

Health Strategies in Latin America for the Elderly in relation to COVID-19

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RESUMEN

Introducción: Las medidas de confinamientos social adoptadas ante la pandemia de COVID-19, ha implicado el diseño e implementación de programas en salud mitigando los efectos de la misma y reconociendo las implicaciones a nivel de salud mental en el adulto mayor, considerando uno de los grupos poblaciones de mayor vulnerabilidad. **Objetivo:** Caracterizar las estrategias y programas implementadas por países de América Latina en respuesta al control de la pandemia de COVID-19, focalizada en la población adulta mayor. **Métodos:** Se revisaron 45 documentos entre artículos

científicos, decretos y lineamientos emitidos de los ministerios de salud de 13 países de Latino América bajo los criterios de búsqueda, COVID-19, salud y adulto mayor. **Resultados.** Se ejecutaron estrategias de acuerdo a las etapas y niveles de incidencia de la pandemia, los grupos más vulnerables fueron protegidos en el caso del adulto mayor con edades entre 60 o 65 años. Permitió clasificar los países según el objetivo de sus acciones en salud enfocadas en la prevención, la promoción, rehabilitación y la restauración del enfermo. **Discusión:** Se han reorientando los servicios sanitarios y la rigurosidad de los mismo priorizando el aumento de promoción de salud y prevención de enfermedad a través de estrategias de información, educación y comunicación. **Conclusiones:** La emergencia sanitaria decretada por los países, no priorizo estrategias o políticas frente a los aspectos emocionales y mentales, y las afectaciones subsecuentes del aislamiento social que ponen a prueba las estrategias de afrontamiento y los recursos psicológicos en lo que se puede llamar nueva normalidad.

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SUMMARY

Introduction: The quarantine measures adopted because of the COVID-19 pandemic have involved the design and implementation of health programs to mitigate the effects of the pandemic and to understand the mental health implications for the elderly, one of the most vulnerable population groups. **Objective:** To characterize the strategies and programs implemented by Latin American countries due to the COVID-19 pandemic, focused on the older population. **Methods:** Forty-five documents were reviewed including scientific articles, decrees, and guidelines issued by the Ministries of Health of 13 Latin American countries

under the search criteria, COVID 19, health, and older adults. Results: Strategies were implemented according to the stages and levels of incidence of the pandemic, the most vulnerable groups were protected in the case of the elderly aged 60 or 65. It allowed classifying the countries according to the objective of their health actions focused on prevention, promotion, rehabilitation, and recovery of the patient. Discussion: The health services have been reoriented by prioritizing the increase of health promotion and disease prevention through information, education, and communication strategies. Conclusions: The health emergency decreed by the countries did not prioritize strategies or policies against the emotional and mental aspects, and the subsequent affectations of social isolation that test the strategies and psychological resources of the new normality.

Key words: COVID-19, Strategies in health, elderly.

INTRODUCTION

It is important to refer to the policies of the countries for the mental health care and quality of life of the elderly versus COVID 19 in Latin America since it is one of the most vulnerable populations due to the psychological-physical characteristics of this age. This virus infects people of all ages, however, the results indicate that the risks increase from 40 years old and the risk in older people is higher (1).

Huenchuan (2) states that risk factors in the elderly are related to health conditions such as cardiovascular disease, diabetes, and respiratory diseases. As the years pass the body changes and deteriorate, and according to the quality of life of the person, organs of the body age at a different rate; the degree of deterioration occurs according to cellular time (3). During this stage, a decrease in tissue volume and a differentiation in cell growth and volume are observed. There are also functional changes of the nervous system and reduction of nerve impulses, "immune defenses decrease by losing natural defense capacity, so infectious agents can attack more easily" (4). On a psychological level, loneliness as an emotion and the isolation experienced by most people are relevant when facing the virus (5).

WHO¹ estimates that between 2000 and 2050, the proportion of the world's inhabitants over the age of 60 will double from 11 % to 22 %.

In absolute numbers, this age group will rise from 605 million to 2 billion for half a century. Therefore, in the face of the health emergency, Latin American countries designed strategies to mitigate contagion of the virus in this age group.

COVID 19 has created the need in countries, such as Spain, to establish new protocols and procedures according to the characteristics and demands of this type of patients, the challenge for nursing directions towards the pandemic has been to optimize the number of professionals by the number of patients, training professionals for patient care in COVID 19 and developing protocols in collaboration with other disciplines to promote patient health (6).

Another consequence of social isolation in older adults has to do with the additional negative impact on their health; the lack of sun exposure may result in vitamin D deficiency (7). The immune system can be affected by making it more vulnerable to infections and people with Parkinson's disease and dementia may have fallen because they have balance and mobility problems (8). The lack of physical exercise of these people living in overcrowded or small houses can lead them to a sedentary standard of living by increasing their body weight and by decreasing their physical and mental health. In addition, for older people living alone, the risk is imminent as staying 24 hours on the floor or more, since the fall is a significant risk factor for morbidity or death. According to the above, the global health organization must take steps during isolation to improve the quality of life of the elderly (9).

Risk factors detected in a hospital in Peru such as high blood pressure and obesity in older adults infected with COVID 19 can exacerbate symptoms of the disease and some aspects related to mental health present in this population, such as anxiety and depression (10).

In the case of healthy older adults, the burden of mental stress increases from the risk of contagion. This can also decrease in those living alone, but the lack of support networks increase feelings of loneliness due to the loss of bonding with other older adults because of the increase in deaths in this group of people (11).

Due to the above risk factors, restrictions

were implemented with the help of the public force of the various governments in all Latin American countries, then it was necessary to protect the more vulnerable age groups because of their immune system. Therefore, all policies and strategies were created to preserve the life and health of early childhood, adolescence, and the elderly through strategies of restriction, protection, containment, and other measures necessary to prevent the transmission and thereby delay or contain the impact and possible collapse of health services (12).

Therefore, health secretaries or health departments in Latin America, in response to the pandemic decreed by the World Health Organization, designed various “differentiated clinical management protocols, where patients with pre-existing diseases are prioritized, as well as children, adolescence, pregnant women and older adults with COVID-19 in health services networks” (13) to establish and standardize timely clinical management in patients with suspect or confirmed COVID-19. These health-level strategies are aimed at 3 of the principles of the Ottawa letters (14) creating environments that support health, and strengthening community action to help health, reorienting health services.

METHODS

The purpose of systematic review in quantitative research in this article is to use quantification to analyze the behavior of indicators by discovering patterns in public health strategies before COVID-19 and their implications in the older adult in Latin American countries. In this sense, Canto & Silva (15) says that the quantitative refers to a linear conception, also, the problem is quantified by the generation of numerical data or data that can be transformed into usable statistics and this is how the attitudes, opinions, behaviors and other variables defined in frequencies are analyzed.

Consistently, the descriptive nature of this paper aims to characterize health strategies, areas of action, the medical approach (16) present, as well as the risks, conditions of vulnerability, and exposure in the different areas, in which the older adult interrelates. For this article, 45 documents

were reviewed between scientific articles, decrees, and guidelines issued by the ministries of health of 13 Latin American countries under the search criteria COVID 19, health, and older adult.

RESULTS

The coding of the search criteria resulted from the analysis to determine the frequency codes in which Health Promotion stands out within the medical approach (16). Four essential tasks of medicine are defined: health promotion, disease prevention, the recovery of the patient, and rehabilitation. The following is the result obtained:

Table 1
Frequency of documents reviewed by country

Country	Document	Quarter	Year
Mexico	3	II	2020
Colombia	5	I, II	2020
Venezuela	4	II	2020
Chile	6	I, II	2020
Honduras	3	I	2020
Costa Rica	2	I	2020
Bolivia	2	I, II	2020
Nicaragua	3	I	2020
Panama	3	II	2020
Salvador	2	I	2020
Uruguay	1	II	2020
Argentina	4	I, II	2020
Peru	7	I	2020

Source: Own elaboration.

As shown in Table 1, the Latin American countries that were analyzed generated measures through the ministries of health of each country. During the first and second quarters of the year, these measures were adjusted according to the behavior of the pandemic and the most vulnerable population groups. The countries analyzed were grouped according to the criteria of disclosure or issuance of the measures per quarter; there is a group in the first quarter of the year that generated strategies and maintain them, such as Peru, Salvador, Nicaragua, Costa Rica, and

Honduras.

The second group refers to countries that generated the first measure in the first quarter of the year, but which according to the social behavior and epidemiological behavior of the pandemic during the first quarter, adopted new measures, strategies, and health guidelines, such as Colombia, Chile, Bolivia, and Argentina.

Finally, the third group, which reunites countries such as Mexico, Venezuela, Uruguay,

and Panama, generated their response strategies in the second quarter of the year. In this way, a chronological line could be established, in which a pattern of speed and relevance is indicated in what could be considered the preparation phase after the respective alerts in the health systems. It allows determining the response of the countries analyzed in terms of the installed capacity and the preparation of the health system to face the pandemic at the social, economic, and social levels.

Table 2
Frequency of essential health strategies by country

	Health promotion	Disease prevention	Recovery of the patient	Rehabilitation
Mexico	0	38	0	0
Colombia	46	18	0	0
Venezuela	0	10	30	0
Chile	15	30	25	0
Honduras	10	0	20	0
Costa Rica	0	21	0	0
Bolivia	0	20	0	0
Nicaragua	0	30	0	0
Panama	10	10	10	0
Salvador	10	10	0	0
Uruguay	1	0	0	0
Argentina	10	0	34	0
Peru	10	3	20	10

Source: Own elaboration.

Table 2, which presents essential health strategies by country, shows that in Latin America, Colombia generates health promotion followed by Chile and other countries such as Honduras Panama, Salvador, Argentina, and Peru. On the other hand, countries such as Mexico, Chile, and Nicaragua lead in responses that are directed in the prevention of the disease. Argentina, Venezuela, and Chile focus on the recovery of the patient. Only Peru includes documents addressing issues related to rehabilitation.

For the analysis of Table 3, the categories stated by García-Ruiz et al. (17) were taken as a reference, who argues that people should be the

focus of policies and actions in the population approach. In the policies, guidelines issued by the health secretaries seek equal conditions and opportunities in health services in the face of the effects of COVID-19 for the health of each country, being able to recognize frequencies associated with gender identity, children, youth, older adult, and groups of indigenous populations.

Among the documents analyzed, the most frequent population is elderly, with an indicator of 405; followed by gender identity with an indicator of 147; thirdly, children and youth with an indicator of 131, indigenous with 12, being the least common in these documents.

Table 3

Frequency from the Population Approach implemented

Country	Childhood and Youth	Old	Gender	Indigenous
Mexico	12	37	10	0
Colombia	19	45	5	0
Venezuela	14	12	18	0
Chile	25	68	0	0
Honduras	0	35	17	0
Costa Rica	0	28	0	0
Bolivia	10	18	15	0
Nicaragua	0	16	18	12
Panama	0	26	15	0
Salvador	16	14	12	0
Uruguay	0	12	0	0
Argentina	35	45	0	0
Peru	0	49	36	0

Source: Own elaboration.

In regard to the population approach focused on the elderly (18), scores stand out in countries such as Chile with 68, Peru with 49, Colombia and Argentina with 45 each; their frequencies indicate the recognition of age as a universal process and the visible changes that occur not only in the physical aspect but in the biological component. Countries that prioritize the focus on child and youth care during the pandemic are Argentina with a score of 35, Chile with 25, and Colombia with 19, these indices allow to relate that health strategies and actions in these countries provide crucial recognition to the early stages of the life cycle in the human development.

Among the protocols of health care due to COVID-19, the indigenous population and health actions in relation to gender identity are recognized, with the following scores Panama 15, Peru 14, Bolivia 13 and Nicaragua 12, being the countries of Latin America that contemplate

principles of attention towards diversity, generating equal opportunities to the attention, access, use and enjoyment of the services of society.

Table 4, which relates to Ottawa's principles, presents the frequency indicators that Latin American countries adopted due to the pandemic and the potential health-level impacts measured to reorient health services with an index of 257, which are consistent with the second most representative indicator which is creating health policies at a frequency of 172; followed by strengthening community actions with 98 and generating health-supporting environments with 97.

This allows us to observe that policies are not only about health, but they must respond dynamically to the biological, pandemic, and social processes that relate to the disease. For

Table 4
Frequency from the Ottawa principles that were prioritized due to COVID-19

Country Health Policy	Public that Support Health	Environments	Strengthen Community Action	Develop Personal Skills	Reorient Health Services
Mexico	11	28	16	0	0
Colombia	16	18	0	38	12
Venezuela	3	0	0	0	49
Chile	16	0	0	17	37
Honduras	10	15	17	0	16
Costa rica	11	0	18	0	19
Bolivia	15	0	0	19	0
Nicaragua	27	0	0	14	39
Panama	12	16	17	37	0
Salvador	7	0	0	0	29
Uruguay	9	0	19	0	0
Argentina	26	0	0	14	18
Peru	9	20	12	16	38
Totales	172	97	99	155	257

Source: Own elaboration.

this reason, Latin American countries established protocols to respond to COVID-19, where individuals, organizations, companies, and associations of a community have to adopt self-care measures.

Moreover, code frequencies indicate that in certain countries public policies are prioritized in response to COVID-19's subsequent health effects, such as the mental health effects of social isolation. According to the above and taking into account the scope of the principles in response to the behavior of the pandemic in each country, it is, therefore, possible to recognize that, at the level of public policies, Nicaragua stands out with 27, followed by Argentina with 26 and gets far distant from countries such as Venezuela and El Salvador. While developing personal skills as a measure of health promotion, it is observed that the initial strategies were radical, which involved restrictions on accessing the different means and modes in everyday life, which were getting more flexible and gradually these have been decreasing the involvement of less coercive mechanisms where the individual is more responsible for his/her conditions and latent risks in a context of autonomy and self-protection, such as the

case of Colombia with an indicator of 38 and Panama with 37.

With regard to reorienting Health Services in Latin American countries, it is consistently consolidated that health services must reorient their activities to meet health promotion goals to face the pandemic, as in Venezuela, Nicaragua, and Peru where a high frequency of 49.39 and 38 are observed, respectively.

Table 5 shows the analysis of older adult-centered strategies in Latin America, the age to be considered an older adult is 60 years except for countries such as Costa Rica, Colombia, and Venezuela where the age is 65. It should be noted that the vast majority of countries adopt provisions, strategies, and measures to prevent the number of contagions in this age group, as well as in the number of children and adolescents from proliferating exponentially.

The frequency of strategies indicates the tendency of countries to implement communication cutting strategies with a score of 222; information strategies with 218, educational strategies with 147. This may be due to the prioritization of the use of technology platforms

Table 5
Frequency of strategies by country focused on the elderly

Country	Age	Information	Education	Communication
Mexico	60	3	6	1
Colombia	65	28	13	18
Venezuela	65	37	0	15
Chile	60	26	28	27
Honduras	60	13	18	13
Costa rica	65	0	0	28
Bolivia	60	14	0	19
Nicaragua	60	16	14	18
Panama	60	28	0	11
Salvador	60	13	0	16
Uruguay	60	0	16	0
Argentina	60	17	14	29
Peru	60	23	38	27
Total		218	147	222

Source: Own elaboration.

because of the access from the various devices at home. Therefore, countries seek to promote the ability to track, process, and understand basic self-care information and services to which they can access through electronic and mobile channels, seeking to make a decision consistent with social isolation policies; but these kinds of social controls exist thanks to the actions implemented

in the framework of health policies that were grouped into 3: generation of routes of attention, creation of protocols and creation of documents. Concerning this, it is noted that the creation of protocols and care routes in Health (self-care, biosecurity, hygiene, teleconsultation) were prioritized in Latin countries with an indicator of 7; Peru with 6 and Mexico 4.

Table 6
Frequency of components and actions prioritized by country in response to COVID-19

Country	Actions				Component		
	Attention	Protocol	Documental	Physical	Social	Emotional	Mental
Mexico	4	4	4	2	9	1	1
Colombia	2	3	3	3	0	0	2
Venezuela	4	3	4	2	2	1	0
Chile	3	3	2	4	1	1	1
Honduras	0	2	2	2	1	0	1
Costa rica	1	2	3	1	2	0	0
Bolivia	1	2	2	6	7	4	4
Nicaragua	3	3	3	2	1	1	0
Panama	1	2	2	2	1	0	0
Salvador	2	2	2	2	2	0	0
Uruguay	0	0	1	1	1	0	0
Argentina	8	7	2	31	11	0	0
Peru	3	6	2	2	2	1	2
Total	32	39	32	60	40	9	11

Source: Own elaboration.

Table 6 shows the analysis of components that were prioritized at the physical, social, emotional, and mental level, establishing frequencies of the physical implications with a score of 60 and their biological consequences on health, followed by social aspects with a score of 40, which respond to the measures established in the protocols, decrees, and curfews.

DISCUSSION

In Latin American, the public health strategies implemented consider two major purposes: to maintain health guarantees and to seek the recovery and rehabilitation of the patient. The first aims to promote health to efficiently prevent the number of COVID-19 contagions and achieve control from an education and self-care approach. The second refers to situations where the strategies did not achieve their purpose and where the care was activated by contagion or suspicion of it. The idea is to prevent the development of increased mortality, since the behavior of the virus has greater complications if there are other pathologies such as diabetes, chronic kidney failure, asthma, hypertension, obesity, tuberculosis, liver disease, according to Li et al. (19) who mention that patients with previous metabolic and cardiovascular diseases may face an increased risk of developing severe condition and comorbidities, affecting the prognosis of COVID 19 (20).

The analysis of the documents allows us to visualize the set of actions, considered as responses of the state to face socially problematic situations. Approaches allow us to observe potentials or limitations of the territory that at the same time give characteristics to the different population groups, transforming and allowing them to generate living conditions to the processes of the integral development of people and communities (21). Similarly, the population provides characteristics on the territories and transforms them, making it necessary to become more aware of self-care by overcoming the physical burden, in response to the deterioration of many physical and mental processes that occur in the adult, the increased incidence and predisposition to the development of diseases that affect the quality of life not only of the individual

but of his/her support network or caregivers. As referred by Bernuy Paz (22) most older adults do not receive organized social support.

In Latin American, Ottawa's principle (23,24) is a reference in terms of the actions that countries should be organized in relation to health, since it points out 5 principles: establishing a healthy public policy, creating environments that support health, strengthening community action for health, developing personal skills and reorienting health services. Under this view, an analysis of the principles applied by Latin American countries in response to COVID-19 and the provision of health services under social confinement measures is established based on Garcia's contributions (25), which involve strengthening social governance systems that guarantee their population's universal access to health services, protection for the most vulnerable groups, as well as health promotion and education.

With regard to Ottawa's principles, the results show an associated pattern in the reorientation of health services in some Latin American countries and others have a tendency to focus on personal skills and the ability of individuals to influence the factors that determine health; it also includes intervention on the environment to reinforce those factors that sustain healthy lifestyles to modify those factors that prevent them from being implemented (26). González (27) also identifies that policies in Latin America are focused on the control of the pandemic and should be updated for the next stages.

The reorientation of health services is important because it results in necessary changes that must be incorporated into the management of health services in which three critical components are identified to reorient actions towards a greater hierarchy of health promotion: nomination and registration of the population in charge, incentives, coordination of services and social sectors (28). The adoption of these measures invites to overcome the attitudinal barriers focused on prejudices or beliefs rooted in the professional practice community that result in a fragmented and reactive practice that has intensified due to the ineffective response of economic issues to address health situations and which translate into possible obstacles to action.

Prioritized components, in the face of measures

to prevent transmission when the number of cases is very high, are: applying drastic measures of quarantining at home; strengthening health care capacity in health systems, and increasing transmission prevention capacity in health services (29).

CONCLUSIONS

In accordance with the documents analyzed by the different Ministries of Health, they implemented medical assessment measures with trained and protected staff in the event of interaction with individuals with suspected or confirmed COVID-19, or who have been exposed to it. The measure requires mandatory quarantine in accordance with international health rules. These measures, while responding to suspected by the manifestation of visible signs and symptoms, are limited due to virus behavior for asymptomatic cases that can exponentially proliferate contagion.

However, in the face of the declared health emergency and related guidelines for social isolation measures, additional surveillance and control actions should be implemented, not only for the early detection of suspected cases but to address a population with differences in risk factors and protective factors, as well as cultural factors in the life cycle of individuals, when the increase in confirmed COVID-19 cases occurred.

Regarding health information, education, and communication strategies, there is a tendency to focus on personal skills and the ability of individuals to influence the factors that determine health, which also includes intervention on the environment to reinforce those factors that sustain healthy lifestyles to modify those factors that prevent them from being implemented (29).

It is evident that among the documents analyzed at the Latin American level, there is a less marked tendency to promote health actions in relation to gender identity and the focus on the indigenous population, this may be due to political and regulatory gaps in the face of covering these populations considered as minorities.

It is observed that Mexico is the country with the highest frequency indicators in relation to the

creation of health-supporting environments such as lines of care, mental health risk questionnaires, violence care, disability, and psychiatric counseling for adults, which can be seen as a concern for the creation of recognized supportive environments, as well as the conduction of strategies or supportive measures that seek to facilitate the choice and understanding of individual and socially healthy behaviors. In this regard, actions are focused on the knowledge of the population, and its effects on the well-being and quality of life.

The main feature in countries such as Colombia and Mexico to face COVID-19 is the creation of health-supporting environments to reorient health services; for this reason, they established new practices in the administration and organization of health services. Thus, the role and responsibility of professionals in this area were resignified.

In response to social manifestations that can affect the mental health of the elderly in times of social isolation, it is considered to strengthen the action from self-care to health, develop personal and interpersonal, cognitive, and physical skills. In the same way, the design and creation of specialized telephone service pages and services were considered.

It is important to consider that the effect of any of the strategies for promoting healthy habits and living conditions in the face of any factor that may affect health, could have a greater impact on individuals as their resources are contextualized (cultural factors), cross-cutting (social and family roles) and respond to cognitive and mature characteristics (life cycle) that consolidate environments and support networks (family, school, work).

The measures that responded to the principle of opportunity, effectiveness, and efficiency of public administration systems in each country allowed to develop actions and measures at different levels, this thanks to the reorganization of processes that involved the decreeing State of National Emergency that seeks Civil Protection, Disaster Prevention, and Mitigation, to ensure the health and well-being of the entire population considering their risk factors and social vulnerability through the adoption of measures of health care, education, economy, transportation,

communication, among others.

However, the analysis shows a tendency by countries that indicate no strategies or policies aimed at emotional and mental aspects were prioritized in the face of the health emergency decreed, and the subsequent impacts of social isolation and the changes associated with the loss of job stability, loss of loved ones that test confrontation strategies and psychological resources.

Although efforts have been made to ensure health services comprehensively, there is no evidence of concrete and clear actions from a vast majority of countries such as Colombia, Venezuela, Honduras, and El Salvador, in topics such as emotional support networks to relatives of people who died because of COVID-19, patients and family members in quarantine or recovery, support for families of health personnel and possible homelessness conditions for older adults who do not have a support network. These aspects should be considered within the new strategies that indicate the beginning of gradual activities in what could be called the new normality.

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