

<https://doi.org/10.23913/ride.v15i30.2311>

Essays

Desafíos de Salud Pública en México y el Rol Educativo de la Enfermería Comunitaria

Public Health Challenges in Mexico and the Educational Role of Community Nursing

Desafios da saúde pública no México e o papel educativo da enfermagem comunitária

Montserrat Mariscal-Delgadillo

Universidad de Guadalajara, Centro Universitario de Ciencias de la Salud, Departamento de Enfermería Clínica Aplicada, México

montserrat.mariscalde@academicos.udg.mx

<https://orcid.org/0000-0002-0794-0930>

María Guadalupe Loza-Rojas

Universidad de Guadalajara, Centro Universitario de Ciencias de la Salud, Departamento de Enfermería Clínica Aplicada, México

guadalupe.loza@academicos.udg.mx

<https://orcid.org/0009-0002-7501-2199>

Resumen

Este ensayo analiza la pertinencia y necesidad del programa de Licenciatura en Enfermería Familiar y Comunitaria (LECO) en México, implementado en 2020 por la Universidad de la Salud, como respuesta a las demandas del sistema de salud nacional, caracterizado por desigualdades estructurales y escasez de personal especializado. Mediante una revisión documental y teórica de la evolución de la enfermería comunitaria, tanto a nivel global como nacional, el ensayo destaca el papel transformador de esta disciplina en la promoción del bienestar colectivo. Se identifican brechas clave en la cobertura de salud y se evalúa cómo la LECO contribuye a reducirlas, fortaleciendo las acciones preventivas y la atención sanitaria en poblaciones vulnerables. Se concluye que la formación de licenciados en enfermería Familiar y Comunitaria no solo responde a necesidades del sistema de salud, sino que



también contribuye a una mayor equidad sanitaria, alineándose con políticas públicas de salud y compromisos internacionales hacia la cobertura universal.

Palabras clave: atención primaria, desigualdad en salud, Enfermería en salud pública, formación de enfermería, promoción de la salud, transformación social.

Abstract

This essay analyzes the relevance and necessity of the Bachelor's of Science in Family and Community Nursing (LECO) in Mexico, implemented in 2020 by the Universidad de la Salud, as a response to the demands of the national healthcare system, characterized by structural inequalities and a shortage of specialized personnel. Through a theoretical and literature review of the evolution of community nursing, both globally and nationally, the essay highlights the key role of this discipline in promoting collective well-being. Critical gaps in healthcare coverage are identified, and the essay evaluates how LECO contributes to closing these gaps by strengthening preventivemeasures and healthcare provision in vulnerable populations. It concludes that the training of Family and Community Nursing graduates not only addresses the needs of the healthcare system but also contributes to greater health equity, aligning with public health policies and international commitments to achieve universal health coverage.

Keywords: primary care, health inequality, public health nursing, nursing education, health promotion, social transformation.

Resumo

Este ensaio analisa a relevância e a necessidade do programa de Bacharelado em Enfermagem de Família e Comunidade (LECO) no México, implementado em 2020 pela Universidad de la Salud, como resposta às demandas do sistema nacional de saúde, caracterizado por desigualdades estruturais e escassez de pessoal especializado. Por meio de uma revisão documental e teórica da evolução da enfermagem comunitária, tanto global quanto nacionalmente, o ensaio destaca o papel transformador desta disciplina na promoção do bem-estar coletivo. São identificadas as principais lacunas na cobertura de saúde e avaliada a forma como o LECO contribui para reduzi-las, fortalecendo as ações preventivas e a assistência à saúde em populações vulneráveis. Conclui-se que a formação de licenciados em Enfermagem de Família e Comunidade não só responde às necessidades do sistema de

saúde, como também contribui para uma maior equidade em saúde, alinhando-se com as políticas de saúde pública e os compromissos internacionais para uma cobertura universal.

Palavras-chave: atenção primária, desigualdade em saúde, enfermagem em saúde pública, educação em enfermagem, promoção da saúde, transformação social.

Reception Date: August 2024

Acceptance Date: January 2025

Introduction

Community nursing has played a central role in primary health care, acting as a key agent in disease prevention and promoting well-being in vulnerable communities. Since its inception, this discipline has evolved from care-based approaches to models focused on health promotion and prevention, generating a positive impact on public health systems globally (Rosen, 1958). In the case of Mexico, community nursing has faced profound challenges, including a shortage of qualified personnel and persistent inequalities in access to health services. These obstacles have highlighted the need for specialization and professionalization in the area. In response, the Mexican government implemented the Bachelor's Degree program in Family and Community Nursing, offered by the Universidad de la Salud, created in 2020 under the Secretariat of Education, Science, Technology and Innovation of Mexico City (Universidad de la Salud, 2020). This university seeks to train professionals capable of addressing the complex public health needs of the country, focusing its approach on prevention and community care, through an educational model that integrates the sociocultural particularities of the Mexican context (Universidad de la Salud, 2020) .

The objective of this essay is to analyze the relevance and need for the Bachelor's Degree in Family and Community Nursing, positioning its importance within the contemporary challenges facing the Mexican health system. Through a historical and theoretical review of community nursing, both globally and in the national context, the benefits of having highly trained personnel in community care will be examined. In addition, the main barriers that have limited the development of this area of nursing in Mexico will be evaluated, such as the lack of resources and specialized training, and how the new degree aims to close these gaps. Thus, this essay examines how training in community nursing can be a key tool to face current challenges in public health and move towards a more equitable and accessible system (Doubova et al., 2018; Nkowane et al., 2016).

This analysis will also explore how the implementation of the Health University program responds to the demands of a health system facing the prevalence of chronic

diseases, epidemics, and socioeconomic disparities. The importance of training nurses not only with clinical competencies, but also with skills in community management, health promotion, and prevention will be analyzed. In this way, the urgency of adopting holistic and specialized approaches in the training of community nurses will be argued, in order to improve the quality of life and reduce inequalities in access to health in the country (Phillips, 2019).

1.1.1 International Community Nursing: From Assistance to Socio-Health Empowerment

Community nursing has been on a path of profound transformation since its inception, forging itself not only as a response to health crises, but as a living testimony to the fight for equity in health care. In accordance with the above, Rosen (1958) points out that, in the 19th century, under the shadow of the Industrial Revolution, social tensions and structural inequalities demanded a vision that transcended temporary responses and aimed at the root of public health problems. It was at this crossroads that the figure of Florence Nightingale emerged, not as a simple cog in the medical system, but as a disruptive force capable of reconfiguring the health paradigm (Nightingale, 2002). Nightingale, observing the suffering and marginalization that dominated hospitals and the poorest communities, understood that true healing could not be limited to clinical intervention (Palmer, 1983 ; Rosen, 1958; Thallon, 1979). For her, health should be the result of an integral process, in which prevention, education and community care were the fundamental pillars of a dignified life (Rosen, 1958).

Nightingale not only revolutionised hospital care in the context of the Crimean War, where her epidemiological and sanitary innovations reduced mortality in military hospitals (Cohen, 1984 ; Palmer, 1983), but she established an essential critique of the individual-centred approach of medicine. Her gaze extended beyond sick bodies, penetrating the very fabric of communities, into the living conditions that perpetuated suffering and illness (Nightingale, 2002). For her, health care could not be separated from social justice; it had to be an emancipatory practice that allowed people and communities to take control of their own living conditions (Rosen, 1958). This critical and holistic thinking continues to resonate with particular urgency in contexts such as Mexico, where gaps in prevention and health

promotion continue to trap the most vulnerable in a cycle of exclusion (Frenk, Gómez and Knaul, 2009).

For Bernabeu and Gascón (1999), the expansion of this vision to North America, and its subsequent institutionalization, shows how community nursing was more than a simple response to emerging crises; it was the consolidation of an approach that broke with traditional medical models. In 1887, with the creation of *Queen Victoria's Jubilee Institute* *The establishment of the National Health Service for Nurses* in London, which trained the first visiting nurses, was a decisive step towards the professionalisation of this practice, which transcended the boundaries of hospitals and entered the homes of the most disadvantaged (Bernabeu and Gascón, 1999). This institutionalisation was not an end in itself, but rather an act of resistance to social fragmentation, a struggle to restore dignity to those who had been left aside. In parallel, the founding of one of the first schools of public health by William Rathbone in 1862 consolidated the idea that health was not simply the absence of illness, but a social construction that should be protected and promoted in communities, integrating the curative and the preventive (Gómez and Domingo, 1999).

In North America, this process was replicated and took on new forms, adapting to the growing social demands of the time. The first visiting nurses, hired in Boston in 1877, and the creation of the first school for visiting nurses in New York in 1902, marked the beginning of an irreversible change in the way community care was understood (Bernabeu & Gascón, 1999). These advances not only professionalized community nursing, but also established a new way of understanding collective well-being, in which the needs of the most disadvantaged could no longer be ignored. In each of these initiatives, one can perceive a search, not for immediate solutions, but for a structural change that allows for the construction of more just societies, where access to health is not a privilege, but a fundamental right (Braveman & Gruskin , 2003).

These historical antecedents draw a clear line towards the relevance of programs such as the Bachelor's Degree in Family and Community Nursing in Mexico, offered by the University of Health. This program is not only a response to the current deficiencies of the Mexican health system, but an echo of the principles that Nightingale (2002) and her contemporaries raised: the need for an approach that recognizes the interrelationship between the individual and the community, between health and social justice. The training of professionals capable of facing structural inequalities and chronic diseases from a preventive

and community perspective is, ultimately, a commitment to a change that transcends the merely health-related (Artaza et al., 2020).

In accordance with the above, the theoretical-scientific evolution of community nursing, from its roots in 19th-century Europe to its global expansion, has shown that true change in health systems is only possible when care is conceived as an integral process, where the care of communities and the prevention of diseases occupy a central place (López, Carracedo and Alcaraz, 2022; Rodriguez, 2017). The creation of programs such as that of the University of Health in Mexico (2020), aligned with these perspectives, not only responds to a pressing need for trained personnel, but also opens the door to the structural transformation of the Mexican health system. The evolution of community nursing shows that its professionalization not only improves individual quality of life, but, by strengthening communities, promotes a more equitable and fair health system (Alemán et al., 2011 ; Doubova et al., 2018).

1.1.2 Historical Transformation of Community Nursing in Mexico: From Tradition to Modern Specialization

Health care in Mexico, according to Torres et al. (2014), has roots that go deep into pre-Columbian history, where the understanding of health transcended the individual, integrating itself into the social and spiritual fabric of community life. In civilizations such as the Aztec, health was not a private good or a privilege, but a collective duty. From childhood, preventive practices were part of education, positioning these societies as pioneers in the adoption of a preventive approach to public health (Torres et al., 2014). For Carrasco (1981) and Venegas (1968), healers not only healed bodies, but were also custodians of social balance, acting in community rituals and family ceremonies linked to the cycle of life. This preventive approach, deeply linked to social and spiritual dynamics, reflected a worldview in which illness was not an isolated phenomenon, but a break with the natural and community order.

However, with the arrival of the Spanish conquest, this holistic conception of health was subjected to the fragmentary logic of colonialism. Indigenous knowledge was subjugated by a system that, despite its greater technological development, did not have the same understanding of nature or dedication to public health (Gómez and Frenk, 2020). The medicine introduced by the colonizers was not oriented towards the common good; rather, it responded to the interests of the colonial elites, satisfying the needs of groups with political

and economic power and relegating the indigenous majority to the periphery of care (Venegas, 1968). Health, from being a shared right, became a controlled privilege.

According to Cárdenas (1976), the smallpox epidemic of 1571, which devastated the indigenous population, marked a turning point. The response to such a catastrophe did not come from a central authority, but from the organized action of religious orders under the mandate of King Charles V. The Franciscans, Jesuits, Augustinians and Dominicans became agents of health care that attempted to respond to the emergency, although without questioning the system of exclusion that had exacerbated it (Cárdenas, 1976). From this chaos emerged the need for a more formal structure for community care in Mexico, which found its first impetus in the arrival of Doña Isabel Cendala in 1798, who promoted smallpox vaccination. In this context, indigenous women and men began to actively involve themselves in the practice of community nursing, not as mere recipients of care, but as actors in the protection of their community (Cárdenas, 1976).

In the late 19th and early 20th centuries, nursing in Mexico, limited to the spheres of childbirth and the postpartum period, began to glimpse its transformative potential. The intervention of sanitary nurses, by introducing hygienic measures in maternal and child care, not only reduced maternal mortality but also subverted the idea of nursing as a merely auxiliary task, giving it a leading role in improving public health conditions (Alemán et al., 2011). In this process, the founding of the School of Public Health of Mexico (ESPM) in 1922 represented a crucial moment: it was not only the creation of an academic institution, but the formal recognition that health care should be in the hands of professionals trained to face the country's health complexities in a context of social change after the Mexican Revolution (Instituto Nacional de Salud Pública [INSP], 2022).

The training of health nurses represented an act of resistance against structural inequalities. In 1925, the organization of specialized courses in areas such as hygiene, sanitation, and communicable diseases sought to train personnel who could penetrate into the very heart of communities, where poverty and lack of resources exacerbated health problems (Department of Public Health [DSP], 1929). Visiting nurses, trained during the government of Lázaro Cárdenas (1934-1940), became agents of social change. They not only attended to health emergencies, but also participated in the construction of a public health system oriented toward greater equity. Their training was not limited to technique, but included aspects such as child care, hygiene, and social work, recognizing that health care required a multidimensional approach (DSP, 1936).

The creation of the nursing section within the Federal District Department in 1943 consolidated these efforts, unifying the theoretical and practical teachings that until then had been dispersed. This process continued until the six-year term of Adolfo López Mateos (1958-1964), when the School of Public Health adopted a more epidemiological and health systems-oriented approach, granting nurses a central role in health administration and disease prevention (Secretaría de Salud y Asistencia Social [SSA], 1959).

The Alma Ata Declaration of 1978 reaffirmed the transformative potential of community nursing, recognizing it as a key element in achieving universal health coverage (World Health Organization [WHO], 1978). This recognition prompted a restructuring of nursing training programs in Mexico, promoting specialization and strengthening of skills in community care. However, despite these advances, the Pan American Health Organization (PAHO) report of 1997 revealed profound deficiencies in nursing human resource training programs. These deficiencies, which included insufficient preparation to address the challenges of primary care and a deterioration in working conditions, showed that the system continued to operate under a logic of fragmentation and inequality (PAHO, 1997).

According to Alemán et al. (2011), the main challenge lies in replacing the unqualified personnel that still occupy a large part of the nursing services in public health with trained professionals who can face the increasingly complex problems of the country. Community nursing, understood in its broadest form, is not only a technical practice, but a means to empower communities and give them back control over their health. Counseling on chronic diseases, monitoring patients with cardiovascular diseases and carrying out preventive diagnoses are just some of the activities that require the presence of specialized nurses, capable of thinking beyond immediate intervention and understanding health as a process deeply linked to living conditions and collective well-being (Alemán et al. 2011).

The historical and scientific review of nursing in Mexico shows a process of constant evolution, a continuous effort to respond to social and health demands that, despite the advances, still faces structural limitations. The implementation of a bachelor's degree program in community nursing is not simply a necessity of the present, but an opportunity to redirect the future of public health in Mexico towards greater justice and equity (Nigenda, Wirtz, González and Reich et al. 2015). In this sense, the training of professionals specialized in community care not only responds to the demands of the system, but also stands as an act of vindication and emancipation of those who have been historically marginalized from the benefits of health progress (Marmot, 2005).

1.1.3 Theoretical Foundations of Community Nursing: Paradigms for Comprehensive and Contextual Care

As discussed up to this point, community nursing, in its constant evolution, has been shaped by a convergence of theories and paradigms that emerge as a response to changing social, cultural and health needs. This trajectory is not only the result of a linear progression, but a reflection of the complex interaction between the historical context and the imperative to care for people from a comprehensive perspective, recognizing them not only as biological beings, but as entities immersed in networks of relationships that influence their health (Baum, & Fisher, 2014). The evolution of this field places at the center the idea of a holistic approach, where care is not a simple technical act, but a deeply human and social process (Kerouac , 1996). From this perspective, community nursing has adopted six key currents: needs, interaction, desired effects, health promotion, the unitary human being and *caring* (Kerouac , 1996), each providing a different, but complementary, nuance in the way in which care is understood and practiced in communities.

Among the various theories that underpin community nursing, names resonate whose vision has profoundly shaped practice. Florence Nightingale's *Environment Model* (2002), for example, remains a fundamental pillar, not only in its time, but also in the present. Nightingale, without explicitly naming community nursing, articulated in her work *Notes on Nursing: Nursing : What Item is , and what Item es not* a radical vision for its time: nursing as an art and science capable of improving health through careful management of the environment, where education and prevention play a central role. Its approach was not limited to curing the sick, but to generating an environment that allowed people to develop their maximum potential to live in a healthy way (Nightingale, 2002). This legacy, although rooted in a specific historical context, is a call to transcend immediate interventions and to think of well-being as a right that must be actively cultivated and sustained.

Nightingale did not only see the individual in terms of his or her physical frailty, but understood health as an integral capacity to use one's faculties to the maximum (Nightingale, 2002). In her view, the environment was not simply an external circumstance, but a determining factor of health, whose adequate management could not only prevent illness, but also facilitate recovery. This approach, which linked health and environment, is especially relevant in the current context, where social and environmental inequalities continue to define disparities in health outcomes, particularly among the most vulnerable communities (Nightingale, 2002).

Nightingale's thinking is intertwined with other paradigms that have broadened and enriched the understanding of community nursing. Madeleine Leininger, with her *Theory of Cultural Diversity and Universality of Care*, introduced a dimension that Nightingale had only outlined: the importance of cultural context. For Leininger (1999), care cannot be effective if it is not culturally congruent. The beliefs, values, and practices of a community determine not only how health is perceived, but also how the care intervention is accepted or rejected (Leininger, 1999; 2002). Transcultural nursing, according to Leininger (1999;2002), forces nurses to adopt a comparative and holistic vision, where professional knowledge is integrated with local cultural knowledge to generate truly meaningful and effective care. This approach not only extends Nightingale's concept of environment, but also challenges us to recognize that community care is not a neutral act; It is imbued with cultural meanings that must be respected and understood.

Along these lines, the *Health Promotion Model* of Nola Pender, Maurdaugh & Parsons (2015) adds a layer of complexity by highlighting self-perception and behavioural factors as key determinants of health. Pender argues that a person's perception of themselves and their environment directly influences their ability to adopt healthy behaviours. Perceived self-efficacy, understood as confidence in the ability to control and improve one's own health, emerges as an essential component in health promotion, particularly in the community context (Aristizábal et al., 2011). The vision of Pender et al. (2015) highlights the importance of empowering people not only in terms of knowledge, but also in their ability to act, suggesting that the transformation of behaviours towards healthy practices depends largely on the construction of a positive and empowering perception.

Thus, the theories of Nightingale, Leininger and Pender not only offer a solid foundation for the practice of community nursing, but also invite us to rethink the act of caring from a perspective that is both inclusive and emancipatory. Nightingale (2002) reminds us that the environment, both physical and social, defines the possibilities for health; Leininger demands that we respect and adapt our interventions to cultural contexts, while Pender et al. (2015) urge us to empower individuals to take control of their health through self-efficacy. These paradigms, far from being static, dialogue with each other and reflect the need for a comprehensive approach that embraces the diversity and complexity of communities.

1.1.4 Demographics and Socioeconomic Development: Key Factors in the Transformation of Community Nursing

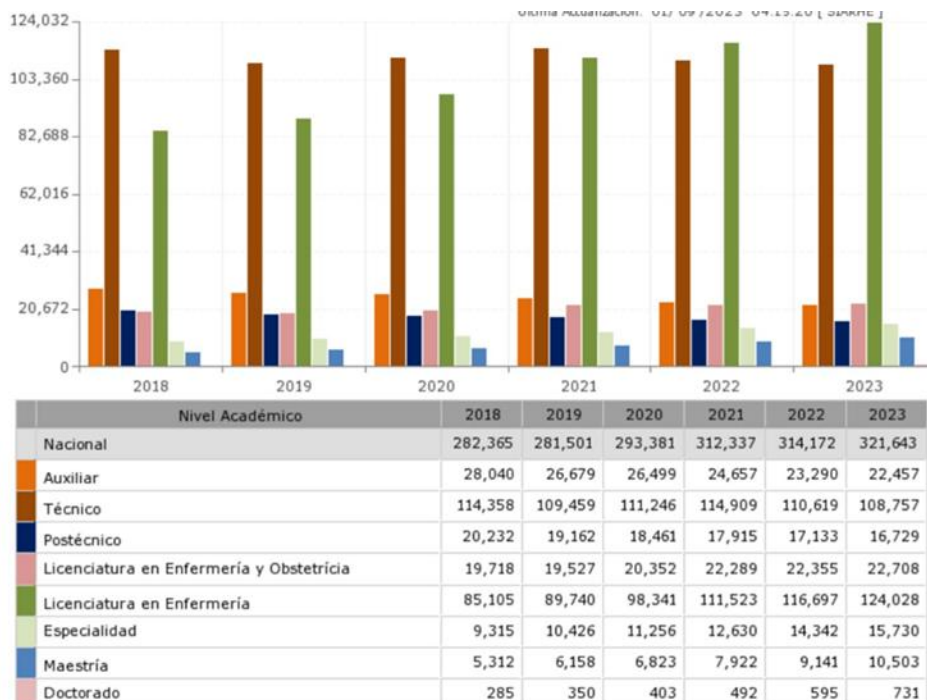
The current health landscape in Mexico reflects deep inequalities in the distribution of resources and specialized personnel, which exacerbates deficiencies in health care, especially in the most vulnerable areas (Frenk et al., 2009). Given this reality, the Bachelor's Degree in Community Nursing (LECO) program is emerging as a strategic and necessary response, designed to train professionals who not only master technical skills, but also understand the complex social, anthropological, and humanistic interactions that underlie health care (Universidad de la Salud, 2020). This comprehensive approach is not merely a theoretical addition, but an urgent need in a country where health structures require a transformation that goes beyond the purely technical (International Council of Nurses [ICN], 2018 ; Universidad de la Salud, 2020). LECO not only responds to the demand for personnel, but also focuses on training professionals with a holistic vision, capable of leading and managing health services in an effective manner and sensitive to the social realities of Mexico.

The shortage of qualified nursing personnel, as evidenced by international and national organizations, is alarming. The World Health Organization (2016) and Fajardo, Carrillo, and Neri (2015) have repeatedly pointed out that simply training more nurses is not enough; an approach that prioritizes quality and specialization in areas such as community health is necessary. Recent data from the National Institute of Statistics and Geography (INEGI , 2023) reveal that in Mexico there are approximately 3.5 nursing workers per thousand inhabitants, an insufficient figure to cover basic health needs. This number is even more worrying if we consider that much of the staff is concentrated in the tertiary sector, working in hospitals and clinics, while primary and community care, essential for health prevention and promotion, remains neglected (Social Service Administration System for Health [SIARHE], 2024).

Furthermore, a significant fraction of nursing workers work in the informal sector, adding another layer of complexity to the challenge of professionalizing and specializing nursing in community settings. This informal sector, although invisible in many official statistics, has a considerable impact on the provision of health services, but also faces significant barriers to accessing advanced training and professional recognition (INEGI, 2023). The *Nursing Human Resources Administration System* (SIARHE, 2024) confirms this scenario, evidencing slow growth in academic specialization, a critical factor that limits the

capacity of the health system to adequately respond to the country's growing and diversified demands (Figure 1).

Figure 1. Level of training of nursing staff in Mexico



*Note: The graph illustrates the academic level of nursing staff in Mexico in 2024. Data extracted from SIARHE by the Directorate of Quality and Health Education. Government of Mexico.

In this context, LECO is not only a training response, but an essential vehicle to overcome the structural gaps in the health system. Focused on specialization and the development of advanced skills, LECO prepares its graduates to assume critical roles in the care of pediatric patients and in community care in general, where deep reasoning and critical analysis become indispensable tools (Universidad de la Salud, 2020). This multidimensional training seeks to promote constant improvement in care standards, not only at a technical level, but also in terms of cultural sensitivity and understanding of the social realities of the communities they serve (Leininger, 2002).

The challenge of strengthening nursing in Mexico, both in terms of quantity and quality, is unavoidable. It is not just about training more professionals, but about providing them with a broad and deep understanding of the context in which they operate, so that they can respond effectively to the changing needs of the country (Nigenda et al. 2015). The

LECO, by integrating rigorous technical training with a focus on the social and cultural factors that impact health, emerges as a necessary response to transform the health system into a more equitable and efficient entity, capable of addressing not only diseases, but also the conditions that perpetuate them (Frenk, 2014 ; Universidad de la Salud, 2020).

Conclusion

In conclusion, the Bachelor's Degree in Family and Community Nursing (LECO) program, proposed by the Mexican government through the University of Health (2020), represents a necessary and strategic response to the growing needs of the health system. The current context, marked by deep inequalities in access to health services, demands training that goes beyond the technical (Nigenda et al. 2015; Phillips, 2019). Community nursing, as demonstrated in this essay, must be understood as a transformative discipline that articulates a holistic approach, integrating prevention, personalized care, and sensitivity to sociocultural factors (McMurray, 2011 ; Doubova et al., 2018). The LECO not only seeks to fill the lack of personnel, but also to reconfigure the role of nursing in the social fabric, which is crucial to address chronic diseases, structural inequalities and historical deficiencies in care for the most vulnerable communities (ICN, 2018; WHO, 2016; Universidad de la Salud, 2020).

This program, in its comprehensive approach, aligns with international commitments and local demands to ensure universal health coverage. As argued throughout the text, the theoretical and practical foundations of community nursing, from Florence Nightingale to the contemporary approaches of Leininger and Pender, provide a framework that calls for a reevaluation of nursing as a tool for social change (Nightingale, 2002; Leininger, 1999, 2002; Pender et al., 2005). The training of professionals who not only master technical skills, but are also trained to understand and manage the social and cultural conditions that determine health, is essential to transform a system that has long marginalized the most disadvantaged populations (World Health Organization, 2022) . In this sense, the LECO is presented as a crucial initiative that will contribute to closing inequality gaps in the Mexican health system, aligning with the sustainable development goals in terms of health and well-being (Alemán et al., 2011; United Nations Organization [UN], 2022) .

Finally, it is important to recognize that the implementation of this program is more than just an educational reform; it is an act of social justice that aims to build a more equitable health system (Pan American Health Organization [PAHO], 2021) . INEGI figures (2023) show that the nursing deficit remains alarming, especially in rural and marginalized areas,



reinforcing the need for graduates with solid, specialized training in community care. LECO, with its holistic and preventive approach, responds to this need in a clear way, providing a way for community nursing to not only improve the quality of life of individuals, but also contribute to the restructuring of the health system, strengthening its capacity to address the complex realities of a diverse country. This is the path to more just and accessible public health (Universidad de la Salud, 2020; SIARHE, 2024).

References

- Alemán, M., Salcedo, R., y Ortega, D. (2011). La formación de enfermeras en la Escuela de Salud Pública de México, 1922-2009: Evolución histórica y desarrollo académico de la enfermería en salud pública en México. *UMAM*, 33(133),174-196. <https://www.scielo.org.mx/pdf/peredu/v33n133/v33n133a11.pdf>
- Aristizábal, G., Blanco, D., Sánchez, A., y Ostiguín, R. (2011). El modelo de promoción de la salud de Nola Pender: Una reflexión en torno a su comprensión. *Enfermería Universitaria ENEO-UNAM*, 8(4), 16-23. <https://www.redalyc.org/articulo.oa?id=358741840003>
- Artaza, O., Santacruz, J., Girard, J., Alvarez, D., Barría, S., Tetelboin, C., y Tomasina, F. (2020). Formación de recursos humanos para la salud universal: Acciones estratégicas desde las instituciones académicas. *Rev Panam de Salud Pública*, 44(83), 1-5. <https://doi.org/10.26633/RPSP.2020.83>
- Baum, F., & Fisher, M. (2014). Why behavioural health promotion endures despite its failure to reduce health inequities. *Sociology of Health and Illness*, 36(2), 213–225. <https://doi.org/10.1111/1467-9566.12112>
- Bernabeu, J., & Gacón, E. (1999). *Historia de la enfermería de la salud pública en España (1860-1977)*. Universidad de Alicante. <https://core.ac.uk/download/pdf/16367143.pdf>
- Braveman, P., & Gruskin, S. (2003). Defining equity in health. *Journal of epidemiology and community health*, 57(4), 254–258. <https://doi.org/10.1136/jech.57.4.254>
- Cárdenas, E. (1976). *Historia de la medicina en la Ciudad de México* (2ª ed., pp. 49-112). Méndez Editores.
- Carrasco, P. (1981). La sociedad mexicana antes de la conquista. En *Historia general de México* (1ra ed., pp. 165-288). El Colegio de México.

- https://www.google.com.mx/books/edition/Estudios_sobre_la_historia_general_de_Me/J1Ni9Mlud74C?hl=es
- Cohen, I. (1984). Florence Nightingale. *Scientific American*, 250(3), 128-137. <https://doi.org/10.1038/scientificamerican0384-128>
- Departamento de Salubridad Pública. (1929). *Informe de los trabajos ejecutados en el primer trimestre de 1929, en la Escuela de Salubridad. Boletín del Departamento de Salubridad Pública*, 106–114. https://scielo.org.mx/scielo.php?script=sci_nlinks&ref=5504706&pid=S0185-2698201100030001100003&lng=es
- Departamento de Salubridad Pública. (1936). Escuela de Salubridad: cursos desarrollados. *En Memoria de las labores realizadas durante el periodo comprendido entre el 1° de septiembre de 1934 y el 15 de julio de 1935 por el Departamento de Salubridad Pública*. DGTI. https://dgti.salud.gob.mx/cdi/doctos/Biblioteca_Historica.xlsx
- Dobova, S., García, S., Pérez, R., Sarabia, O., Pacheco, P., Leslie, H., Santamaría, C., Torres, L., & Infante, C. (2018). Barriers and opportunities to improve the foundations for high-quality healthcare in the Mexican health system. *Health Policy and Planning*, 33(10), 1073–1082. <https://doi.org/10.1093/heapol/czy098>
- Fajardo Ortiz, G., Carrillo, A. M., & Neri Vela, R. (2002). *Perspectiva histórica de la atención a la salud en México: 1902-2002*. (1ra ed., pp. 150-159). OPS-UNAM, Sociedad Mexicana de Historia y Filosofía de la Medicina.
- Frenk, J. (2014). El concepto de accesibilidad. *Salud Pública de México*, 27(5), 430–453. <https://saludpublica.mx/index.php/spm/article/view/422/411>
- Frenk, J., Gómez, O., & Knaul, F. (2009). The democratization of health in Mexico: Financial innovations for universal coverage. *Bulletin of the World Health Organization*, 87(7), 542–548. <https://doi.org/10.2471/BLT.08.053199>
- Gómez, J., & Domingo, M. (1999). Historia de la enfermería de salud pública en España. Universidad de Alicante. https://rua.ua.es/dspace/bitstream/10045/5162/1/CC_05_04.pdf
- Gómez, O., & Frenk, J. (2020). La atención a la salud en Mesoamérica antes y después de 1519. *Salud Pública de México*, 62(1), 114-117. <https://doi.org/10.21149/10996>
- Instituto Nacional de Estadística y Geografía. (2023). Estadísticas de Defunciones Registradas.

<https://www.inegi.org.mx/contenidos/saladeprensa/boletines/2023/EDR/EDR2022.pdf>

- Instituto Nacional de Salud Pública. (2022). *Cien años de la Escuela de Salud Pública de México, 1922-2022: Un siglo de innovación educativa para responder a los desafíos sanitarios del país*. Instituto Nacional de Salud Pública. https://www.insp.mx/resources/images/stories/2022/docs/Cien_anos_de_la_Escuela_de_Salud_Publica_de_Mexico.pdf
- International Council of Nursing. (2018). Nurse Practitioner/Advanced Practice Nursing Network. <https://international.aanp.org/Practice/APNRoles>
- Kerouac, S., Pepin, J., & Ducharme, F. (2007). *El pensamiento enfermero: Teoría del cuidado desde una perspectiva psicosocial* (pp. 4-18). Masson SA.
- Leininger, M. (1999). What is transcultural nursing and culturally competent care? *Journal of Transcultural Nursing*, 10(1), 9. Sage Publications, Inc
- Leininger, M. (2002). Culture care theory: A major contribution to advance transcultural nursing knowledge and practices. *Journal of Transcultural Nursing*, 13(3), 189–192. <https://doi.org/10.1177/10459602013003005>
- López, A., Carracedo, M., & Alcaraz, A. (2022). Evolución de la enfermería comunitaria a lo largo de la historia. *Revista Electrónica de PortalesMedicos.com*, 17(7), 280. <https://www.revista-portalesmedicos.com/revista-medica/evolucion-de-la-enfermeria-comunitaria-a-lo-largo-de-la-historia/>
- Marmot, M. (2005). Social determinants of health inequalities. *The Lancet*, 365(9464), 1099–1104. [https://doi.org/10.1016/S0140-6736\(05\)71146-6](https://doi.org/10.1016/S0140-6736(05)71146-6)
- McMurray, A. (2011). *Health as a socio-ecological concept*. In Community health and wellness: Primary health care in practice (4th ed., pp. 7-24). Elsevier. https://books.google.com.mx/books?id=af3urm2J8zcC&printsec=frontcover&hl=es&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false
- Nigenda, G., Wirtz, V., González, L., & Reich, M. (2015). Evaluating the implementation of Mexico's health reform: The case of Seguro Popular. *Health Systems & Reform*, 1(3), 217–228. <https://doi.org/10.1080/23288604.2015.1031336>
- Nightingale, F. (2002). *Notas sobre enfermería: Qué es y qué no es*. Elsevier. (Obra original publicada en 1859). <https://books.google.es/books?id=nSqzXx6jNEEC&printsec=frontcover&hl=es#v=onepage&q&f=false>

- Nkowane, A., Khayesi, J., Suchaxaya, P., Phiri, M., Malvárez, S., & Ajuebor, O. (2016). Enhancing the role of community health nursing for universal health coverage: A survey of the practice of community health nursing in 13 countries. *Annals of Nursing and Practice*, 3(1), 1042. <https://www.jscimedcentral.com/public/assets/articles/nursing-3-1042.pdf>
- OMS. (1978). *ALMA ATA*. <https://iris.who.int/bitstream/handle/10665/39244/9243541358.pdf;jsessionid=57EB577067300D7F12C3140AAA0D710F?sequence=1>
- Organización de las Naciones Unidas. (2022). *Informe de los Objetivos de Desarrollo Sostenible 2022*. ONU. https://unstats.un.org/sdgs/report/2022/The-Sustainable-Development-Goals-Report-2022_Spanish.pdf
- Organización Mundial de la Salud. (2016). La OPS/OMS insta a transformar la educación en enfermería en las Américas. https://www3.paho.org/hq/index.php?option=com_content&view=article&id=12003:pahowho-urges-transformation-of-nursing-education-in-the-americas&Itemid=0&lang=es#gsc.tab=0
- Organización Panamericana de la Salud. (1997). Nuevos retos en el campo de la educación avanzada del personal de enfermería en América Latina. *Revista Panamericana de Salud Pública*, 2(1), 51-56. <https://iris.paho.org/bitstream/handle/10665.2/9053/v2n1a9.pdf?sequence=1&isAlloved=y>
- Palmer, I. (1983). Florence Nightingale and the first organized delivery of nursing services. *Nursing Research*, 31(3), 188-194. <https://ezborrow.reshare.indexdata.com/Record/02e711a7-eb33-4dc1-af2a-b13046f8f9f4>
- Pan American Health Organization. (2021). *Agenda for the Americas on Health, Environment, and Climate Change 2021–2030* (Informe No. PAHO/CDE/CE/21-0004). PAHO.
- Pender, N., Maudaugh, C. & Parsons, M. (2015). Health promotion in nursing practice. In *Nursing standard (Royal College of Nursing (Great Britain): 1987)* (7 ed.), PEARSON. <https://doi.org/10.7748/ns.5.23.37.s49>

- Pender, N., Murdaugh, C., & Parsons, M. (2015). *Health promotion in nursing practice* (7^a ed., pp.6-23). PEARSON.
<https://www.gmu.ac.ir/Dorsapax/userfiles/file/NolaJPenderCarolynLMurdaugh.pdf>
- Pender, N., Murdaugh, C., & Parsons, M. A. (2015). *Health promotion in nursing practice* (7^a ed.). PEARSON.
- Phillips A. (2019). Effective approaches to health promotion in nursing practice. *Nursing standard*, 34(4), 43–50. <https://doi.org/10.7748/ns.2019.e11312>
- Rodríguez, R. (2017). Los orígenes de la enfermería comunitaria en Latinoamérica. *Revista de la Universidad Industrial de Santander. Salud*, 49(3), 490-497.
<https://doi.org/10.18273/revsal.v49n3-2017007>
- Rosen, C. (1958). *A history of public health*. The Johns Hopkins University Press.
<https://books.google.com.mx/books?id=DTwfuUJ8iECMC>
- Secretaría de Salubridad y Asistencia (SSA). (1959). Anuario de las actividades docentes que desarrollara la Escuela de Salud Pública durante los años académicos de 1959 y 1960. México: Talleres Gráficos de la Nación.
<https://saludpublica.mx/index.php/spm/article/view/4350/4231>
- SIARHE. (2024). REGISTRO NACIONAL DEL PERSONAL MÉXICO. *Gobierno de México*, 24. www.salud.gob.mx/unidades/cie/siarhe
- Thallon, G. (1979). The advance of American nursing. *The Australian Nurses' Journal*, 8(11), 31–33. <https://pubmed.ncbi.nlm.nih.gov/383063/>
- Torres, F., Torres, M., Ávila, S., Pérez, J., Pichardo, C., Cuevas, N., Reyes, L., Salas, M., & Barrera, B. (2014). La salud pública en el México prehispánico: Una visión desde la salud pública actual. *Vertientes. Revista Especializada en Ciencias de la Salud*, 17(1), 48-60. <https://www.revistas.unam.mx/index.php/vertientes/article/view/51702>
- Universidad de la Salud. (2020). DECRETO POR EL QUE SE CREA EL ÓRGANO DESCONCENTRADO DENOMINADO UNIVERSIDAD DE LA SALUD. DOCTORA. *Gobierno de La Ciudad de México*, 1–9.
<https://unisa.cdmx.gob.mx/storage/app/media/decreto-de-creacion.pdf>
- Venegas, C. (1968). La asistencia hospitalaria para indios en la Nueva España. *Anales Del Instituto Nacional De Antropología E Historia*, 6(19), 227–240.
<https://revistas.inah.gob.mx/index.php/anales/article/view/7323>

World Health Organization. (2022). *Human resources for health: Global strategy on human resources for health: Workforce 2030. Report by the Director-General* (Informe No. A75/15). WHO. https://apps.who.int/gb/ebwha/pdf_files/WHA75/A75_15-en.pdf

Contribution Role	Author(s)
Conceptualization	Montserrat Mariscal Delgado
Methodology	Montserrat Mariscal Delgado
Software	Montserrat Mariscal Delgado
Validation	Montserrat Mariscal Delgado
Formal Analysis	Montserrat Mariscal Delgado
Investigation	Montserrat Mariscal Delgado
Resources	Maria Guadalupe Loza Rojas
Data curation	Montserrat Mariscal Delgado
Writing - Preparing the original draft	Creation and/or presentation of the published work, specifically writing the initial draft.
Writing - Review and editing	Montserrat Mariscal Delgado
Display	Montserrat Mariscal Delgado and Maria Guadalupe Loza Rojas
Supervision	Montserrat Mariscal Delgado
Project Management	Montserrat Mariscal Delgado
Acquisition of funds	Maria Guadalupe Loza Rojas