



AVAILABILITY OF NURSES IN THE JOB MARKET: WHAT THE NUMBERS SAY DISPONIBILIDADE DE ENFERMEIROS NO MERCADO DE TRABALHO: O QUE DIZEM OS NÚMEROS

DISPONIBILIDAD DE ENFERMEROS EN EL MERCADO DE TRABAJO: LO QUE DICEN LOS NÚMEROS

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ABSTRACT

Objective: identifying trends in nurses' workforce availability. **Method:** descriptive, cross-sectional, study with a quantitative approach, conducted on the basis of search in the Brazilian Registry of the College Education Regulation System (e-MEC), interviews with key informants, and search in the database of the Regional Nursing Council of Rio Grande do Norte, Brazil (COREN-RN). Data collection was performed following 3 structured scripts; and the findings were organized into tables and analyzed through the software *Statistical Package for the Social Sciences (SPSS)*, version 19.0. **Results:** there is a high availability of nurses in Rio Grande do Norte, influenced by the expansion of Nursing courses and evidenced by the number of professionals who graduated in the area and are registered in the COREN-RN. **Conclusion:** depending on the growing trend of Nursing undergraduate courses in the state, a worrying scenario of discrepancy between the number of graduated professionals and the absorption capacity of the local job market can be configured. **Descriptors:** Education; Nursing; College Education Institutions; Job Market; Employment.

RESUMO

Objetivo: identificar tendências na disponibilidade de força de trabalho de enfermeiros. **Método:** estudo descritivo, transversal, com abordagem quantitativa, realizado a partir de busca no Cadastro do Sistema de Regulação do Ensino Superior (e-MEC), de entrevistas com informantes-chave e busca no banco de dados do Conselho Regional de Enfermagem do Rio Grande do Norte (Coren-RN). A coleta de dados foi realizada com base em 3 formulários estruturados; e os achados foram organizados em tabelas e analisados por meio do programa *Statistical Package for the Social Sciences (SPSS)*, versão 19.0. **Resultados:** há elevada disponibilidade de enfermeiros no Rio Grande do Norte, influenciada pela expansão da oferta dos cursos de Enfermagem e evidenciada pela quantidade de profissionais que concluíram a graduação na área e inscreveram-se no Coren-RN. **Conclusão:** a depender da tendência crescente de cursos de Enfermagem no estado, pode configurar-se um cenário preocupante de dissintonia entre o número de titulados e a capacidade de absorção do mercado de trabalho local. **Descritores:** Educação; Enfermagem; Instituições de Ensino Superior; Mercado de Trabalho; Emprego.

RESUMEN

Objetivo: identificar tendencias en la disponibilidad de fuerza de trabajo de enfermeros. **Método:** estudio descriptivo, transversal, con abordaje cuantitativo, realizado a partir de búsqueda en el Registro del Sistema de Regulación de Educación Superior de Brasil (e-MEC), de entrevistas con informantes clave y de búsqueda en la base de datos del Consejo Regional de Enfermería de Rio Grande do Norte, Brasil (COREN-RN). La recogida de datos se realizó con 3 formularios estructurados; y los datos encontrados se organizaron en tablas y se analizaron a través del software *Statistical Package for the Social Sciences (SPSS)*, versión 19.0. **Resultados:** existe una alta disponibilidad de enfermeros en Rio Grande do Norte, influenciada por la expansión de la oferta de cursos de Enfermería y evidenciada por la cantidad de profesionales que se graduaron en el área y se inscribieron en el COREN-RN. **Conclusión:** en función de la tendencia creciente de cursos de Enfermería en el estado, se puede configurar un escenario preocupante de discrepancia entre el número de profesionales graduados y la capacidad de absorción del mercado de trabajo local. **Descriptores:** Educación; Enfermería; Instituciones de Educación Superior; Mercado de Trabajo; Empleo.

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INTRODUCTION

The term *job market* consists in the very workforce dynamics deployed in a sector, including its insertion and absorption aspects, as well as its conditions of use and the relations between capital and labor. Considering this concept, one aspect to be analyzed concerns the workforce supply available; several questions may be raised in this regard. Is the existing contingent of nurses in the market enough? Given the same scenario of workforce education and absorption, do the numbers indicate a tendency to deficit or shortage? What may we think about the future by relating the number of nurses attending courses and the number of available jobs?

The international literature is abundant in terms of findings on the direct relation between the job market and the macropolitical and macroeconomic scenario of countries, in various historical contexts.^{1,2} However, there is no economic determinism. Each historical-social reality derives from a complex and multidetermined process.³⁻⁵ Based on the theories provided by the literature, we may claim that the market is influenced by the economic dynamics, by the technological availability, as well as by the social needs and political priorities adopted by countries and governments in relation to the State's role in the economy. The economic dynamics and the choice of political model are driven by actual needs, but also by moral values and the class struggle dynamics.

Nowadays, in a globalized world that has contributed to narrow both geographical and economic borders, the barriers between countries in trade, production, and distribution of goods and services have been reduced. All of them play a role in a global economic system and experience, on a daily basis, fluctuations and metamorphoses for profit generation.⁶

In the health sector context, analyzing the job market for nurses, there is a strong relation between economy, investment in the health sector, and availability of job vacancies for nurses.⁷ These professionals represent the largest group in the health workforce, with a key contribution to achieve goals such as improving worker productivity, quality of care, and efficiency in the sector.

The 2008 economic crisis affected the health sector, causing changes in funding for human resources and generating an impact on the job market of nurses in some countries. This new setting has been noticed by reduced

job supply and qualification and experience requirements, with negative consequences for employment, especially for newly graduated practitioners.^{7,8} However, studies in the countries of the Organisation for Economic Co-Operation and Development (OECD) show that the relation is not only economic. Even in the crisis scenario, which interferes with the health sector funding and promotes changes in the job market dynamics, there are differences in the sector's funding. This fact is related to the political priorities adopted by countries, which lead to various trends in the job market for nurses.⁷

In the Americas, we see imbalances regarding the quantity, adequacy, and qualification of the workforce, concerning the country's needs. There is shortage and, at the same time, migration of health workers that in many cases outweigh the countries' capacity to guarantee minimum health care levels, especially in rural areas and for rather vulnerable groups.⁹

In Brazil, considering nursing jobs, historical and political factors help understanding the current scenario. After the creation of the Brazilian National Health System (SUS), through the 1988 Federal Constitution and Law 8,080/1990, and deploying policies to expand primary health care, specially with the Family Health Strategy (FHS), we saw a systematic increase in the number of nursing jobs all over the country, in order to constitute the FHS teams.¹⁰

In addition to this factor, many others have influenced the expansion of jobs for these professionals, as well as of education to meet local and regional needs. Among them demographic transition stands out, with population aging; a complex epidemiological profile, with persistence of communicable diseases (CD); emergence of new endemic diseases and epidemics; an increase in chronic noncommunicable diseases (CNCD); and a significant increase in damages and deaths due to external causes.¹¹

A study published by the Brazilian Institute of Applied Economic Research (IPEA) shows that 'nurses and the like' rank second among the careers that grew the most in number of jobs between January 2009 and December 2012.¹² Still considering the growth of jobs, data on labor contracts in the Brazilian Annual Report of Social Information (RAIS), from the Ministry of Labor and Employment (MTE), record that 19 Brazilian states and the Federal District had a positive growth in the number of labor contracts for 'nurses and the like'

within the period from 2009 to 2013. Only in 7 states (Rio Grande do Norte, Sergipe, Rio Grande do Sul, Mato Grosso do Sul, Amazonas, Amapá, and Tocantins) oscillations were observed ('growth/decrease' or 'growth/decrease/growth') in the labor contracts of these professionals within the period.^{12,13}

The group 'nurses and the like' includes nurses and the other nursing professionals. There was a numerical growth of nurses in the workforce of the area after the approval of Law 7,498/1986 (Professional Nursing Practice Law).

Regarding the expansion of College Education in Brazil, two major moments are identified. The first, which corresponds to three decades, from 1964 to 1994, was marked by the 1968 University Reform, and the second from 1994 to 2010, which brings a reconfiguration of College Education.¹⁴ Since 1994, we see a significant increase in the number of College Education institutions (CEIs), as well as in the supply of courses and vacancies, with a predominance of private business participation. This phenomenon also occurs in nurses' education.

The expansion of undergraduate courses was strongly related to the policy adopted by the Brazilian government to increase access to College Education, which has been implemented through various initiatives, including funding incentives and changes in the process of course accreditation and assessment.¹⁵

The results of this policy are also observed in the health sector and in nurses' education. In spite of the positive aspect of increasing access to College Education and expanding health professionals' education, the form of growth, the relationship between vacancies and regional needs, problems to guarantee the quality of education, the great concentration in private business, and the extension of distance education (DE) courses have been the main critiques.¹⁶⁻¹⁹

Considering the above, this article aims at identifying trends in nurses' workforce availability, analyzing the situation in a northeastern Brazilian state.

METHOD

This article was extracted from the Ph.D. thesis "Trends nurses labor market: a study in northeastern Brazil." This is a descriptive, cross-sectional, study with a quantitative approach, approved by the Research Ethics Committee of the Santa Catarina State University (UDESC), under the Opinion 90,2344

and the Brazilian Certificate of Submission for Ethical Assessment (CAAE) 37685214.2.0000.0118.

Data was collected from 3 sources: a) website of the Brazilian Registry of the College Education Regulation System (e-MEC); b) interviews with members of the Nursing undergraduate course coordinations in Rio Grande do Norte; and c) database of the Regional Nursing Council of Rio Grande do Norte, Brazil (COREN-RN).

For collecting from the e-MEC, a structured instrument with the following variables was used: a) number of CEIs; b) legal nature; c) educational level; d) periodicity; e) minimum number of hours; f) operation start year; g) number of vacancies authorized by the Ministry of Education (MEC); and h) number of alumni.

Data collection from the e-MEC occurred between May and July 2014.

The interviews with members of the Nursing undergraduate course coordinations in Rio Grande do Norte were carried out by means of a structured instrument, in order to survey the number of alumni. By 2015, there were 11 CEIs in the state and 7 coordinators were interviewed. The coordinators from the other 4 CEIs were not interviewed because: a) 2 had not formed any class; and b) 2 did not agree to participate in the research.

In turn, in the COREN-RN database, the following information was sought: a) number of new registered nurses within the period from January 1, 2009, to December 31, 2013; and b) number of nurses who asked for cancellation and transfer during that period.

Data collection through the interviews with Nursing undergraduate course coordinators and from the COREN-RN database took place in November and December 2014.

The information obtained was entered onto two databases in the software *Microsoft Excel*, version 2010, and a dictionary (*coodebook*) was prepared for each source under analysis. Initially, a dual power validation process was conducted in this software, resorting to 2 independent typings, in 2 worksheets; then, data underwent descriptive statistical analysis in the software *Statistical Package for the Social Sciences (SPSS)*, version 19.0.

The simple and percentage frequencies were extracted, as well as the mean central tendency, median, and mode values were calculated. In all evaluation instruments applied, the results were converted into the percentage scale from 0% to 100%. The scores

presented are more satisfactory the closer they are to 100.

RESULTS

The results of this research are described considering the variables of the e-MEC database, data from interviews with undergraduate course coordinators, and the COREN-RN database. To do this, they are organized in a descriptive way on two axes: a) Axis 1 refers to the panorama of Nursing undergraduate courses between 2009 and 2013; and b) Axis 2 indicates the number of graduated nurses and registrations in the COREN-RN from 2009 to 2013.

Overview of Nursing undergraduate courses between 2009 and 2013

The e-MEC records show 11 CEIs offering Nursing undergraduate courses in Rio Grande do Norte until April 2015. Out of these, 4 offer courses in more than one teaching site (municipality), which totals 21 Nursing undergraduate courses in Rio Grande do Norte, operating in 9 municipalities: Natal (38.1%), Mossoró (19.0%), Açu (4.8%), Caicó (9.5%), Currais Novos (4.8%), Goianinha (4.8%), Pau dos Ferros (4.8%), Parnamirim (4.8%), and Santa Cruz (9,5%) (Figure 1).

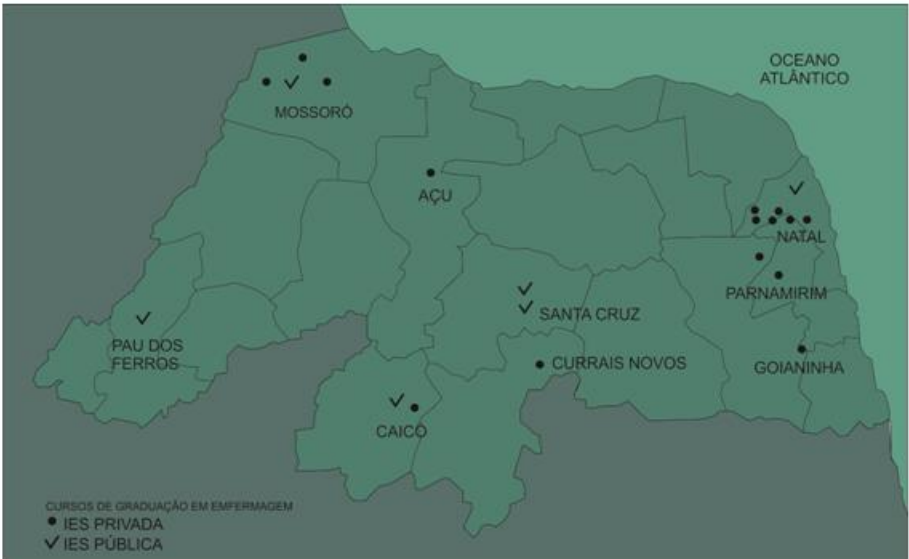


Figure 1. Distribution of public and private College Education institutions with Nursing undergraduate courses in Rio Grande do Norte, Brazil, in 2015.

The oldest course was created in 1971 at a state public CEI, the Rio Grande do Norte State University (UERN), followed in 1974 by a federal public university, the Federal University of Rio Grande do Norte (UFRN). From that period up to 2003 there were 2 public CEIs in Rio Grande do Norte that provided nurses with education. Since 2004, there was a marked expansion in the supply of Nursing courses in the state. Between 2004 and 2014, 9 CEIs were created, totaling a supply of 21 courses in various campuses.

During this period, there was a significant increase in the number of courses. In public CEIs, the supply of Nursing courses was expanded with the creation of 1 new course in the UFRN, at the Santa Cruz campus, totaling 2 federal public courses; and 3 new courses in the UERN, however the latter extinguished the

course at the Santa Cruz campus after forming a class, totaling 3 state public courses in 2015. Within the same period, from 2004 to 2014, 9 private CEIs were created, nonexistent in Rio Grande do Norte so far. They offer 15 Nursing undergraduate courses distributed into 7 municipalities.

The Nursing undergraduate courses are distributed into all of the macroregions in Rio Grande do Norte, with a higher concentration in the ‘Potiguar’ east, west, and rural zones, but there are empty spaces in the ‘Potiguar’ central zone, as shown in Figure 1.

Figure 2 indicates that Nursing courses in the state are predominantly offered during the daytime period, although the expansion has been characterized by a significant increase in the supply of night time courses in private CEIs.

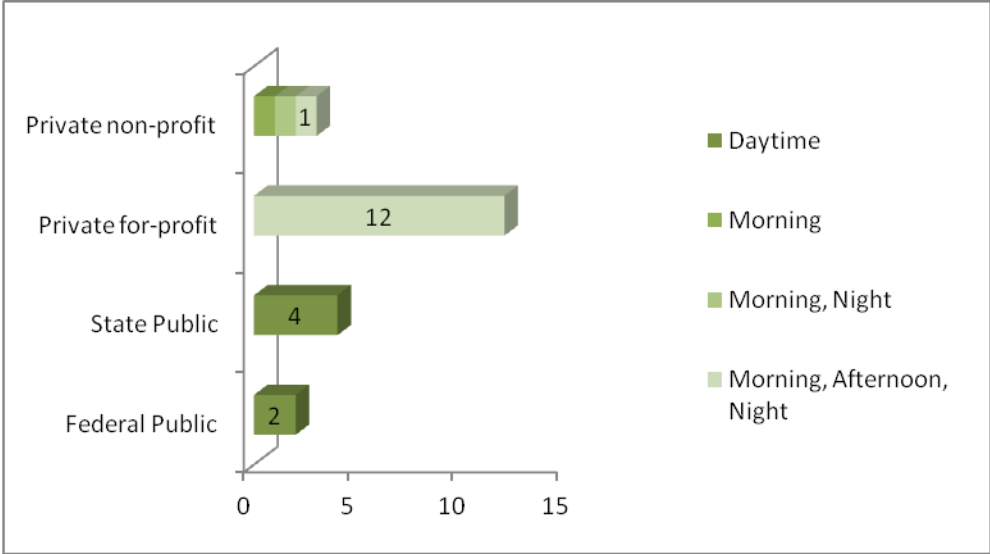


Figure 2. Number of Nursing undergraduate courses by legal nature and course time schedule in Rio Grande do Norte, Brazil, in 2015 (n = 21).

The findings of this study reveal the increased number of vacancies made available in Nursing courses in Rio Grande do Norte, demonstrating the variation between public and private CEIs, with a tendency towards expansion of the latter (Table 1).

Table 1. Characterization of College Education institutions with Nursing undergraduate courses in Rio Grande do Norte, Brazil, in 2015 (n = 21).

Variables	N	%
Academic organization		
College Education center	2	9.52
College	5	23.81
University	14	66.67
Legal nature		
Public	6	28.57
Private non-profit	2	9.52
Private for-profit	13	61.90
Modality		
Classroom	15	71.43
Distance	6	28.57

The results displayed in Table 1 indicate that the Nursing courses in Rio Grande do Norte have a diversity regarding academic organization, legal nature, and modality, with a predominance of private for-profit CEIs and classroom education. Out of the 21 courses, 15 (71.4%) provide classroom education and 6 (28.6%) provide DE. It is worth emphasizing that these DE sites are offered by a single CEI, which was authorized by the MEC in 2008; they are distributed into campuses in 6 ‘Potiguar’ municipalities.

In Rio Grande do Norte, there are differences between public and private CEIs. In relation to the number of vacancies authorized, private CEIs providing classroom education offer a larger number, 2,280 vacancies/year, while public CEIs offer 244 vacancies/year. It is worth mentioning that one of the private CEIs offers vacancies in the DE modality in 6 courses (campuses in 6 municipalities). The number of vacancies offered by this CEI is not computed in Table 2, because it did not authorize the collection of data, as previously mentioned. Having e-MEC data as a basis, this CEI makes available 16,800 vacancies/year in the country,

distributed into 23 Brazilian states. If this distribution was equitable across the states of the federation, dividing the total number of vacancies by the 23 states, we might estimate that in Rio Grande do Norte this CEI could offer 730 vacancies/year. Considering only data on classroom education, Rio Grande do Norte offers 2,524 vacancies/year.

Regarding compliance with the minimum number of hours for the course operation, it was found that all public CEIs comply with the minimum number of hours required by the Resolution from the Brazilian National Council of Education (CNE) 3, enacted on November 7, 2001, which provides for the minimum number of hours and procedures related to the comprehensiveness and length of Nursing undergraduate courses.²⁰ As for the courses offered by private CEIs, it was found that all those with classroom education courses comply with the minimum number of hours and the CEI that offers DE courses does not observe the minimum number of hours established by Resolution CNE 3/2001, corresponding to 3,380 hours (Table 2).

The data obtained from the e-MEC and coordinators are displayed in Figure 3. along with the Nursing undergraduate course

College Education institution	Campus/operation start year	Vacancies per year authorized for course operation	Graduates per year					
			2009	2010	2011	2012	2013	Total/period
Rio Grande do Norte State University (UERN)	Mossoró (1971)	26	26	25	24	22	33	130
	Caicó (2004)	26	-	18	20	16	21	75
	Pau dos Ferros (2004)	26	20	19	17	21	22	99
	Santa Cruz (2004)	26	-	18	-	-	-	18
	Subtotal	104	46	80	61	59	76	322
Federal University of Rio Grande do Norte (UFRN)	Natal (1974)	100	68	81	75	80	70	374
	School of Health Sciences in the Trairi (FACISA) - Santa Cruz (2007)	40	-	-	40	40	40	120
	Subtotal	140	68	81	115	120	110	494
Universidade Potiguar (UnP)	Natal (2004)	500	294	393	331	436	183	1,637
	Mossoró (2007)	240	-	187	196	174	86	643
	Subtotal	740	294	580	527	610	269	2,280
Universidade Estácio de Sá (Estácio)	Natal (2007)	300	-	-	110	130	120	360
	Subtotal	300	-	-	110	130	120	360
Centro Universitário do Rio Grande do Norte (UNI-RN)	Natal (2006)	100	-	80	80	80	80	320
	Subtotal	100	-	80	80	80	80	320
Centro Universitário Facex (UniFacex)	Natal (2005)	300	50	40	45	59	65	259
	Subtotal	300	50	40	45	59	65	259
Faculdade de Enfermagem Nova Esperança (Facene)	Mossoró (2007)	200	-	62	38	31	37	168
	Subtotal	200	-	62	38	31	37	168
Faculdade de Ciências e Tecnologia de Natal (Faciten) ¹	Natal (2008)	300	-	-	-	-	-	-
	Subtotal	300	-	-	-	-	-	-
Universidade Anhanguera-Uniderp ²	Açu (2008)	-	-	-	-	-	-	-
	Caicó (2008)	-	-	-	-	-	-	-
	Currais Novos (2008)	-	-	-	-	-	-	-
	Goianinha (2008)	-	-	-	-	-	-	-
	Mossoró (2008)	-	-	-	-	-	-	-
	Natal (2008)	-	-	-	-	-	-	-
	Subtotal	Not informed ²	0	0	0	0	0	0
Faculdade Mauricio de Nassau (Nassau) ³	Natal (2010)	160	-	-	-	-	-	-
	Subtotal	160	-	-	-	-	-	-
Faculdade Talles de Mileto (Nassau Parnamirim) ⁴	Parnamirim (2014)	180	-	-	-	-	-	-
	Subtotal	180	-	-	-	-	-	-
11 College Education Institutions	21 campuses	2,524	458	923	976	1,089	757	4,203

Figure 3. Characterization of Nursing undergraduate courses in Rio Grande do Norte, Brazil, from 2009 to 2013.

¹The College Education institutions did not agree to participate in the research.
²The College Education institution did not report the number of vacancies. The e-MEC data only record the

general quantity authorized by the MEC, i.e. 16,800 vacancies offered and distributed into 240 sites, in 23 Brazilian states. Out of these sites, 6 operate in Rio Grande do Norte.

³The College Education institutions did not have a class of graduating students in the period in focus.

Data from Figure 3 show that, in Rio Grande do Norte, out of the 11 CEIs that offer undergraduate courses with classroom education, the total number of vacancies authorized by the MEC per year is 2,524. The vacancies offered in the DE modality were excluded from this figure, since the CEI responsible for courses in this modality did not authorize an interview with the coordinator, making it impossible to obtain such information.

Regarding the number of students graduated from the CEIs in the classroom education modality, we found out a total of

4,203 nurses, from 2009 to 2013. This total does not include those graduated from the CEI using the DE modality for the same reason mentioned above. Thus, with the expectation of an increased number of alumni from the CEI that will begin to form Nursing classes in the coming years, added to the number of alumni made available by the operating CEIs, a tendency of maintenance and/or increased number of nurses available to the job market is estimated in the state.

Number of graduated nurses and registrations in the COREN-RN from 2009 to 2013

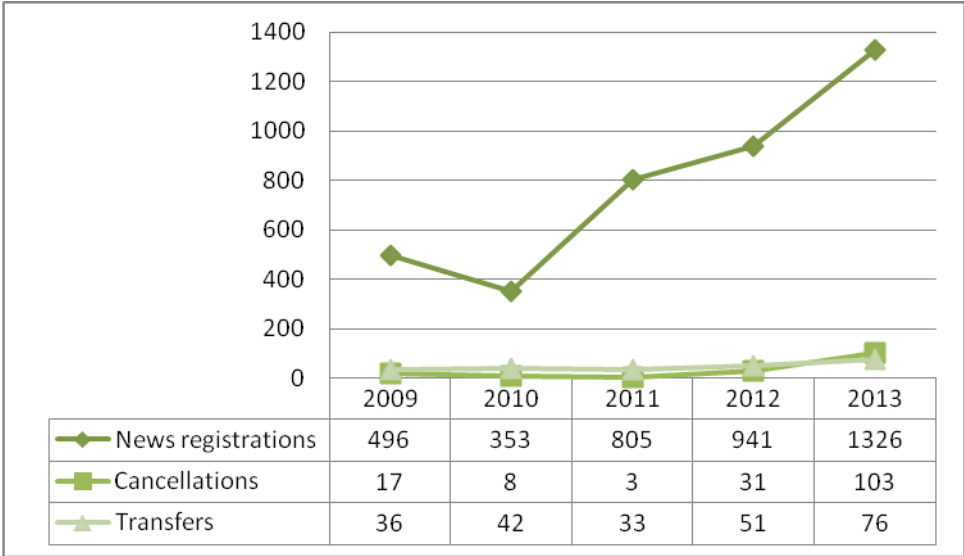


Figure 4. Number of new registrations, cancellations, and transfers of nurses per year (2009-2013).

Regarding the number of nurses available to the job market in nursing in Rio Grande do Norte, considering data from the COREN-RN, it was found that between January 1, 2009, and December 31, 2013, there was a significant increase in the number of new registrations, totaling 3,921 new nurses registered in the COREN-RN within the period (Figure 4).

The number of new nurses registered in the COREN-RN increased from 496 in 2009 to 1,326 in 2013. It is worth highlighting that the largest increase occurred in the years 2011 and 2012 and it reached its peak in 2013. By 2014, the number of new registrations got close to the figures from 2009 and 2010, closing the year with 533.

In Figure 4, there is also an increased number of cancellations of the professional registry and transfers to the Regional Nursing Council (COREN) of other Brazilian states and/or to other states in the country, corresponding to 162 and 238, respectively.

DISCUSSION

The findings of the study show that there was an expansion in the offer of Nursing undergraduate courses in Rio Grande do Norte between 2009 and 2013, in which private business is dominant. Rio Grande do Norte stood out with a large number of nurses graduated from the CEIs within this period, available to enter the job market in the state.

This growth occurred in the scenario of expansion in College Education in the country, after approval of Law 9,394/1996 - the Law of Guidelines and Bases of the Brazilian National Education (LDB). The approval of the LDB promoted structural changes in the Brazilian College Education, with implications for Nursing education. The LDB defined changes in the form of course operating authorization, accreditation, and assessment, and the CEI gained pedagogical, administrative, and financial management autonomy.²¹ The expansion in Nursing undergraduate courses in Rio Grande do Norte in private CEIs corroborated the findings of other studies

conducted in the country and in other Brazilian states, such as Piauí and Minas Gerais.^{9,14,18,22}

Government policies to increase access to College Education play a significant role in revising a historical framework of excluding a large part of the population from this educational level. On the other hand, government policies have also benefited private CEIs, by reducing the tax burden with tax abatement, something which contributes to generate profit in the sector.²³

As for the number of students graduating from Nursing undergraduate courses in the state between 2009 and 2013, in relation to the number of vacancies authorized by the MEC, we observe a certain similarity to the findings of Pierantoni and colleagues (2012).²⁴ According to the authors, the number of students graduating from Nursing undergraduate courses in Brazil between 2000 and 2010 did not follow the number of vacancies available, leading them to infer that vacancies to enter these courses were either not fulfilled or they had a high percentage of dropout students during the course. However, data on Rio Grande do Norte, when analyzed by year, do not signal a high discrepancy between the number of vacancies offered and graduated nurses.

The CEIs that offer Nursing undergraduate courses in the state show diversity in their political-administrative organization, legal nature, and education modality, as well as differences in vacancy availability and course time schedule availability.

In relation to the variation in the authorized vacancies and the number of hours of the courses offered, there are significant differences between the CEIs and between public and private CEIs. The growing number of vacancies in private business expresses the market premise observed in College Education in the country.

Regarding the quality of Nursing undergraduate courses offered by private CEIs, the provision of courses in the DE modality is a matter of concern, since nurses' education requires theoretical/practical/reflective skills, which presuppose follow-up and qualification to perform procedures that make them able to adopt actions aimed at health promotion, disease treatment and prevention, and rehabilitation, both individually and collectively.

Considering the e-MEC database, there were 3 CEIs providing Nursing education in the DE modality in Brazil; out of these, 1 was

extinguished and 2 are going through the extinction phase.²⁵ One of them offers courses in this modality in 6 sites distributed in Rio Grande do Norte, distributed in Rio Grande do Norte, in Açu, Caicó, Currais Novos, Goianinha, Natal, and Mossoró. The same CEI operates in 22 other Brazilian states, totaling 240 education sites and it has obtained authorization from the MEC to open 16,800 vacancies in the country.

This Nursing undergraduate course modality favors private business and profit generation. It is worth stressing that, until October 7, 2016, the only courses in the health field whose creation and authorization in the DE modality depended on the opinion of the Brazilian National Health Council (CNS) were Medicine, Dentistry, and Psychology, and this made things easier to create Nursing courses in the DE modality.

Nurses' education in this modality has been criticized by organizations that represent nursing, which justify it is not conceivable to educate a prospective SUS worker, who will provide its users with care directly in the most diverse scenarios, using only the DE resources. The examples below illustrate the position of nursing entities.

In 2012, the Federal Nursing Council (COFEN) issued a draft recommending to the MEC that Nursing undergraduate courses operating in the DE modality are not recognized.²⁶ In the same year, the Brazilian Nursing Association (ABEn), through the so-called "Belém Charter," as a result of discussions and referrals of the 13th Brazilian National Seminar of Nursing Education Guidelines, held in Belém, Pará, Brazil, asked for immediate intervention of the MEC in the more than 600 DE sites, developed by private CEIs in the country, suspending nurses' education in the DE modality.²⁷

At the 17th Brazilian National Seminar on Nursing Research, held in Natal, Rio Grande do Norte, Brazil, in 2013, the ABEn discussed again the situation of courses in the DE modality in its Working Group (WG) on the panorama of Nursing education in Brazil. This WG also agreed with immediate intervention of the MEC in the DE sites, developed by private CEIs in the country, suspending nurses' education in the DE modality.²⁸

Concerning the minimum number of hours of Nursing undergraduate courses, this study evidenced that public CEI meet the minimum workload established by Resolution CNE 3/2001. This document provides for the minimum of 4,000 hours and the procedures required for the comprehensiveness and

length of Nursing undergraduate courses. The private CEIs that offer courses in Rio Grande do Norte comply with the precepts of this resolution, except for the CEI that offers the course in the DE modality.

As for the availability of nurses in Rio Grande do Norte in 2013, the COREN-RN data recorded a total of 5,938 registered nurses, out of these 1,326 are new registered nurses. The COREN-RN registered nurses are increasing since 2006, with greater concentration in the period that provided this study with a basis.²⁹ The COREN-RN newsletter showed that in 2008 the total number of registered nurses was 1,180 and in 2009 this figure went up to 3.568. In 2009, the first private CEIs began to have students graduated from Nursing courses.

In the period of this study, from 2009 to 2013, the number of graduated nurses rose in the state, as well as the number of nurses qualified for professional practice, considering the number of COREN-RN registered nurses. Analyzing the behavior of new registered nurses showed to be an adequate indicator to capture if nurses graduated in the state remain in the job market of Rio Grande do Norte (employed or available to the market), migrate to other locations, or quit the profession.

Some countries educate professionals and they migrate in search of better working conditions, as in the cases of the Philippines, Portugal, and Canada.³⁰⁻³³ Other countries have difficulties to educate nurses and keep them to meet the country's needs, as in the case of England, which has imported these professionals from other countries. This phenomenon has been becoming a significant problem for the various countries in relation to the needs of health care services.

The findings of this study do not correspond to the international trends mentioned above, since Rio Grande do Norte shows an ascending curve of growth in the graduated workforce, which has remained in the state.

CONCLUSION

The findings of this study allow us to conclude there is a high availability of nurses in Rio Grande do Norte, influenced by expansion in the provision of Nursing courses in the state, where private business offers the largest number of graduates. These professionals are available to the nursing job market in Rio Grande do Norte, as evidenced by the number of professionals registered in the COREN-RN within the period under analysis.

The expansion of CEIs is related to government policies for College Education, in an attempt to increase the population's access to this educational level. This government policy has had repercussions on nurses' education, with a dizzying increase in the number of courses and vacancies made available in Rio Grande do Norte. However, to analyze the job market for nurses, it is worth relating the availability of these professionals to the job vacancies existing in the employing institutions within the state.

It is also worth considering that the study had limitations as for the survey of the total number of vacancies to enter Nursing undergraduate courses, as well as the number of nurses graduated in the state, since out of the 11 CEIs operating in Rio Grande do Norte, 2 did not authorize the collection of data. In addition, the number of undergraduate students attending courses in the DE modality was not calculated. In this way, the amount of nurses may be quite different.

As for its potential, this study contributed to identify the panorama of increasing numbers of CEIs, vacancies, and graduates from Nursing undergraduate courses in the state. If this growth trend is sustained, a worrying scenario of discrepancy between the number of graduated professionals and the absorption capacity of the local job market can be configured, as well as conditions may arise to increase work precariousness in this area.

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