

The active survey from the approach of students of medical sciences in fighting Covid-19

La pesquisa activa desde un enfoque estudiantil en el enfrentamiento a la COVID-19

Yusnier Lázaro Díaz-Rodríguez¹  , Gino Iglesias-Sordo² , María de los Ángeles Vargas-Fernández² 

¹Universidad de Ciencias Médicas de La Habana. Facultad de Ciencias Médicas “General Calixto García”. La Habana, Cuba.

²Universidad de Ciencias Médicas de La Habana. Facultad de Ciencias Médicas “10 de Octubre”. La Habana, Cuba.

Received: September 07, 2020 | Accepted: September 27, 2020 | Published: October 09, 2020

Cite as: Díaz-Rodríguez YL, Iglesias-Sordo G, Vargas-Fernández MA. La pesquisa activa desde un enfoque estudiantil en el enfrentamiento a la COVID-19. Univ Méd Pinareña [Internet]. 2020 [citado: Fecha de acceso]; 17(1):e607. Disponible en: www.revgaleno.sld.cu/index.php/ump/article/view/607

ABSTRACT

Introduction: the active survey medical students carry out plays an essential role in fighting Covid-19.

Objective: to characterize the work of the active survey from the perspective of medical students in fighting Covid-19.

Method: an observational, descriptive and cross-sectional study was carried out with medical students who conducted surveys in Habana del Este and 10 de Octubre municipalities, in September 2020. The target group included 55 medical students who agreed to participate in the study; the totality of the group was included in the study.

Results: female students predominated (60 %), and students of Medicine (87,27 %). The 12,73 % of them described the surveys as an unnecessary activity and 69,09 % expressed it is a slowdown on the development of the teaching-learning process; 96,36 % reported that the work of the active survey was supervised by healthcare professionals and 80 % reported receiving training from healthcare professionals in the health area. Among the difficulties in conducting the active survey, the students reported a negative attitude on the part of the population being surveyed (36,36 %).

Conclusions: medical students showed a positive response about the importance of doing surveys; however, many students considered it a slowdown on the development of the educational process without contributions to professional development. The professors play an essential role in the training and supervision of active surveys.

Key words: Severe Acute Respiratory Syndrome; Medical Education; Coronavirus Infections.

RESUMEN

Introducción: la pesquisa activa realizada por estudiantes de ciencias médicas juega un papel indispensable en el enfrentamiento a la COVID-19

Objetivo: caracterizar la labor de la pesquisa activa desde la perspectiva estudiantil en el enfrentamiento a la COVID-19.

Método: se realizó un estudio observacional, descriptivo y transversal en estudiantes de las ciencias médicas que se encontraron pesquisando en los municipios Habana del Este y 10 de Octubre, en el mes de septiembre de 2020. El universo estuvo conformado por 55 estudiantes que accedieron a participar en el estudio, trabajándose con la totalidad.

Resultados: se encontró predominio de las féminas (60 %), y estudiantes de Medicina (87,27 %). El 12,73 % calificó la pesquisa como una actividad innecesaria y el 69,09 % la calificó como un freno para el desarrollo del proceso docente. El 96,36 % refirió que la labor de pesquisa activa fue supervisada por profesionales de la salud y el 80 % expuso recibir la preparación por parte de profesionales de la salud

del área de salud. Entre las dificultades en la realización de la pesquisa activa, los estudiantes refirieron una actitud negativa por parte de la población objeto de pesquisa (36,36 %).

Conclusiones: existió una aperccepción positiva por parte de los estudiantes sobre la importancia de la pesquisa, sin embargo, un gran número de estudiantes la consideró como un freno en el desarrollo del proceso docente-educativo y sin aportes al desarrollo profesional. El profesor juega un papel imprescindible en la preparación y guía de la pesquisa activa.

Palabras clave: Síndrome Respiratorio Agudo Grave; Educación Médica; Infecciones por coronavirus.

INTRODUCTION

SARS-CoV-2 (severe acute respiratory syndrome) was first reported in late 2019 in Wuhan, Hubei Province, China. This virus, causing coronavirus disease 2019 (COVID-19), has spread around the world with major implications on healthcare systems, making it a challenge for the scientific community to achieve control.^(1,2)

At the close of February 28th, 2021, 113 315 218 confirmed positive cases and 2 517 964 deaths were reported, for a fatality rate of 2,22 %. In Cuba, at the close of February 28th, 2021, 49 779 confirmed positive cases have been reported, including 45 242 recovered cases and 322 deaths.⁽²⁾

In this context, the need arises to apply strategies that guarantee the lessening of the transmission of the disease and, at the same time, minimize the consequences of the disease in the population, achieving a precise control of it. Prevention strategies, including active screening, have proven to be effective in the adequate epidemiological management of communicable and non-communicable diseases, and therefore their implementation is of vital importance.⁽³⁾

Active survey in the fight against COVID-19 has played a key role since the first reports of the disease in Cuba. Students of medical sciences from all over the country have carried out this task with the greatest of responsibilities, leaving behind fears and anxiety. During this long period, the students have developed, at the same time, the distance teaching-learning process and research work, reaching the homes of the Cuban people with great commitment and interest.^(4,5)

It is important to identify the perspective of medical science students regarding the task they perform, in order to develop strategies to improve this work, and in consequence to achieve better results. For these reasons, the present study was carried out with the objective of characterizing the work of the active surveys from the perspective of the students in fighting COVID-19.

METHOD

An observational, descriptive and cross-sectional study was carried out in a population of students of medical sciences from La Habana University of Medical Sciences, who were doing active survey in Habana del Este and 10 de Octubre municipalities, Havana province, Cuba; in September 2020.

The target group comprised 55 students of medical sciences, working with all of them. Students belonging to Las Habana University of Medical Sciences, in any of the majors for the Ordinary Daytime Course that it includes, who were doing active surveys in Habana de Este and 10 de Octubre municipalities and those who agreed to participate in the research were included.

The variables studied were age, sex, major, and concern for the need to conduct the active survey, which included necessary and indispensable, moderately necessary and unnecessary; supervision by healthcare professionals, the consideration of active survey as an obstacle to the development of the distance teaching-learning process and the substantial contribution of research to professional development. This also included the training received to carry out the work, either by means of the own management of information by themselves or by healthcare professionals assigned for this purpose; the difficulties or

obstacles that prevailed in active survey; as well as the degree of satisfaction with this as a preventive strategy.

Data collection was based on a survey prepared by the authors. The data were stored in a database created for this purpose. Descriptive statistical techniques were used and the results obtained were expressed in absolute and relative percentage frequencies.

The informed consent was requested in a written way from each of the students. The approval of the Medical Committee of Ethics from Wilfredo Santana Teaching Polyclinic was achieved, as well as from the Scientific Council of the Institution. In this research, the principles and recommendations for physicians involve in biomedical research on human beings adopted in the Declaration of Helsinki were met.

RESULTS

Out of the 55 students of medical sciences who participated in the study, 100 % were in the age group from 18 to 25 years and female sex predominated (60 %); of them the 87,27 % were from medicine major.

Students referred that doing active surveys is a necessary and an essential activity (54.45 %), and the 41,82 % qualified it as moderately necessary and 12,73 % qualified it as an unnecessary activity.

They stated (96,36 %) these activities were supervised by healthcare professionals. The 69,09 % of the students referred that making the inquiries constitutes an obstacle for the development of the distance teaching-learning process, and the 36,36 % set out negative criteria on the contribution of the active survey to the professional development (table 1).

Table 1. Criteria of the students of medical sciences concerning the active surveys

Opinions concerning the active surveys	Positive criterion		Negative criterion	
	No.	%	No.	%
Supervision of the healthcare professional	53	96,36	2	3,64
Slowdown in the distance teaching-learning process	38	69,09	17	30,91
Substantial contribution to the professional development	35	63,64	20	36,36

When analyzing the sources of basic knowledge to carry out the active survey, 5,45 % reported not getting any instruction, 14,55 % stated self-training to conduct the active survey, while the 80 % reported they were trained by healthcare professionals in the health area.

Among the difficulties in conducting the active survey, the students reported a negative attitude on the part of the population being surveyed (36,36 %). When analyzing the perception of the students regarding the degree of satisfaction towards the active survey as a strategy, 72,73 % of them considered it as satisfactory.

DISCUSSION

Active survey has been a prevention strategy implemented by the Ministry of Public Health in the midst of the current epidemiological situation, given the satisfactory results that have been confirmed with its implementation.⁽³⁾ Within this framework, medicine major students have been the main representatives of this strategic and important activity, being part of the curricular reordering of the teaching-learning process.⁽⁶⁾

In the present study, all the students from the age group 18 to 25 years were included; this is due to the fact that in Cuba the registration to Higher Education in the Ordinary Daytime Courses is comprised mainly of 18 years old students. In the present study we worked with students from first to fourth academic year belonging to the medicine fields of La Habana University of Medical Sciences and those enrolled for

Ordinary Daytime Course⁽⁷⁾, and no student had a previous major. The predominance of female students is consistent with the study conducted by Proenza-Fernández et al.,⁽⁸⁾ and with the sociodemographic characteristics of Cuba.⁽⁹⁾

On the other hand, medicine students were the most representative in the study, which is related to the number of students enrolled in the major during 2019-2020 academic year in Havana, 12,134 students; figures much higher than those of the rest of the majors in medical science fields.⁽⁹⁾

In the study on the opinions of healthcare personnel on the strategy of active search for tuberculosis cases, Núñez-Mederos et al.,⁽¹⁰⁾ reported that healthcare professionals considered active survey to be novel and necessary, a result similar to that obtained in the present study. Núñez-Mederos et al.,⁽¹⁰⁾ also concluded that in order to achieve the acceptance of this work, it is essential to adequately acquaint students towards its objective.

The conception of the students regarding the need for active survey as a preventive strategy, in the authors' opinion, presents a high subjective component based on the capacity to understand the context in which it is developed and the factors that determine it. The idea of the active survey as a necessary and essential preventive strategy can be determined by adequate training, professional staff companionship, as well as the observation of real changes translated into a decrease of cases in the health area, after its implementation.

The work of active survey has been developed in combination with healthcare professionals, who have among their tasks the supervision and guidance of the activity carried out by the students to optimize the results of the same. The literature reviewed shows the interest of the healthcare professionals in improving the active survey, which is shown in the present study with the companionship that the students are given.^(8,11,12,13)

It is interesting the conception of a high number of students to conduct the active survey as an obstacle to the development of the distance teaching-learning process implemented as part of the public policies of the National Healthcare System. In the opinion of the authors, this consideration is influenced by dissimilar factors, among them the limited use of distance education in the majors of medical sciences, the limited use of e-learning platforms in the teaching-learning process, as well as the deficiencies in infrastructure and connectivity.^(5,14) In addition to the aforementioned factors, emotional situations such as fear, stress and anxiety resulting from a new disease that affects the world on a large scale, constitute troubles, so to speak, for the development of a satisfactory teaching-learning process.⁽¹⁵⁾

According to Proenza-Fernández et al.,⁽⁸⁾ during active surveys, knowledge is strengthened and new knowledge is acquired, mainly in the anamnesis and the doctor-patient-family relationship, the main axis of the health-disease process; knowledge needs constant updating and reliable bases, which becomes even more important in the current context, in which cognitive tools are needed to cope with Covid-19. In the study conducted by Díaz-Rodríguez et al.,⁽¹⁶⁾ an educational intervention was designed to test the level of knowledge of Covid-19 in older adults, recognizing the importance of risk perception promoted by knowledge.⁽¹⁷⁾

The literature^(8,12) reports that the main way in which medical science students are trained to develop active survey, is the instruction process given by healthcare professionals, which is in agreement with the present study.

Depression, anxiety and stress are disorders that are emerging in the midst of Covid-19 pandemic. Fear of getting sick, social isolation, economic problems, as well as rumors or misinformation are key elements in the development of these disorders, which can bring negative feelings of anger, sadness or frustration.⁽¹⁵⁾ This generates a state of dissatisfaction in the population, which makes them irritable. This may have influenced on the identification of a negative attitude in the population surveyed, as the main difficulty or obstacle presented in the development of surveys. This represents a challenge that becomes

the responsibility of the healthcare team to provide tools that allow the population to understand the importance of this task, a process in which students should be involved.

In the authors' opinion, the main limitation of the study lies in the small sample studied, hence the need to replicate the study in other areas. Similarly, it is a limitation to only analyze the levels of satisfaction with the survey from the student perspective, and not to contrast it with the perception of the population and the teaching staff.

Students of medical sciences showed a positive response about the importance of doing surveys; however, a large number of students considered it a slowdown on the development of the teaching-learning process without contributions to professional development. The professors play an essential role in the training, guidance and supervision of the active surveys. It is necessary to provide tools to the population to cope with the current epidemiological situation, which would facilitate the process of the active surveys.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORSHIP CONTRIBUTION

YLDR, GIS and MAVF participated in the conceptualization, formal analysis, writing of the initial draft, review and editing of the final version. YLDR and GIS were responsible for research. MAVF was responsible for the analysis of data and methodology. YLDR was responsible for administration.

FINANCING

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

SUPPLEMENTARY MATERIAL

Supplementary Material is available at: <http://www.revgaleno.sld.cu/index.php/ump/rt/suppFiles/607>

BIBLIOGRAPHIC REFERENCES

1. Cuba. Centro Nacional de Información de Ciencias Médicas. Infecciones por coronavirus. Temas de salud. [Internet]. 2020 [citado 04/09/2020]. Disponible en: <https://temas.sld.cu/coronavirus/covid-19/>.
2. Redacción MINSAP. Parte de cierre del día 28 de febrero a las 12 de la noche. Sitio oficial de gobierno del Ministerio de Salud Pública en Cuba. [Internet]. 2020 [citado 07/09/2020]. Disponible en: <https://salud.msp.gob.cu/parte-de-cierre-del-dia-28-de-febrero-a-las-12-de-la-noche>.
3. Cabreara-Cruz N, Toledo Fernández AM. Los estudios de pesquisa activa en Cuba. Rev Cubana Salud Pública [Internet]. 2008 [citado 05/09/2020]; 34(1):0. Disponible en: http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0864-34662008000100015&lng=es&nrm=iso&tIng=es.
4. Díaz-Rodríguez YL. Valor de la pesquisa en la lucha contra la COVID-19. Univ Méd Pinareña [Internet]. 2020 [citado 05/09/2020]; 16(3):e545. Disponible en: <http://www.revgaleno.sld.cu/index.php/ump/article/view/545>.
5. Díaz-Rodríguez YL, Quintana-López LA. Educación a distancia en tiempos de coronavirus, un reto para los estudiantes de ciencias médicas. SPIMED [Internet]. 2020 [citado 05/09/2020];1(2):e22. Disponible en: <http://revspimed.sld.cu/index.php/spimed/article/view/22>.

6. Vázquez-González LA, Machado-Rojas MA. La pesquisa activa en la estrategia curricular del estudiante de medicina. Univ Méd Pinareña [Internet]. 2020 [citado 06/09/2020]; 16(3):e552. Disponible en: <http://www.revgaleno.sld.cu/index.php/ump/article/view/552>.
7. Requerimientos y trámites para ingresar a la Educación Superior. Directorio Cubano. [Internet]. 27 enero 2019 [citado 07/09/2020] Disponible en: <https://www.directoriocubano.info/noticias/cultura/requerimientos-y-tramites-para-ingresar-a-la-educacion-superior-en-cuba/>.
8. Proenza-Fernández L, Gallardo-Sánchez Y, Figueredo-Remón RJ. Caracterización del componente académico en estudiantes de medicina frente a la pesquisa de la COVID-19. MULTIMED. [Internet]. 2020 [citado 05/09/2020] 24(3): [aprox. 0 p.]. Disponible en: <http://www.revmultimed.sld.cu/index.php/mtm/article/view/1949>.
9. Ministerio de Salud Pública. Dirección de Registros Médicos y Estadística de salud. Anuario Estadístico de Salud 2019. [Internet]. 2020 [citado 05/09/2020]. <http://files.sld.cu/bvscuba/files/2020/05/Anuario-Electr%C3%B3nico-Espa%C3%B1ol-2019-ed-2020.pdf>.
10. Núñez Mederos CS, Pérez Chacón D, Castro Peraza M, Armas Pérez L, Laird Pérez RM, González Ochoa E, et al. Opiniones de actores de salud sobre la estrategia de búsqueda activa de casos de tuberculosis. Rev Cubana Med Trop [Internet]. 2019 [citado 07/09/2020]; 71(4): e374. Disponible en: <http://revmedtropical.sld.cu/index.php/medtropical/article/view/374>.
11. Molina-Raad V, Panizo-Bruzón SE, Ávila-Pérez YM, Gamboa-Molina L, Carmenate-Mora I. Preparación de los profesores no biomédicos para conducir la pesquisa activa relacionada con la COVID-19. Univ Méd Pinareña [Internet]. 2020 [citado 05/09/2020]; 16(3):e587. Disponible en: <http://revgaleno.sld.cu/index.php/ump/article/view/587>.
12. Rodríguez-García S, Marcano-Pérez A, Hidalgo-Ávila M, Sánchez-Figueras Y, Martínez- Lorenzo FY, García-Martín D. Comportamiento de los estudiantes de Ciencias Médicas ante la pesquisa activa durante la COVID-19.16 de Abril [Internet]. 2020 [citado 05/09/2020]; 59 (277): e965. Disponible en: http://www.rev16deabril.sld.cu/index.php/16_4/article/view/965.
13. Molina-Raad V. Caracterización del componente estudiantil en la pesquisa activa relacionada con la COVID-19. Revista Electrónica Dr. Zoilo E. Marinello Vidaurreta. [Internet]. 2020 [citado 06/09/2020]; 45(3). Disponible en: <http://revzoilomarinello.sld.cu/index.php/zmv/article/view/2260>.
14. Aquino-Canchari CR, Medina-Quispe CI. COVID-19 y la educación en estudiantes de medicina. Rev Cubana Inv Bioméd [Internet]. 2020 [citado 04/09/2020]; 39(2): e758. Disponible en: <http://www.revbiomedica.sld.cu/index.php/ibi/article/view/758>.
15. Véliz-Sánchez M, Díaz-Águila H. Comprensión y contención de la depresión durante el distanciamiento social por COVID-19. Univ Méd Pinareña [Internet]. 2020 [citado 07/09/2020]; 16(3):e559. Disponible en: <http://www.revgaleno.sld.cu/index.php/ump/article/view/559>.
16. Díaz-Rodríguez YL, Vargas-Fernández MA, Quintana-López LA. Efectividad de una Intervención educativa sobre el nivel de conocimiento de la COVID-19 en adultos mayores. Univ Méd Pinareña [Internet]. 2020 [citado 07/09/2020]; 16(3):e570. Disponible en: <http://www.revgaleno.sld.cu/index.php/ump/article/view/570>.
17. Díaz-Rodríguez YL, Quintana-López LA. A propósito del artículo “COVID-19. De la patogenia a la elevada mortalidad en el adulto mayor y con comorbilidades”. Rev haban cienc méd [Internet]. 2020 [citado 07/09/2020]; 19(4): e3531. Disponible en: <http://www.revhabanera.sld.cu/index.php/rhab/article/view/3531>