







Nursing workforce: scenario and trends

Recursos Humanos de enfermería: escenario y tendencias

Força de trabalho de enfermagem: cenário e tendências

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Abstract

Objective: reflect on the current panorama and trends of the nursing workforce in Brazil and in the world. **Method:** theoretical-reflective essay based on data from reports from international and national health and nursing organizations, available on official websites, between February and September 2021. **Results:** the current scenario of the nursing workforce points to a global shortage of professionals, alerting to a huge contingent of people who will not have their health needs met. Brazil has a similar number of nursing professionals to developed countries, but with an unequal distribution and a small percentage of nurses in the composition of the workforce. **Conclusion:** even with global efforts to reduce nursing workforce shortages, the picture remains critical. It is fundamental work to achieve health for all, which requires investment in numbers, qualifications, and adequate working conditions.

Descriptors: Delivery of Health Care; Working Conditions; Nursing; Workforce; Nurse Practitioners

Resumo

Objetivo: refletir sobre o panorama atual e tendências da força de trabalho de enfermagem no Brasil e no mundo. **Método:** ensaio teórico-reflexivo elaborado com base em dados de relatórios de organizações internacionais e nacionais de saúde e enfermagem, disponíveis em sites oficiais, entre fevereiro e setembro de 2021. **Resultados:** o cenário atual da força de trabalho da enfermagem aponta para escassez global de profissionais, alertando para um enorme contingente de pessoas que não terá suas necessidades de saúde atendidas. O Brasil dispõe de quantitativo de profissionais de enfermagem semelhante ao dos países desenvolvidos, mas com distribuição desigual e percentual pequeno de enfermeiros na composição da força de trabalho. **Conclusão:** mesmo com esforços globais para reduzir a escassez da força de trabalho de enfermagem, o cenário permanece crítico. Trata-se de um trabalho

fundamental para alcançar saúde para todos, o que requer investimento em número, qualificação e condições de trabalho adequadas.

Descritores: Atenção à Saúde; Condições de Trabalho; Enfermagem; Força de Trabalho; Profissionais de Enfermagem

Resumen

Objetivo: reflejar sobre el panorama actual y tendencias de recursos humanos de enfermería en Brasil y en el mundo. **Método:** ensayo teórico-reflexivo elaborado con base en datos de informes de organizaciones internacionales y nacionales de salud y enfermería, disponibles en sitios oficiales, entre febrero y septiembre de 2021. **Resultados:** el escenario actual de recursos humanos de la enfermería apunta para escasez global de profesionales, alertando para un enorme contingente de personas que no tendrán sus necesidades de salud atendidas. Brasil dispone de cuantitativo de profesionales de enfermería semejante a de los países desarrollados, pero con distribución desigual y porcentual pequeño de enfermeros en la composición de recursos humanos. **Conclusión:** mismo con esfuerzos globales para reducir la escasez de recursos humanos de enfermería, el escenario permanece crítico. Se trata de un trabajo fundamental para alcanzar salud para todos, lo que requiere inversión en número, calificación y condiciones de trabajo adecuadas.

Descriptorios: Atención a la Salud; Condiciones de Trabajo; Enfermería; Fuerza de Trabajo; Enfermeras Practicantes

Introduction

Human work comprises a process of transformation oriented towards a purpose that aims to satisfy the needs of different social groups. In this process, the constituent elements are: workforce, object, instruments and the transforming action itself. In this articulated set of elements, force (human capital) is the one who performs the work.¹

Health integrates the service sector with different professionals who work individually or collectively. The product of health work and health care belongs to the non-material sphere, being consumed at the same time as it is produced.² Considering the simultaneity between production and consumption and the strong dependence on the workforce, predominant in the health field, the looking at who performs it assumes greater relevance.

The global crisis of health professionals has been widely debated by several countries and health and nursing organizations due to the huge concern about the availability of a workforce in sufficient quantity and quality to meet the health needs of populations in the coming years.³⁻⁴

In 2020, the projection released by the World Health Organization (WHO) estimated the availability of 36 million health professionals by 2030, representing a reduction of only 17% in workforce shortages compared to 2013 data, is even more serious with the effects of the COVID-19 pandemic, especially on the nursing workforce.⁵

To minimize the shortage of these professionals, the total number of nursing graduates would have to increase by an average of 8% per year, which reinforces the urgent concern with adequate planning of the profession's workforce.⁴ In this perspective, the question emerges: "What is the current scenario and trends in the availability of the nursing workforce in Brazil and in the world?". Faced with this question, it is proposed to reflect on the current scenario and trends of the nursing workforce in Brazil and in the world.

Method

This is a theoretical-reflective essay on the scenario and trends of the nursing workforce, prepared based on data from reports from international and national health and nursing organizations, available on official websites, between February and September 2021. The sources consulted were The World Health Organization (WHO), The Pan American Health Organization (PAHO), The International Council of Nurses (ICN) and the Federal Council of Nursing (COFEN), seeking current publications that addressed the situation and trends in availability of nursing workforce. Documents that used data from the last ten years were included.

After an exhaustive reading of the documents, the findings were organized into four sub-items for discussion: Scenario of the nursing workforce in the world; Brazilian nursing workforce scenario; Nursing workforce mobility: trends that accentuate scarcity; and Attraction and retention of the nursing workforce in Brazil: challenges and trends.

Based on the theorization of the work process¹ and its application in health and nursing,² the process of interpretation and reflection sought to problematize different aspects that are interrelated with the scarcity and unequal distribution of nursing professionals in the world and in Brazil. It considered the political, economic, social and health scenario to understand the availability and trends of the workforce, dialoguing with texts chosen because they deal with the theme and have been published in the last five years. Therefore, the reflections established in this study emerge as the authors' considerations about the nursing workforce and also emerge as an awareness strategy on the subject.

Results and discussion

Scenario of the nursing workforce in the world

Data released by the WHO point to a deficit of 5.7 million nursing professionals by 2030, warning of a huge contingent of people who will not have their health needs met due to the shortage of the health and nursing workforce. The projections also reveal the persistent difficulty

of countries in attracting and retaining professionals to work in health services around the world.³⁻⁴

The effects resulting from the shortage of the health and nursing workforce have been widely discussed due to the confrontation of the COVID-19 pandemic, triggered by the new coronavirus (SARS-CoV-2) and installed in 2019, demand for health care, reinforcing the urgent need for a greater number of professionals to work in newly created or expanded jobs, as well as to meet deficits generated by illness, retirement and death of nursing professionals.⁵

Nursing is the largest occupational group in the health sector, with approximately 59% of the world's workforce. However, the distribution of these professionals around the world is disproportionate to what is needed to achieve universal health coverage and the global goals of sustainable development by 2030. The biggest differences are concentrated in countries in Africa, Southeast Asia, the Eastern Mediterranean and in some Latin American countries. In the Americas, the deficit is smaller, with about 30% of the world's nursing professionals and a density of 83.4 professionals per 10,000 inhabitants, with the global average being 36.9. The contrast is revealed when realizing that, in countries like Haiti, Bolivia and the Dominican Republic, the average density is less than 10 per 10 thousand inhabitants.⁴

The aging of the nursing workforce has also been considered a concern, given that about 30% of professionals are 55 years of age or older, and almost a quarter of these professionals are expected to retire in the next ten years. The current stock to cover the absences resulting from retirement is approximately 1.2 million nursing professionals, however, in the long term, due to population growth and the post-COVID-19 pandemic scenario, this number will be insufficient.⁴

To fill this gap by 2030, the WHO recommends that countries substantially increase investments to increase the growth in the number of the workforce, aiming to provide essential care to their populations. International cooperation agreements are fundamental in this regard, as they strengthen the most fragile health systems through the sharing of experiences, technical capacities, and financial resources, helping them to attract and train the nursing workforce.⁴⁻⁶

In this sense, the International Council of Nurses (ICN) has fought for the implementation of public health policies that establish minimum safety standards for nursing teams and, consequently, ensure the quality of work globally.⁷ A recent study indicates that the availability of a workforce numerically adequate to the health demands results in good clinical outcomes for the assisted population and generates a good financial return for the institution providing the care.⁸

The report produced by the International Labor Organization (ILO), Organization for Economic Co-operation and Development (OECD) and WHO, entitled "Health Employment and

Economic Growth: A Five-Year Action Plan (2017–21)”, highlights the concern of with investments in education and job creation in the health sectors. Investments in the health workforce articulated with public policies that protect workers have the potential to expand socioeconomic gains and generate inclusive economic growth.⁹

A large part of the investments to provide a workforce in health and nursing have been used to develop more immediate interventions. However, investments and effective strategies are essential to face long-term challenges, such as training in sufficient quantity and quality to meet the needs of populations.⁹⁻¹⁰

In the period from 1990 to 2016, only 7% of the resources invested in the health area were aimed specifically at the health workforce.¹⁰ This reality corroborates the fragility identified in the strategies that have been adopted by countries over decades and that ended up by contribute to the global shortage of health professionals, including nursing.

Despite the recognition, by multilateral organizations, of the importance of health in human life and for sustainable development,^{3-4,7,9} it is necessary to consider the determinations of the hegemonic mode of production¹ and its influence on the health work market and on the social aspects of financing and providing health services.² Macroeconomic issues have a strong influence on the orientation of public policies and on the ways used by the private sector to obtain profit. In this sense, the universal right to health as a moral value is permanently strained by the logic of capitalist accumulation, influencing the scenario and trends in the health and nursing labor market.⁹

Brazilian nursing workforce scenario

Nursing represents about 70% of the health workforce in Brazil, and estimates made in 2020 indicate a 51% growth in the number of these professionals to 2030.¹¹ Currently, 2,432,079 professionals are registered in the Federal Nursing Council (COFEN), of which 1,408,185 are nursing technicians; 429,183, nursing assistants; and 594,408 nurses.¹²

The country has a high number of nursing professionals, however the inequalities in the distribution are worrying.¹³ The Southeast Region has the highest concentration of these professionals, while the North and Northeast are the most affected by the unequal distribution.¹³ In 2018, the proportion was of 101.4 nursing professionals per 10,000 inhabitants in the country, with the highest concentration in the Federal District (163.60) and the lowest in the state of Alagoas (73,69).

The problem of inequality in distribution becomes even more visible when analyzing the

small percentage of nurses in the composition of the Brazilian nursing workforce, making up the general average of 24.54 nurses per 10,000 inhabitants — and in the Federal District, nurses make up 43.39 per 10 thousand inhabitants, in contrast to the state of Pará, where they correspond to 14.13.¹¹

The nursing workforce is especially concentrated in large urban centers and capitals,¹⁴ making it difficult to meet the territorial and demographic needs of each state or region. It is understood that the unequal distribution of nursing workers is multifactorial and multidimensional and that factors such as the search for better working conditions, salary and housing can strongly influence professionals when choosing the place/region of work.

In addition, regions that offer poor working conditions may have less potential to attract the health workforce, such as inadequate infrastructure and difficulty in accessing medium and high complexity services, disfavoring the choice of these spaces. The constant search for professional improvement and better quality of personal and family life can also motivate professionals to look for jobs in large centers.

A detailed diagnosis, carried out in 2013, about the situation of nurses, technicians and nursing assistants working in Brazil found that the Brazilian nursing workforce is mostly born in this country (98%), female (85%), has up to 40 years old (61.7%) and resides both in the country's capitals (56.8%) and in the countryside (40.9%).¹⁵

The geographical distribution of nurses' training is led by the Southeast Region (48.2%), followed by the Northeast (23.5%), South (12.8%), Midwest (6.8%) and North (5.6%). Similarly, the distribution of training for nursing technicians and assistants is led by the Southeast Region (46.5%), followed by the Northeast Regions (21.1%), South (13.1%), North (7.8%) and Central-West (6.3%).¹⁵

Regarding employability, the public sector is considered the largest employer of nursing, totaling 58.9%. It is followed by the private sector, which employs 31.6% of the workforce; and the philanthropic, responsible for employing 15.4% of this contingent.¹⁵ The loss of qualified professionals for the international job market can contribute to the vulnerability in the development of the Brazilian health system. Of the participants in the Profile of Nursing Survey in Brazil, 66.7% reported difficulty in finding a job, and 16% of those working in the teaching sector indicated a desire to work abroad.¹⁵

Although Brazil has a similar number of nursing professionals to developed countries, it needs to develop strategies to face the unequal distribution in different regions of the country and to increase the percentage of nurses in the composition of the workforce. Therefore, it is recommended to increase investments in training, attracting, and retaining professionals in the

most underserved regions, aiming to guarantee fair remuneration, healthy working conditions, and environments.

The mobility of the nursing workforce: trends that accentuate scarcity

Nursing workforce mobility is on the rise and is an almost universal problem. The 2020 data report that one in eight nursing professionals works in a country other than their birth or training.⁴ In addition, many high-income countries in different regions seem to be overly dependent on the international mobility of these professionals due to the low number of professionals graduates or their scarcity in relation to the number of available jobs.

In this context, some aspects can act as motivators for the phenomenon of moving these professionals from one place to another. In general, health and nursing professionals migrate to high-income countries in the quest to improve pay, job satisfaction, and career or training opportunities. Others turn away from political instability, war, and violent work environments.⁶⁻¹⁶

In an attempt to explain migratory flows, the terms push factors have been used, such as high levels of violence, high cost of living when related to lagged wages, unemployment and difficulties in entering the labor market, among others; and pull factors, such as better wages, living conditions and work opportunities, access to goods and services, among others.¹⁷ Based on this, it can be observed that individual factors combined with socioeconomic and political conditions between countries, regions of the same country and even within the same region can constitute potential motivators of migratory flows in nursing.

However, the factors of expulsion and attraction do not seem to be able to explain in isolation the concept of social determination of migration,¹⁶ especially of workers. When considering the centrality of work in societies, a study is based on the theoretical assumptions of Karl Marx¹⁸ to propose the concept of labor mobility, which adds important elements in the explanation of the migratory phenomenon relating it to the demands of capitalism.

Labor mobility involves the production, use and circulation of the workforce and the way in which it is mobilized in spatial, sectoral, and professional terms to meet capitalist interests, that is, how capital produces and controls it.¹⁸ From a perspective Marxist¹ looking at the human labor process, the commodity "labor power" is sold to the owner of the means of production, the capitalist. To guarantee their subsistence and reproduction, workers are subjected to the interests of capitalism. In the public sector, which employs a large contingent of health workers, as is the case in Brazil and other countries, there is no private accumulation of capital, but the capitalist logic of society organization influences the ways in which the State makes these services available to the population.

From this perspective, it is reflected that the nursing worker can travel to different geographic spaces to sell their workforce, especially to countries or regions where job offers are more attractive and with better pay. The migration of nursing professionals is a complex phenomenon and involves several elements that enhance it.

The historical legacy of the profession, the transformations in the world of work and its unfolding in the health sector are factors that are articulated with the migratory processes of professionals, and may be associated with the deficits in recognition, in several countries, of the importance of the nursing profession for the health and assistance of the population, as well as for the economy.¹⁹

In a study in Brazil,²⁰ three flows of migration of nurses were predominantly observed: national migration guided by the training process with a high rate of entries and exits in states that concentrate several courses and vacancies in undergraduate and graduate courses; national migration motivated by job opportunities, especially in regions of economic expansion in the country; and international migration.

Another equally important situation that has interfaces with the migratory scenario and shortage of the health and nursing workforce is the flight of human capital. The phenomenon called “brain drain” occurs when qualified health professionals leave their countries of origin and migrate to others that prove to be able to offer better conditions of life, work, and career progression.¹⁶

The countries of origin end up losing qualified, committed, and problem-solving people, which strongly impacts health coverage and the technical, technological, and scientific development of health systems. On the other hand, receiving countries face difficulties in terms of regulation for professional practice and a high number of immigrants, and this interferes in the supply and demand of jobs for native professionals. However, in the interrelationship between exporting and importing labor force countries, the benefits of migration still seem to be greater for receiving countries.

In a joint attempt to regulate the migratory flow, in 2010, the WHO Global Code of Practice on the Recruitment of Health Personnel was created, with the aim of achieving a balance between the interests of health professionals, countries of origin and countries of origin. of destination.²¹ In this sense, to achieve universal health coverage, it is necessary to retain these professionals in their country of origin and attract them to the most remote areas in order to obtain an adequate geographical distribution.

Attracting and retaining the nursing workforce in Brazil: challenges and trends

The discussions presented so far offer important reflections on the global challenges faced to address the shortage of the nursing workforce to meet the health needs of populations. In Brazil, more specifically in the Unified Health System (SUS), it is no different. Attracting and retaining the nursing workforce has been a huge challenge for health managers, given that the turnover and/or absence of professionals implies the fragmentation of care and difficulties in building a bond with users.

Nursing professionals work in primary, secondary and tertiary care, in direct care or in management positions, both in public and private institutions.¹³ This characteristic made it possible to expand the spaces for their work, especially within the SUS and in Health Care. Primary Health Care (PHC). When considering the breadth of spaces in which nursing is inserted and its contributions to improving access and quality of health care, it is essential to properly plan the workforce, in order to meet the demands for professionals in sufficient quantity and quality to serve the populations.¹³

Overcoming nursing turnover and shortages also involves deep and ongoing debate. This discussion should include the State, health service managers, professional training institutions, representative entities, and multilateral organizations, given that this challenge cannot be overcome only with isolated programs or strategies.

Investing in valorization strategies and policies that ensure the maintenance of the nursing workforce in rural locations and away from large centers contributes significantly to the satisfaction and retention of professionals in places where the density of this workforce is below the national average. The factors considered important in this process involve assertive communication between management and workers, recognition of the work performed, financial incentives for the most qualified, healthy practice environments, worker-protective policies and professional regulation.²¹ In addition, there must be personnel dimensioning to minimize wear and tear, so that productivity increases and nursing services improve.²²

To attract and retain nursing professionals, government policies need to ensure job security, manageable workload, supportive supervision, and organizational management, continuing education and professional development, housing, and education subsidies, as well as the availability of material and structural resources. Still, it is necessary to guarantee a work environment free from any type of violence, discrimination, and harassment, given that the execution of exhausting routines influences the quality of life of the nursing professional.¹⁷⁻²²

When considering the inequality in the geographical distribution of the workforce, especially regarding the data presented by Brazilian nursing, it is urgent to rethink the retention

strategies of these professionals at different levels of care and across the country. Therefore, it is necessary to combine financial and non-financial incentives that guarantee labor rights.

A study on the migration of nurses in southern Brazil suggests some political propositions for nursing migration in the state and transnational institutions. The following stand out: evaluation of the policy for the creation and distribution of nursing courses by geographic area and their respective qualifications or specialties; inclusion of a subsystem for registering nursing emigrants and immigrants in the Cofen/Coren system, in conjunction with the Brazilian Consular System for guidance and assistance to professionals; proposition to encourage research on migration and migration policy in the context of nursing and its relationship with the economic processes of countries; conducting multicentric research on this topic; creation of support mechanisms for migrants; among others.¹⁹

Therefore, Brazil needs to move towards guaranteeing decent working conditions and environments, fair remuneration, quality training and in line with the assumptions of the SUS and organizational structures that enable the full development of health work. In this sense, in Brazil and in the world, interventions to attract and retain these professionals in the neediest areas must consider the increase in investments in the health and education sector, to expand the hiring and qualification of the workforce, as a foundation to guarantee the universal access to health. The existence of a sufficient number of trained and valued professionals, with defined and respected regulatory norms, can be considered a cornerstone for overcoming the shortage of the nursing and health workforce.

The limitations of the study concern the difficulties in the availability of data that allow some comparability. Information is insufficient, professional regulations are different in different countries; and, although the COVID-19 pandemic indicates potential for changes in the current supply and demand of nursing professionals at the national and global levels, data for more informed prognoses are still lacking.

Regarding the contributions of this study to the area, the alert for scarcity and unequal distribution of the nursing workforce in Brazil and in the world is highlighted, and the consequent need to carry out research that seeks to elucidate its reasons and possibilities for reduction, aiming at improvements in health care in different world scenarios.

Conclusion

Despite global efforts to reduce the shortage of the nursing workforce, the scenario remains critical. Achieving health for all will depend on the quality training of a greater number of professionals and adequate working conditions for the provision of care.

Thus, for the relevant performance of the nursing workforce to be effective in the quantity and quality required, appropriate policies are required in the context of training and professional development. These policies, aligned with each other and with the emergency needs of populations and health systems, need to consider and enable better wages and favorable working environments for all professionals.

The field of health is, on the one hand, determined by the macro-social sphere, but, on the other hand, it is determinant. That is, historical-structural conditions delimit scenarios for the action of social subjects, however, conscious collectives fight for rights and build history.

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