Nation. It remains to be seen, however, the critical issue of the economic and social reactivation derived from a forced stop of this style, which may be more demanding to the extent that there are extensions of isolation or commitment of various sectors in an economic model that, to figures from the first quarter of 2020, it handled almost 13% unemployment and 56% informal employment or underemployment(38).

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Authors contribution

Oneida Castañeda and Omar Segura proposed the idea, developed the project and the protocol. Suleida Jiménez carried out a review of the protocol and communication and contact tasks. All three participated in data analysis, writing the report and the final manuscript.

Conflicts of interest

None.

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