

Archivos Venezolanos de Farmacología y Terapéutica ISSN: 0798-0264 revista.avft@gmail.com Sociedad Venezolana de Farmacología Clínica y Terapéutica Venezuela

# Nursing role in the covid-19 pandemic: Systematic Review

Rojas Sarango, Daniela Estefanía; Mesa-Cano, Isabel Cristina; Ramírez-Coronel, Andrés Alexis; Moyano Brito, Edison Gustavo

Nursing role in the covid-19 pandemic: Systematic Review

Archivos Venezolanos de Farmacología y Terapéutica, vol. 40, núm. 6, 2021

Sociedad Venezolana de Farmacología Clínica y Terapéutica, Venezuela

Disponible en: https://www.redalyc.org/articulo.oa?id=55969710003

DOI: https://doi.org/10.5281/zenodo.5557112

Queda prohibida la reproducción total o parcial de todo el material contenido en la revista sin el consentimiento por escrito del editor en jefe.



Esta obra está bajo una Licencia Creative Commons Atribución-SinDerivar 4.0 Internacional.



Artículos

## Nursing role in the covid-19 pandemic: Systematic Review

El papel de la enfermería en la pandemia del covid-19: Revisión sistemática

Daniela Estefanía Rojas Sarango University of Cuenca,, Ecuador DOI: https://doi.org/10.5281/zenodo.5557112 Redalyc: https://www.redalyc.org/articulo.oa? id=55969710003

Isabel Cristina Mesa-Cano University of Cuenca, Ecuador imesac@ucacue.edu.ec

Andrés Alexis Ramírez-Coronel University of Cuenca, Ecuador

Edison Gustavo Moyano Brito University of Cuenca, Ecuador

> Recepción: 28 Junio 2021 Aprobación: 15 Agosto 2021 Publicación: 10 Octubre 2021

#### ABSTRACT:

The role of the nurse is based on providing comprehensive quality care to the healthy or sick person and accompanying him/her in the healing and rehabilitation process, and if necessary, at the time of death. Objective: To examine the role of nursing in the Covid-19 pandemic through a systematic review. Methodology: A systematic investigation was carried out in the scientific databases PubMed, SciElo, Google Scholar, Nursing Journal combining the Boolean operators AND and OR, in Spanish, English and Portuguese. Results: The literary search reported 1243 documents after the application of the selection criteria and evaluative reading, 32 articles were included for analysis due to their belonging and contribution to the fulfillment of the objective. Conclusions: It is possible to affirm that the pandemic caused by Covid-19 placed the health systems in different challenges, where the nurse played a transcendental and recognized role, standing out for being the heart and fundamental pillar in the different levels of care, demonstrating their safety and leadership by being in a frontline scenario.

KEYWORDS: role of nursing, Covid-19, pandemic.

#### RESUMEN:

El papel de la enfermera se basa en proporcionar cuidados integrales de calidad a la persona sana o enferma y acompañarla en el proceso de curación y rehabilitación, y si es necesario, en el momento de la muerte. Objetivo: Examinar el papel de la enfermería en la pandemia de Covid-19 mediante una revisión sistemática. Metodología: Se realizó una investigación sistemática en las bases de datos científicas PubMed, SciElo, Google Scholar, Nursing Journal combinando los operadores booleanos AND y OR, en español, inglés y portugués. Resultados: La búsqueda literaria reportó 1243 documentos luego de la aplicación de los criterios de selección y lectura evaluativa, se incluyeron 32 artículos para su análisis por su pertenencia y aporte al cumplimiento del objetivo. Conclusiones: Es posible afirmar que la pandemia causada por el Covid-19 colocó a los sistemas de salud en diferentes retos, donde la enfermera jugó un papel trascendental y reconocido, destacándose por ser el corazón y pilar fundamental en los diferentes niveles de atención, demostrando su seguridad y liderazgo al estar en un escenario de primera línea.

PALABRAS CLAVE: rol de enfermería, Covid-19, pandemia.

## Introduction

The World Health Organization (WHO) designated 2020 as the International Year of Nursing and Midwifery <sup>1</sup>, which has served to analyze and discuss the contribution of nurses.. The Covid-19 pandemic continues to be a challenge for different health systems, as mortality figures continue to rise daily.. Because



of the Covid-19 pandemic, nurses have faced one of the greatest challenges throughout history, being in the front line to mitigate the spread, exposing themselves to compromise their health status due to direct contact with positive patients and increased workload <sup>2,4</sup>.

Within the International Council of Nurses Code of Ethics, it states in Art.3. The Nurse and the Profession "The nurse shall have the primary role in establishing and applying acceptable standards of clinical practice, management, research and nursing education. It shall actively contribute to the development of a core of professional knowledge based on research. Through professional organization, it shall participate in the creation and maintenance of socially and economically equitable and safe working conditions in nursing." Constitution of According to Law 57. Law of professional practice of nurses, in its Art. 7. Mentions that: are competences and duties of nurses, literal 1.: Exercise care, administrative, research and teaching functions in the areas of specialization and those related to their professional field, therefore, it is of great relevance the study of the subject 5.

Different studies have pointed out the great work of nursing in history, however, the Covid-19 pandemic was, is and continues to be a challenge. Since different work strategies have had to be taken and the nursing professional has stood out for the great physical and intellectual efforts surpassing human capabilities, with long working hours, psychological pressure and detachment from their social and family environments. Being able to identify each of the roles that has developed in the course of this health emergency <sup>6,7</sup>.

Nursing professionals are an organized team that actively contributes to global health from health policy, health-disease dynamics, to the control of epidemics and emergency situations <sup>8</sup>. Therefore, when analyzing the situation of nursing, it can be seen that in the past it was little recognized in the development of its work and activities, remaining on the sidelines <sup>3</sup>. It 's important to highlight the role of nursing in facing this Covid-19 pandemic and through this to emphasize care as a fundamental axis of health care <sup>9,10</sup>.

Other studies show that the role of the nurse before the health emergency has been overshadowed, however, during the Covid-19 pandemic, the nurse has played an important role, developing leadership and assistance in the services in charge <sup>3, 11</sup>, recognizing that they are at the heart of the different health systems playing a crucial role in health promotion, prevention and treatment of diseases and subsequent rehabilitation of patients <sup>12,13</sup>.

In this context, nursing professionals have acquired a significant role in the health care team in coping with extremely dangerous and threatening scenarios, such as the pandemic caused by Covid-19, which has claimed thousands of lives of health care personnel during the performance of their duties <sup>14,15</sup>.

Florence Nightingale, in her nursing model, emphasizes that within the role of the profession is the administration of work areas, education of new professionals and the individual, family and community, research as a fundamental axis of change from scientific evidence with statistics that prove it, providing care in an organized, practical and scientific manner <sup>16</sup>. In this sense, Nightingale's Theory of the Environment promotes and preserves the vital energy of patients by considering the effect of nature on individuals <sup>17</sup>.

Therefore, the objective of this article is to examine the role of nursing in the Covid-19 pandemic through a systematic review, which will enable health professionals, especially nurses, to familiarize and learn about the subject, answering the following research questions: What is the role of nursing in the Covid-19 pandemic? and What are the most prominent roles of nursing in the Covid-19 pandemic?

In relation to this, it establishes specific objectives: to describe the main roles of nursing in the Covid-19 pandemic at international, regional and local levels, to verify differences in the roles of nursing in the Covid-19 pandemic according to the area of work.



## **METHODOLOGY**

## Type of research

A systematic literature review was carried out, following PRISMA recommendations

## Search strategy

An organized exploration of original articles was carried out through the following search engines: PubMed, SciElo, Google Scholar; using the combination of the Boolean operators AND and OR. For the search we used keywords such as: role, nursing, Covid-19, pandemic; in Spanish, English and Portuguese.

#### **Inclusion Criteria**

The selection of articles will be made as follows:

- Articles that are not from the year of publication sought will be excluded from the study.
- Thesis-type studies (undergraduate, graduate and doctoral), monographs and argumentative essays.
- Impossibility to retrieve the full text of the article.

The literature review was carried out in three phases: first the search in the first national and international scientific databases, followed by the selection of data through the application of inclusion and exclusion and finally the reading, analysis and review of complete studies.

#### RESULTS

A total of 1243 scientific papers on the Role of Nursing during the Covid-19 pandemic were identified. Following the selection of the papers, as shown in Figure 1, a total of 30 articles were included for the analysis of this review.

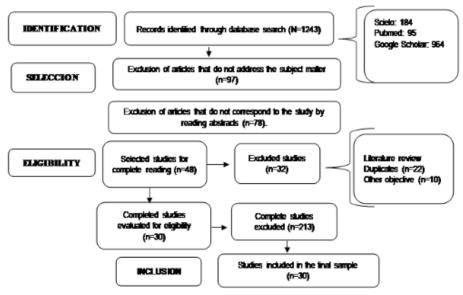


FIGURE 1.

Selection process of published papers on the Role of Nursing during the Covid-19 pandemic.

Figure 2. Process of selection of published papers on the Role of Nursing during the pandemic by Covid-19 for discussion.





The role of the nurse is based on providing comprehensive quality care to the healthy or sick person and accompanying him/her in the process of healing and rehabilitation of health, and if necessary at the time of death. This care is of quality for the person, family and community <sup>2</sup>.

At the beginning of the health emergency caused by Covid-19, all health systems suffered a challenge that led to changes due to the high demand of patients, the lack of material resources and the lack of health professionals due to the high demand of patients. This lack of professionals occurred because of the lack of knowledge about the new disease and the lack of protective clothing, many of them acquired the disease and even died from it <sup>18</sup>.

Therefore, it is necessary to emphasize that the role of nursing strengthens and articulates the collaboration networks of the different health services, ensuring the quality of services and guaranteeing the organization and performance of resources. Being an inter and multidisciplinary professional in teaching, research and assistance and management in daily work, a professional practice characterized in the updating of knowledge is established. Being a transcendental work, not only for being in 2020 and recognized by the WHO the year of Nursing and Midwifery, but for his hard work in the direct care of patients who presented symptoms and developed the disease by Covid-19 <sup>19–21</sup>.

It is worth mentioning that this group of professionals are the ones who provide direct patient care, staying 24 hours a day, feeling the situation and reality of the different areas and levels of care; being this occasion where new skills of professionals and nursing students are achieved, since, due to the confusion caused by the Covid-19, the behaviors of responsibility, empathy and solidarity with patients, family and community are strengthened <sup>16,23</sup>.

Rejane <sup>22</sup>, in a study, two categories are made to analyze the work of nursing in the face of the Covid-19 pandemic. Recognizing the leadership and management of nursing; noting that nursing leadership has been highlighted in different investigations in which they emphasize the initiative and effective work in the face of the pandemic. As well as the work of management have been through unquestionable challenges that cause stress and psychological fatigue, despite all the inconveniences encountered, the nurse dedicates actions to



the promotion and prevention of the precise care to intervene and mitigate the virus in patients with positive diagnosis.

The activities carried out by the nursing personnel during the pandemic have been arduous and worthy of recognition, since these procedures have been carried out from the first level of care to the assistance in the Intensive Care Units, where the most outstanding roles have been: assistance, management and teaching <sup>8,24.</sup> They are direct workers in patient care and are also collaborators of scientific laboratories that help in the research of this new virus <sup>25</sup>. Also, teaching and research activities have been developed where the nursing staff has created training programs, workshops, protocols and models of nursing care processes, being instruments that serve to create diagnoses of interventions to improve patient care and provide an accurate education to the population <sup>19,26.</sup>

The development of the pandemic generated by Covid-19 has aggravated mental health and has altered the well-being of health professionals. As a consequence, fear of the new disease, social distancing, lack of protective equipment, workload, high mortality rate, concern for their health status and that of their family members, economic situation, among others, being necessary to invest in mental health services <sup>27–30</sup>.

## Conclusions

The present bibliographic review allows us to affirm that the pandemic caused by Covid-19 placed the health systems in different challenges, where the nurse played a transcendental and recognized role, standing out for being the heart and fundamental pillar in the different levels of care, demonstrating their security and leadership by being in a front-line scenario. Evidencing with this that nurses maintain firm the model that Florence Nigthengale left us, being the light of hope, support and comfort for many patients who have found themselves in critical moments during their hospitalization process.

Verifying with this that the role of nursing is updated every day, each professional implement knowledge, techniques, methods and procedures that have scientific bases; and we remain in constant updating for the improvement of patients. Developing administrative, managerial and assistance functions in each department in which they develop their work.

It is important to emphasize that health professionals, especially nurses, deepen research on the subject providing knowledge on scientific bases that help to solve future searches that contribute to the community.

#### REFERENCES

- 1. Fuentes GP. Nursing and COVID-19: recognition of the profession in times of adversity. Rev Colombian Nursing [Internet]. 2020;19:17. Available in: https://revistas.unbosque.edu.co/index.php/RCE/article/view/2970
- 2. Díaz Díaz J, González Puerto Y, García Sánchez Z, Pérez Pérez F, Hernández Araña Y, Hurtado Montero G. The role of Nursing vis-à-vis COVID-19. Trad e Interpret Traducciones 2019 -2020 [Internet]. 2020; Available in: http://cuidarconciencia2020.sld.cu/index.php/cuidarconciencia/2020/paper/viewFile/136/123
- 3. Martinez Estalella G, Zabalegui A, Sevilla Guerra S. Management and leadership of nursing services in the COVID-19 pandemic emergency plan: the experience of Hospital Clínic de Barcelona. Clinical Nurse [Internet]. 2021;31:12–7. Available in: https://doi.org/10.1016/j.enfcli.2020.05.002
- 4. Exposito Concepcion M, Diaz Mass D, Vasquez Soto C, Consuegra Cabally D. Management of care teams during the COVID-19 pandemic. Rev Cuba Nursing [Internet]. 2021;37:1–10. Available in: http://revenfermeria.sl d.cu/index.php/enf/article/view/4230
- 5. Consejo Internacional de Enfermeras. International Council of Nurses Code of Ethics for the Nursing Profession. Rev Enferm Inst Mex Seguro Soc [Internet]. 2017;25(2):83–4. Available in: https://www.medigraphic.com/pdfs/enfermeriaimss/eim-2017/eim172b.pdf



- 6. Cassiani S, Munar Jimenez E, Umpiérrez Ferreira A, Peduzzi M, Leija Hernández C. The situation of nursing in the world and the Region of the Americas in times of the COVID-19 pandemic. Rev Panam Public Health /Pan Am J Public Heal [Internet]. 2020;44:1–2. Available in: https://www.scielosp.org/article/rpsp/2020.v44/e64/es/#
- 7. NVDO S, Carvalho E, Soares L, Varella T, Pereira S, Andrade K. Nursing work in the COVID-19 pandemic and repercussions for workers' mental health. Rev Gauch Enferm [Internet]. 2021;42(spe):e20200225. Available in: https://www.scielo.br/j/rgenf/a/MHPHGNFPtgYJgQzwyFQnZZr/?lang=en
- 8. Arévalo Ipanaqué J, Silva Tetzlaff A, Gonzalez V, Sánchez P, Lobos R, Velasquez L. Multi-country analysis of nursing care management during the COVID-19 pandemic. Cuba Nursing [Internet]. 2020;36:1-4–5. Available in: ht tp://revenfermeria.sld.cu/index.php/enf/article/view/3998
- 9. Lahite-Savón Y, Céspedes-Pereña V, Maslen-Bonnana M. Nursing staff performance during the COVID-19 pandemic | Lahite-Savón | Revista Información Científica. Revinfcientifica [Internet]. 2020;99(5):494–502. Available in: http://www.revinfcientifica.sld.cu/index.php/ric/article/view/3086
- 10. Maciá Soler L. Nursing and COVID. Scientific Journal of Nursing [Internet]. 2020;(20):1. Available in: https://rua.ua.es/dspace/bitstream/10045/114209/1/RECIEN\_20\_01.pdf
- 11. Maidana Sosa ME. Analysis on the use of teaching and learning strategies supported by Information and Communication Technologies in the Nursing career, before the COVID-19 pandemic. Cartogr del Sur Rev Sciences Arts and Technologyl [Internet]. 2020;(12). Available in: https://cartografiasdelsur.undav.edu.ar/ind ex.php/CdS/article/view/186
- 12. Quintana Zavala M. Vital role of Nursing, for the health of the whole world. Sanus [Internet]. 2020;(13):1–2. Available in: https://sanus.unison.mx/index.php/Sanus/article/view/197
- 13. Encalada Campo G, Yancha Moreta C, Esperaza Guerrero G, Daquilema Sánchez M, Moran Almendariz B. Situation of nursing in America in the face of the Covid-19 pandemic. Collective Health and Wellness [Internet]. 2020;4(3):108–28. Available in: https://revistasaludybienestarcolectivo.com/index.php/resbic/article/view/106/103
- 14. López Vega MJ, Majo Marrufo HR. Situation of Nursing in times of COVID-19: A panoramic view. J Am Heal [Internet]. 2020;3(3):48–58. Available in: http://www.jah-journal.com/index.php/jah/article/view/50
- 15. Jaque RL. Nursing education in pandemic times: Present and future challenges. Cienc y Enferm [Internet]. 2020;26:1–3. Available in n: https://scielo.conicyt.cl/scielo.php?pid=S0717-95532020000100102&script=sci\_arttext
- Morales Contreras B, Palencia Sierra J. Nursing reflections in times of covid. Nursing Research, Teaching and Management Research [Internet]. 2020;5(3):71–8. Available in: https://revistas.uta.edu.ec/erevista/index.php/enfi/article/view/914/859
- 17. Almeida M, Sousa P, Aguado M, Gomez S, Pina P. Florence Nightingale's theoretical nursing model: a transmission of knowledge. Rev Gaúcha Nursing [Internet]. 2021;42:13. Available in: https://doi.org/10.1590/1983-1447 .2021.20200228
- 18. Zaragoza Merino J, Regalado Ruiz L, Godínez Rodríguez M. Nurses' experiences in performing some professional nursing role. Rev Neurological Nursing [Internet]. 11 de noviembre de 2020 [citado 26 de junio de 2021];19(1):32–7. Available in: http://www.revenferneurolenlinea.org.mx
- 19. Raurell-Torredà M. Management of ICU Nursing Teams During the Covid-19 Pandemic. Enferm Intensiva [Internet]. 2020;31(2):49–51. Available in: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7246046/
- 20. González E, Torres J, Álvarez C, Lauzán Y. Nursing management during the Covid-19 pandemic. Cent Investig Medical Surgical [Internet]. 2021;13(3):3–11. Disponible en: http://www.revcimeq.sld.cu/index.php/imq/article/view/729
- 21. Carvalho ES de S, DoVale PRLF, Pinto KA, Ferreira SL. Contents related to nursing professionals during the COVID-19 pandemic on the Youtube TM platform. Rev Bras Enferm [Internet]. 2021;74(Suppl 1):e20200581. Available in: https://www.scielo.br/j/reben/a/TvCP7Znpxh6Kj9MhV4RGN5H/?format=html&lang=en



- 22. Rejane M, Menezes P De. The nurse's work in the context of COVID-19 pandemic. Rev Bras Enfermagen REBEn [Internet]. 2021;74:1–5. Available in: https://www.scielo.br/j/reben/a/MH4YCt9PWtGJFqySZ4jSYDB/?lang=en
- 23. Newell E. Taking advantage of unexpected leadership at the forefront of COVID-19. Elsevier [Internet]. 2020;68:388–90. Available in: https://pubmed.ncbi.nlm.nih.gov/32527597/
- 24. Torres J. Nursing paradigms in times of COVID-19. Cuban Journal of Nursing [Internet]. 2020;36(2):e3677. Available in: https://www.medigraphic.com/cgi-bin/new/resumen.cgi?IDARTICULO=97104
- 25. Velázquez Pérez L. COVID-19: a challenge for world science. An the Acad Sciences Cuba [Internet]. 2020 [citado 26 de junio de 2021];10. Available in: http://www.revistaccuba.sld.cu/index.php/revacc/article/view/763
- Community 26. Rodríguez Conterón E, Herrera Lopez J. Nursing Process with Available in Patients Covid-19. Enferm Investig [Internet]. 2021;6(1):57-68. in: https://www3.paho.org/hq/index.php?option=com\_content&view=article&id=15772:amid-covid-19-pa ndemic-new-who-report-urges-greater-investments-in-the-nursing-workforce&Itemid=1926&lang=es
- 27. Sánchez Martínez D, Madrigal Laguía P, Serrano Porta S, Guardiola Olmos J, Cañadilla Ferreira M. Analysis of the work activity of health professionals in training in the Region of Murcia in the face of the COVID-19 pandemic. Rev Española Educ Médica [Internet].2020;1(1):11–23. Available in: https://revistas.um.es/edumed/article/view/422531/282651
- 28. Ramírez-Coronel AA, Martínez-Suárez PC, Pogyo-Morocho GL, Estrella-González M de los Á, Mesa-Cano IC, Minchala-Urgilés RE, et al. Psychometric Evaluation and Nursing Intervention Against Fear of Covid-19. Arch Venez Farmacol y Ter [Internet]. 2020;39(5):660–6. Available in: https://www.redalyc.org/articulo.oa?id=55 965386022
- 29. Caballero Muñoz E. Challenges for Chilean nursing in the context of pandemic according to the guidelines of the International Council of Nursing. Benessere Rev Nursing [Internet].. 2021;5(1):4–8. Available in: https://revistas.uv.cl/index.php/Benessere/article/view/2717/2689
- 30. Baldini C, Peduzzi M, Viana M. Nursing workers in the Covid-19 pandemic and social inequalities. Rev Esc Enferm USP [Internet]. 2020;54(3):e03599. Available in: https://www.scielo.br/j/reeusp/a/TkQMY6gqJnXwpRzkGQN8V6P/?lang=en

