



SANUS. 2020;(16):1-10

DOI: https://doi.org/10.36789/sanus.vi16.227

www.sanus.unison.mx

Devising of public health policies during Covid-19 pandemic in American countries

Erick Landeros-Olvera^{1*}; Francisco Javier Arroyo-Cruz ²; Mariela de Jesús Rodríguez-Hernández³

ABSTRACT

Introduction: The pandemic has generated an immediate response in the form of global actions that have not either been tested or evaluated, since there has been little time to check the results. It is essential to prepare public policies to implement the regulations for such actions within health programs. Objective: Present a proposal for the implementation of health policies aimed at solving problems resulting from the Covid-19 pandemic. **Development:** As a result of the epidemics recorded in history, health policies have developed programs that offered prevention and treatment solutions. Currently, the emergency situation has forced us to work to remedy, understand, and improve such health policies in the American countries. The World Health Organization has made efforts to help delimit the pandemic through the different governments of the Americas, but how can feasible policies be prepared if the situation in each country has shown different health contingency strategies? The proposal for the devising and execution of public health policies is as follows: 1. Define the problem, 2. Generate solutions, 3. Main objective, 4. Write strategies, 5. Implementation, 6. Planning, 7. Execution, 8. Results, 9. Evaluation, 10. Feedback. **Conclusions**: Public health policies had to be adapted to the financial and cultural reality of each country, considering current health challenges; nevertheless, health professionals, when proposing public policies, must be aware of seeking support from Congress, so this could be the voice to represent the proposal of those who are on the scene.

Key words: Policies; public policies; nursing (DeCS)

ORCID: https://orcid.org/0000-0001-6270-1759

*Correspondence author: franciscoarroyoc2004@gmail.com

¹Nursing PhD, Benemérita Universidad Autónoma de Puebla. Nursing School. Av. 25 Pte. 1304, Los Volcanes, 72410 Puebla, Pue. Telephone: 2295500 ext. 5618.

² Posgraduate student. Benemérita Universidad Autónoma de Puebla. Nursing School. Master Degree in Nursing. Av. 25 Pte. 1304, Los Volcanes, 72410 Puebla, Pue. Telephone: 2295500 ext. 5618. ORCID: https://orcid.org/0000-0003-2044-1412

³ Posgraduate student. Benemérita Universidad Autónoma de Puebla. Nursing School. Master Degree in Nursing. Av. 25 Pte. 1304, Los Volcanes, 72410 Puebla, Pue. Telephone: 2295500 ext. 5618. ORCID: https://orcid.org/0000-0002-7960-280X

Formulación de políticas públicas en salud durante la pandemia de covid-19 en países americanos

RESUMEN

Introducción: La pandemia ha provocado una situación de respuesta inmediata de acciones globales no probadas y no evaluadas, se ha tenido poco tiempo para verificar resultados. Es imprescindible formular políticas públicas para establecer la normativa de dichas acciones en los programas en salud. Objetivo: Presentar una propuesta para la operacionalización de políticas de salud que sean encaminados a resolver problemas derivados de la pandemia por Covid-19. Desarrollo: Ante las epidemias registradas en la historia, las políticas de salud desarrollaron programas que ofrecieron soluciones de prevención y tratamiento. Ahora, la situación de emergencia ha obligado a trabajar para remediar, comprender y mejorar las políticas sanitarias en los países americanos. La Organización Mundial de la Salud ha hecho esfuerzos por contribuir a delimitar la pandemia a través de los distintos gobiernos de América, pero ¿Cómo se pueden formular políticas factibles si la situación en cada país ha presentado distintas estategias de contingencia sanitaria? La propuesta para la Formulación y ejecución de las políticas públicas de salud es la siguiente: 1.Definir el problema, 2.Generar soluciones, 3.Objetivo principal, 4.Redactar estrategias, 5. Operacionalización, 6.Planeación, 7.Ejecución, 8.Resultados, 9.Evaluación, Conclusiones: Las políticas públicas de salud deben ser "adaptadas" a la realidad financiera y cultural de cada país, considerar retos actuales de salud; sin embargo, los profesionales de la salud, al proponer políticas públicas, deben estar conscientes de buscar respaldo del congreso, que sea la voz para representar la propuesta de quienes están en el lugar de los hechos.

Palabras clave: Políticas; Políticas públicas; Enfermería (DeCS).

Elaboração de políticas de saúde pública durante a pandemia de Covid-19 nos países americanos

RESUMO

Introdução: A pandemia gerou uma resposta imediata na forma de ações globais que não foram testadas ou avaliadas, já que houve pouco tempo para verificar os resultados. É imprescindível a formulação de políticas públicas para a implementação da regulamentação dessas ações nos programas de saúde. Objetivo: Apresentar uma proposta de implementação de políticas de saúde voltadas para a solução dos problemas decorrentes da pandemia Covid-19. Desenvolvimento: em decorrência das epidemias registradas na história, as políticas de saúde desenvolveram programas que oferecem soluções de prevenção e tratamento. Atualmente, a situação de emergência nos obrigou a trabalhar para remediar, compreender e melhorar essas políticas de saúde nos países americanos. A Organização Mundial da Saúde tem feito esforços para ajudar a delimitar a pandemia por meio dos diferentes governos das Américas, mas como podem ser elaboradas políticas viáveis se a situação de cada país apresenta estratégias diferentes de contingência em saúde? A proposta para a formulação e execução de políticas públicas de saúde é a seguinte: 1. Defina o problema, 2. Gerar soluções, 3. Objetivo principal, 4. Escreva estratégias, 5. Implementação, 6. Planejamento, 7. Execução, 8. Resultados, 9. Avaliação, 10. Feedback. Conclusões: As políticas públicas de saúde tiveram que ser adaptadas à realidade financeira e cultural de cada país, considerando os desafios atuais da saúde; entretanto, os profissionais de saúde, ao proporem políticas públicas, devem estar atentos para buscar apoio no Congresso, para que esta seja a voz que represente a proposta de quem está em cena.

Palavras-chave: Políticas; políticas publicam; enfermagem (DeCS)

INTRODUCTION

The pandemic caused by the new SARS-Cov-2 coronavirus has placed the world in a situation of immediate response. Most of the interventions have been carried out without adequate infrastructure and without prior evidence that could support the global actions that have been implemented by the health systems of all countries, mainly due to the unprecedented nature of the event and the short time that has been available, and most of the articles that have been published during the pandemic have been presented as "Preprints" 1, 2. The impact has been reflected in the number of cases reported worldwide. Up to January 6, 2021, there have been 85,091,012 confirmed cases (585,557 new cases) and 1,861,005 deaths (11,632 new deaths) have been registered, with a global fatality rate of 2.2 %; in the Americas the cases reported so far are 242,785, giving a distribution percentage of 41.5%³. Both scientific evidence and epidemiological data are basic elements to guide public health policies in any country, whose main function is to guide actions to provide a socially organized response through the appropriate use of human and material resources4. These public policies are implemented through programs that emanate from them, i.e., they become concrete when they are transformed into services in accordance with the health needs of the communities⁵.

In the Americas, there are health problems that require worldwide attention, for instance, efforts to establish public health policies that address similar problems. Such is the case of the epidemiological transition towards chronic diseases that have become the main causes of death and disease⁶. Despite being a common public health problem, in each country, there are different contexts and resources to achieve the resulting programs, both economic and health services, as it has been presented in the Organization for Economic Cooperation and Development (OECD, 2020)⁷ ⁸. In order for a

public health policy to be incorporated into the health programs of the countries, a prior analysis of the situation must be carried out and its devising must be based on the results of public health research along with clinical results, in order to achieve an efficient and effective service that is more in line with the real context. In other words, it is not feasible to propose public health policies without scientific evidence that is part of the social development of the international community⁹. But, before this emergency caused by the Covid-19 pandemic, how can feasible policies be devised if the situation in each country presented different has health contingency strategies?⁷

The purpose of this essay is to present a proposal for the operationalization of public health policies aimed at solving problems resulting from the Covid-19 pandemic.

COMMON PROBLEMS. COMMON SOLUTIONS?

At the beginning of the 20th century in the American continent, most deaths were caused by epidemics resulting from diphtheria, pertussis, tetanus, measles, tuberculosis, and poliomyelitis, and the average life expectancy did not exceed 50 years.¹⁰ Faced with this problem, public health policies developed programs that offered coverage through universal vaccination, a program resulting from epidemiological analysis that, from a technical point of view, validated the policy proposal to achieve the maximum social benefit that is possible. However, over time, failures have been identified in public health policies due to the same lack of scientific evidence¹¹. On the one hand, in some sectors there has been an epidemiological lag due to the marginalization and of certain communities¹², i.e., the poor continue to die from the same "apparently controlled" diseases in the 21st century.

But, on the other hand, vaccination has favored the increase in life average, but as a consequence, the onset of chronic illnesses such as diabetes, heart disease, and obesity, which nowadays appear at younger ages due to lack of public health policies to face unhealthy life styles such as physical inactivity and junk food eating have generated an obesogenic environment¹³. In the American continent, these illnesses cause a large economic and social impact, and have represented a constant challenge to public health, and currently, they are a mortality risk factor during the Covid-19 pandemic creating a crisis in public, economic, and political health¹⁴. This emergency health situation has forced people to work in order to cure, understand, and improve public health polices in the American countries. The World Health Organization (WHO) has performed huge efforts to contribute to delimit the pandemic through the different countries designing health recommendations in cooperation with the representatives of all American countries; however, the results do not represent a rule, since WHO public health policies are elective for the health systems of all the countries, and the reason is simple, despite the fact that the pandemic represents a common health problem the solutions are not necessarily equal¹⁵. There are differences among the countries, such as the environment, the public administration, health services, education, and cultural diversity, which means that the actions within the strategies shall be adapted to the context where they are being implemented, considering the resources of each country, since a developed country is totally different compared to a developing country¹⁶.

DEVISING AND EXECUTION OF PUBLIC HEALTH POLICIES

The aforementioned no doubt is determinant, but coping with this health emergency, each country has made its own decisions to apply strategic actions. Some American countries gave priority to political and economic interests, others to the technical opinion of scientists and considered the vicarious experience provided by China and European countries through the behavior of their epidemiological curves and history itself from epidemics from other times¹⁷. But, regardless of the strategy, almost one year from the time the first coronavirus appeared, the actions are still being evaluated based on the results, mistakes, and successes independently of the economical results and the debt that was generated in each country, the main evaluation shall be done from the epidemiological point of view. Several interpretation forms of the epidemiological curves have been identified, guided by the database generated in every country, where it is indicated the number of accumulated deaths; the data repository of the Johns Hopkins University¹⁸ allows constructing the respective curves with the data considered. For instance, with a rate of 10,000 inhabitants. situating the beginning of the curve in the number 100 as covariance strategy, it can be seen that the curve has different behaviors in the American countries up to August 2020, situation that exposes one of the reasons of the diversity the actions that each country implemented to cope the health contingency (Figure 1).

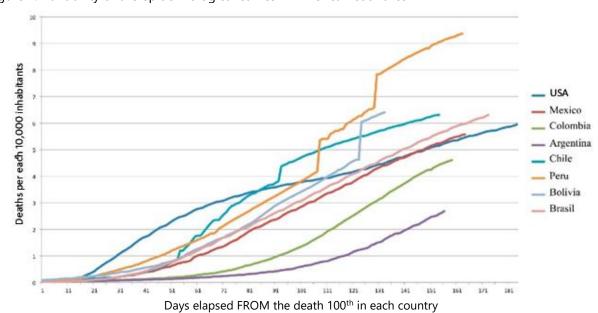


Figure 1. Variability of the epidemiological curves in American countries

Source: Data repository of COVID-19 of the Science and System Engineering Center (CSSE) of the Johns Hopkins University¹²

At any time, all the actions that have had success shall be configured in public health policies in this new normality, where the set of objectives, decisions, and strategies to solve priority problems resulting from the pandemic shall be raised. Although it is known that partisan interests are divided in the devising and approval of public policies¹⁹, scientific evidence and procedure techniques shall be always placed for the common good.

To contribute with this historical moment, in this assay 10 stages are proposed for the devising of a public health policy adjusted to the Latin American context, and adapted from the framework of Mason D, et al. ²⁰. First, describe the health problem resulting from the pandemic, which shall be defined, determined under a previous statistical and epidemiological research, and data resulting from human or material resources, since it is necessary to collect all the possible information in a convincing way to justify the desired public policy. Second, generate alternatives of solution, where the probabilities are projected, that is, what it is

possible and what is not, based on the following questions: What does this imply? When to carry it out? Where to establish it? Why to apply it? And, what are the financial resources at hand? To be able to identify the feasibility of a public health policy, it shall be considered as starting point that in the construction of the public agenda there is a complex interconnection between apparent and real socio-sanitary problems, thus, it is required to consider all of the possible scenarios, since the issue raised has to be treated as a health phenomenon with multiple feasible solutions. Third, state the main objective that includes the alternatives of solution and that is written in such a way that encloses the responses to the former questions. It shall be remembered that, in this moment, there are too many "opinions" with respect to what should be done or what should not be done, since a health emergency of this size is a new phenomenon; therefore, each alternative of solution should result from published scientific and technical evidence, which has already been validated⁵. Fourth, write the strategies to include the main objective, considering the actions that are going to operate through a program, which will have to indicate the instances that will be in charge of operating it, identify the commission. the committee, the ministry, representative group whose functions directly imply the responsibility of their execution. Fifth, the program shall include specific objectives to start with the operationalization, and these will be informed in the projects resulting from each program according to the problem identified, to be solved or prevented. Sixth, each project of the program shall show its expected products, that is, based on a temporary planning, the specific goals and the date to get the expected results shall be written. When these six steps are established, the public health policy should be passed on by the corresponding authorities and there is the opportunity to perfect it; thus, this step is inter-related with the whole process since each evaluation instance can suggest or request changes to be approved. In the last decades, the evaluation subject of the public health policies has progressively experienced a great boom as response to the citizens' demand for an efficient and transparent management of resources, some proposals of public health policies are set forth by organizations such as WHO²¹ at international level, and others inside each country within the interamerican system²². In order to describe an example of this approval stage, in Mexico, the National Council for Evaluation of Social Development Policy (Coneval by its acronym in Spanish)²³ is a Mexican government department with autonomy and technical capacity to generate objective information about the situation of the social policies, and the measurement of the poverty in the country; its attributes allows it improving the decision making process with respect to the approval of public health policies.

But Coneval is not the only instance that should be considered. In order that a public policy is accepted, it has to be adapted to the stipulations of the national, state, and local development plan, as the case may be, and Planning and Financing²⁴ is the ministry in charge, since this is the instance that promotes the planning process, budgeting resources, and responsible and congruent exercise of the public health policies that drive the wellbeing as it is established in Article 25th, which is about the development of the country²⁵. In Mexico, the authority to propose laws to the Executive Branch is equally shared by the members of the National Congress and state legislatures. It is worth mentioning that the Chief Audit Office of Mexico (ASF by its acronym in Spanish) ²⁶ has the nature of technical body of auditing of the Chamber of Deputies, which has the purpose of revising the public expense exercised by the Mexican federal government, the three powers of the union, states, and municipalities.

Specifically, for example, Tlaxcala is the only state in Mexico that has a Ministry of Public Politics and Citizen Participation, in charge of designing, suggesting, and executing government actions that generate public interest. However, most of the times public health policies are decreed by the executive and legislative branches²⁷, so this Ministry is not often consulted. Continuing in the process, after the public policy is passed on, the seventh step, which is the execution of the program, so what is next is based on the time in which the public policy is applied or allowed, and it could be permanent or flexible to the change or the situations that occur or how the pandemic or cases behave. This phase is related to the appointed budget, therefore, it shall be written with clarity, so it can be attractive and considerate. To reach this, regardless of the proposed subject (hiring of specialists, protection resources, strategies of action in different levels of attention, continuity of care, mental health, health regulations in stores and school centers, etc.) the execution of the program has to be justified apart from the prevention of the Covid-19¹⁵ infection. Eight, obtain the final products and compare the results against the indicators that are established. If the policy was well planned and submitted to an analysis of probabilities, this point should match the predictions of results that emanate from the alternatives of solution of the second point. Ninth, the evaluation -which despite of being almost at the end of the process-, will always be present in all the phases of the process in general. Evaluate each one of the phases of the public health policy gives the opportunity to fix, implement, and redirect the strategies in order to serve the society. Finally, the tenth step shall be focused on the feedback and restructuration, a step that improves the development of the public health policy over the years; thus, it is a phase of continuous movement and it is related to all the other phases, as the case may be, and always exposes the public policy to the transformation in order to reach its consolidation and has the possibility to be replicated or considered by other entities of different governments. Feedback of a public health policy shall identify barriers and plan the feasibility of replica in different geographic zones to reach universality.

CONCLUSIONS

Public health policies must be adapted to the financial and cultural reality, considering current health challenges, not only the presence of the new coronavirus; also, due to the specific epidemiological profiles of each country and the environment that affects life styles. Nevertheless, currently, health professionals such as nurses and medical doctors, when proposing public health policies, should be conscious that the assistance of someone in the Congress is necessary since this person will be the spoke person that will represent the proposal, otherwise. its implementation will not be possible although it

is feasible and based on evidence. To end, the proposal presented in this assay for the devising and execution of public health policies, unlike the reference frame of Mason D, et. al. 16, the characteristics of the political environment of Latin America are considered in order to be contextualized to the government institutions the best way possible, it is flexible, and can serve as reference, so the health professionals who are not political actors can present proposals in the Congress, since a large part of the responsibility and care of Covid-19 patients lies in them, as well as their knowledge and experience based on the science and technique that highlights the strength to make proposals of policies based on real needs.

CONFLICTS OF INTEREST

The author stated they do not have any type of conflict of interest with respect to this article.

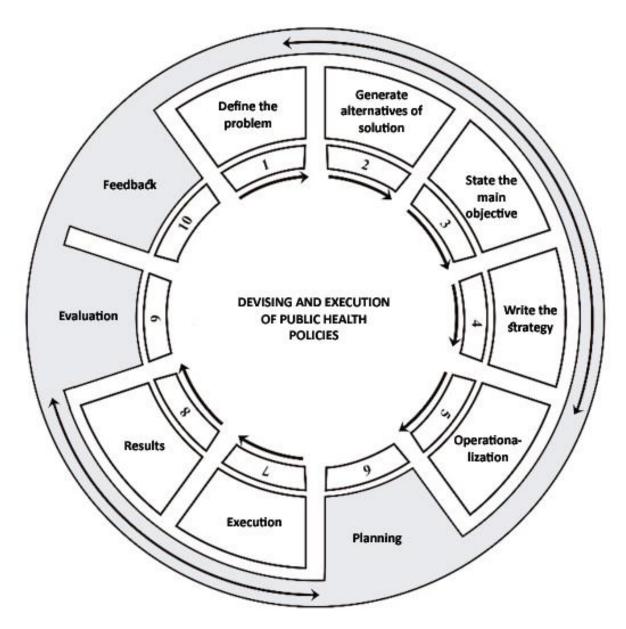
FINANCING

The authors stated they did not receive any type of financing to perform this article.

ACKNOWLEDGEMENTS

Our acknowledgment to the individuals who participated in this assay, namely, Georgina Mayela Núñez Rocha, José Antonio Morales Santiago, Andrea Romero González, and José Eusebio Arroyo Cruz.

Figure 2. Devising and execution of public health policies



Source. Own development. Adapted from the framework of Mason D, Gardner D, Hopkins F, O´Grady E. Policy & Politics in Nursing and Health Care²⁰.

REFERENCES

 Fraser N, Brierley L, Dey G, Polka JK, Pálfy M, Coates JA. Preprinting a pandemic: the role of preprints in the COVID-19 pandemic. BioRxivpreprintdoi: https://doi.org/10.1101/2020.05.22.1112 94.

2. Bourne PE, Polka JK, Vale RD, Kiley R. Ten simple rules to consider regarding

- preprint submission. PLoSComputBiol 13(5): e1005473.
- Panel de control de la enfermedad por coronavirus de la OMS (COVID-19). Ginebra:
 - Organización Mundial de la Salud, 2020. [Internet]. 2021 [cited on January 06, 2021] Available at: https://covid19.who.int/
- 4. Araneta F, Rosa M. La problematización de la realidad desde la mirada comunicacional para el diseño y gestión de políticas públicas. Actas de Periodismo y Comunicación [Internet]. 2018 [cited on September 22, 2020];4(2). Available at: https://www.perio.unlp.edu.ar/ojs/index. php/actas/article/view/5827
- Barboza-Palomino, Caycho T, Castilla-Cabello H. Políticas públicas en salud basadas en la evidencia. Discusión en el contexto peruano. Salud pública de México [Internet]. 2017 [cited on September 19, 2020];59(1):2–3. Available at: http://dx.doi.org/10.21149/7881
- 6. Faus-Bertomeu A, Gómez-Redondo R. La reconstrucción de las causas de muerte por el método de MODICOD en el análisis demográfico-sanitario. De la CIE-9 a la CIE-10 a un nivel de cuarto dígito. EMPIRIA: Revista de Metodología de Ciencias Sociales [Internet]. 2018 May [cited on September 19];40:167–95. Available at: https://doi.org/10.5944/empiria.40.2018. 22015
- Clavellina Miller JL, Domínguez Rivas MI. Implicaciones económicas de la pandemia por COVID-19 y opciones de política. 2020 [cited on Jan 6, 2021]; Available at: http://bibliodigitalibd.senado.gob.mx/ha ndle/123456789/4829
- 8. Rodríguez TG, de la Luz Pérez Reveles M, Bolívar HR. Efectos de las medidas de prevención y mitigación de la pandemia

- de COVID-19 sobre los índices de confianza en países de la OCDE. Contad adm. 2020;65(4):214.
- Chaverri Chaves P, Arguedas Ramírez A. Políticas Públicas Basadas en Evidencia: una revisión del concepto y sus características. ABRA [Internet]. 2020 [cited on September 20, 2020];40(60):49– 76. Available at: https://doi.org/10.15359/abra.40-60.2
- 10. Orive N. Mortalidad infantil, malformaciones congénitas y transición epidemiológica: un reto para el sistema de salud. Revista Electrónica Dr. Zoilo E. Marinello Vidaurreta [Internet]. 2017 [cited on September 20, 2020];42(2). Available at: http://revzoilomarinello.sld.cu/index.php/zmv/article/view/1047/pdf_391
- 11. Chaverri Chaves P, Arguedas Ramírez A. Políticas Públicas Basadas en Evidencia: una revisión del concepto y sus características. ABRA [Internet]. 2020 [cited on September 20, 2020];40(60):49–76. Available at: https://doi.org/10.15359/abra.40-60.2
- 12. Brett T, Ajelli M, Liu Q-H, Krauland MG, Grefenstette JJ, van Panhuis, WG, Vespignani A, Drake JM, Rohani P. Detectar desaceleraciones críticas en epidemiológicos de sistemas alta dimensión. PlosComputationalBiology. [Internet]. 2020 [cited on September 20, 2020]; 16(3): 1-19. Available https://doi.org/10.1371/journal.pcbi.100 7679
- 13. Kaczynski AT, Eberth JM, Stowe EW, Wende ME, Liese AD, McLain AC, Breneman CB, Josey MJ. Development of a national childhood obesogenic environment index in the United States: differences by region and rurality. International Journal of Behavioral Nutrition & Physical Activity [Internet]. 2020 Jul 2 [cited on September 19, 2020];17(1):1–11. Available at:

- https://ijbnpa.biomedcentral.com/articles/10.1186/s12966-020-00984-x
- 14. Webber R. COVID-19 and race: Protecting data or saving lives? International Journal of Market Research [Internet]. 2020 Sep [cited on September 19, 2020];62(5):528–37. Available at: https://journals.sagepub.com/doi/full/10. 1177/1470785320946589
- 15. La OMS publica directrices para ayudar a los países a mantener los servicios sanitarios esenciales durante la pandemia de COVID-19 [Internet]. Organización Mundial de la Salud. 2020 [cited on September 14, 2020]. Available at: https://www.who.int/es/news-room/detail/30-03-2020-who-releases-guidelines-to-help-countries-maintain-essential-health-services-during-the-covid-19-pandemic
- Gustavo Rodríguez Albor. Cooperación para el desarrollo, relaciones internacionales y políticas públicas. OASIS [Internet]. 2019 Feb 1 [cited on September 21, 2020];(29). Available at: https://dialnet.unirioja.es/descarga/artic ulo/7016538.pdf
- 17. Serrano-Cumplido A, Antón-Eguía Ortega PB, Ruiz García A, Olmo Quintana V, Segura Fragoso A, Barquilla Garcia A, et al. COVID-19. History repeats itself and we keep stumbling on the same stone. Semergen. 2020;46 Suppl 1:48–54.
- Repositorio de datos COVID-19 del Centro de ciencia e ingeniería de sistemas (CSSE) de la Universidad Johns Hopkins [Internet]. github.com. 2020 [cited on September 24, 2020]. Available at: https://github.com/CSSEGISandData/CO
 - https://github.com/CSSEGISandData/CO VID-19/
- Concepción Montiel LE, Suarez M, Fernanda Aranibar M. El Impacto De Los Gobiernos Divididos en La Formulación Y Aprobación De Las Políticas Públicas Legislativas. Nuevo Derecho [Internet].

- 2018 Jul [cited on Sep 2020];14(23):2–18. Available at: https://dialnet.unirioja.es/servlet/articulo?codigo=6742006
- 20. Mason D, Gardner D, Hopkins F, O'GradyE. Policy & Politics in Nursing and Health Care. 7.a ed. St. Louis, Missouri: ELSEVIER; 2020.
- 21. Gamhewage G, Utunen H, Attias M, George R. Fast-tracking WHO's COVID-19 technical guidance to training for the frontline/Acceleration de la mise a disposition des orientations techniques de l'OMS sur la COVID-19 aux fins de la formation des intervenants de premiere ligne. Weekly Epidemiological Record [Internet]. 2020 [cited on September 23, 2020];(23):257. Available at: https://apps.who.int/iris/handle/10665/3 32277?locale-attribute=es&
- 22. Cruz A, Gutiérrez A, Zaldivar E. Gestión de seguridad psicológica del personal sanitario en situaciones de emergencia por COVID-19 en el contexto hospitalario o de aislamiento. Revista Cubana de Enfermería [Internet]. 2020 Apr [cited on Sep 23, 2020];36(2):N.PAG. Availablefrom:
 - http://www.revenfermeria.sld.cu/index.p hp/enf/article/view/3704
- 23. Araceli Damián. Pobreza y desigualdad en México. La construcción ideológica y fáctica de ciudadanías diversas y desiguales*. El Trimestre Económico [Internet]. 2019 Jan 1 [cited on Sep 23, 2020];86(343):623–66. Available at: http://www.revistasconacyt.unam.mx/tri mestre/index.php/te/article/view/920/10. 20430/ete.v86i343.920
- 24. Secretaría de Planeación y Finanzas del Gobierno del Estado de Tlaxcala (SPF). Desarrollo Social [Internet]. SFP.2020 [updated September 2020; accessed on September 2020]. Available at: https://www.finanzastlax.gob.mx/spf/

- 25. Constitución Política de los Estados Unidos Méxicanos (UNAM) Ordenamiento-Legislación[Internet]. UNAM.2020 [updated May 2020; accessed on September 2020]. Available at:https://www.juridicas.unam.mx/legisla cion/ordenamiento/constitucion-politica-de-los-estados-unidos-mexicanos#10560
- 26. Eguia Casis A. Retos de la auditoría superior de la federación en el año 2018, en el marco del sistema nacional anticorrupción. Revista Ciencia Administrativa [Internet]. 2018 Jul [cited on Sep 23, 2020];(2):128–33. Available at: https://cienciasadmvastyp.uat.edu.mx/in dex.php/ACACIA/article/view/255/284
- 27. Gobierno del Estado de Tlaxcala (TLX), Bienvenida [Internet]. TLX.2020 [updated September 2020; accessed on September 2020]. Available at:https://www.tlaxcala.gob.mx/index.ph p/titular-sp-24292?id=2663

Copyright © 2020 SANUS

Artículo de acceso abierto distribuido bajo Licencia CreativeCommons

