

## Expansion of higher education in Brazil: increase in the number of Undergraduate Nursing courses<sup>1</sup>

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**Objective:** This study analyzed the increase in the number of undergraduate nursing courses during the last two decades due to the expansion of higher education in Brazil. **Method:** A records-based research concerning the legal frameworks that have driven this movement and a quantitative research that described the increase in the number of professional nursing courses. Data were analyzed using thematic content analysis (qualitative) and descriptive statistics (quantitative). **Results:** the political-ideological argument present in the regulatory documents, which points out higher education as a possibility to change the current social scenario, has not been reflected in the professional nursing field. The expansion of nursing courses has been unfolding in a disorderly manner and is concentrated in the private sector, with geographical inequality in the distribution of these courses. **Conclusion:** There does not seem to be a concern with the local needs and with a connection among education, research and extension, which compromises the quality of the education provided to future nurses.

**Descriptors:** Nursing; Nursing Education; Schools, Nursing; Higher Education.

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## Introduction

Nursing education in Brazil was institutionalized in 1923 with the creation of the Nursing School by the National Department of Public Health, when the first traits of a health policy emerged as a responsibility of the State<sup>(1)</sup>.

The process of economic-political reorganization that started in the 1930s highlighted the need for a qualified and healthy workforce, which resulted in the demand for healthcare services and the consequent increase in the number of nursing courses in the country. This increase was intensified during the 1940s due to the acceleration in the replacement of imports process and strengthening of industrialization<sup>(1)</sup>.

In this context, the State, given the rationale of healthcare services provided, launches Decree number 775/49, which regulates nursing education as a matter of law, proposing the increase in the number of colleges and making nursing courses compulsory in all medicine universities or medical college headquarters<sup>(1)</sup>.

In 1961, Decree number 4024/62, called the Law of Directives and Bases of National Education (LDB/61) was released, in which education became an obligation of public power and open to private enterprises, thus promoting the intensification of quantitative expansion of higher education in the country<sup>(1)</sup>.

The measures resulting from the LDB/61 were not sufficient to meet expectations concerning the qualification of human resources for the modernization of the country. Therefore, a study for University Reforms was started and resulted in the development of Decree number 5540/68 which, among other measures, supported the expansion of higher education.

This Decree, in turn, required higher qualification from the teaching staff, addressing the need for specialization to serve the technological area and the greater demand for healthcare services. Therefore, in addition to expanding the number of courses and places, the University Reforms also regulated graduate courses (MSc and PhD), with the purpose of qualifying personnel to attend to higher education needs<sup>(1)</sup>.

Also in 1972, the Ten-Year Health Plan for the Americas set, as one of its goals, the quantitative increase of nurses, requiring an increase in the number of places and the opening of new nursing courses in the country<sup>(2)</sup>.

The 1990s showed the change in the economic model with the strengthening of neoliberal policies, with the market rationale and the minimization of the State as their most damaging foundations, causing the universalization of social exclusion and priority of economic conditions over the social. Also in the 1990s, teachers, staff and students of Brazilian public higher education institutions reported the poor organizational and work conditions affecting the universities in the country.

It was in this scenario that the change of legal framework occurred, which seriously changed higher education in the country – the new Law of Directives and Bases of National Education (LDB) in 1996 – Decree 9394/96<sup>(3)</sup>, which established the guidelines and bases for national education, allowing the introduction of organizational, curricular and autonomy alternatives in the educational sector scope, besides the quantitative increase of Higher Education Institutions (HEI), courses and places.

In the same direction, the National Education Plan (PNE) for the decade of 2001-2010<sup>(4)</sup>, in line with the World Declaration on Education for All, presented a state policy focused on the expansion of higher education as a strategy for the development of the country.

Within these two legal frameworks (LDB and PNE), the education system in the country started to show strong growth in its services, with the indiscriminate opening of new courses, that is, without control for example of specific needs and demands for each region, which caused geographical inequality (regional unbalance and intra-regional) of these services, and also the privatization of the system and uncontrolled proliferation of courses and institutions increasingly more distant from the concept of university and minimum quality standards<sup>(1)</sup>.

As part of the university system, the nursing field followed the expansionist trend, encouraged by the LDB and the PNE, marked by an accelerated expansion of the courses provided, a growth in enrolments in relation to the private sector and a rationalization of resources in public institutions of higher education. In conclusion, an expansion that lacked strategic planning based on public policies, where the needs and regional healthcare peculiarities were considered.

It is important to highlight that the existing literature about this expansion of nursing courses has not been

advancing objectively, and has not been discussed in all of its implications on the education process of nurses. Therefore, the present study is necessary and relevant, and seeks to fill out the gaps in the literature, particularly in nursing-related journals, in addition to promoting an argument about the education process, taking into consideration the expansion of courses/places in the nursing field, thus assisting with the construction of new information for this area and providing support to public policies in the education and healthcare areas.

Based on the above, the present study was aimed at analyzing the increase in the number of undergraduate nursing courses during the last two decades, in the context of public education policies, taking into consideration the expansion movement of higher education in the country.

## Methods

This is an exploratory and descriptive study, with both qualitative and quantitative approaches. The qualitative stage consisted in a study about the interpretation of the legal frameworks (LDB and PNE) that promoted the movement concerning higher education expansion in the last two decades and their effects in the number of undergraduate nursing courses. The quantitative stage consisted in the listing and classification of nursing courses in the country and their trajectory in the context of public policies, considering the expansion movement of higher education in the country.

A records-based research was undertaken and granted a further understanding about the expansion movement, which required historical and socio-cultural contextualization. The use of documents in research permits adding the time dimension to social understanding, besides favoring the observation of the analysis process in relation to the evolution of people, groups, concepts, knowledge, behavior, attitudes and practices<sup>(5)</sup>.

The contents of documents were analyzed with the purpose of seeking relevant aspects that appear and reappear in various contexts, directing the codification of the subject of analysis that reflects the purpose of the research.

For quantitative data collection, a form was used with the following relevant information about the HEI

and the undergraduate nursing courses these institutions offered: administrative category of the HEI, year of course creation, states and geographical region.

Data were collected over the years from 2005 to 2011\*, initially through the website of the *Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira* of the Ministry of Education (INEP/ME), which provided access to a database with the register of all HEI in Brazil<sup>(6)</sup>. Since 2010, this website has ceased to provide online access to this database, which has been published through the e-Mec System<sup>(7)</sup>, from where the data then started to be collected. The information related to the quantity of nursing courses during the period between 1991 and 2004 were collected through a study undertaken by INEP/ME<sup>(8)</sup>, which analyzed the trajectory of graduation courses in the healthcare area in this period.

To present quantitative data, descriptive statistics through graphical analysis was used, in order to better show the expansion and trends of undergraduate nursing courses.

The study was based on the dialectic framework method, which provided the approach of the study scenario, recognized and related this scenario with a historical process in its peculiar dynamism, temporality and transformation. The dialectic method is considered a strategy to apprehend and comprehend an empirical social practice in relation to a certain social scenario, with its contradictions and consequences<sup>(9)</sup>.

Based on this understanding, the course expansion movement was analyzed in its dynamics and contradictions, based on the relevant historical context, as well as in the totality of its inclusion into public education policies.

## Results

For the quantitative analysis, two documents that are viewed as legal frameworks of the higher education expansion movement in Brazil in the last two decades were selected: the LDB/1996<sup>(3)</sup> and the PNE decade 2001-2010<sup>(4)</sup>. The analysis of these documents showed the political, economic and ideological dimensions of the higher education expansion movement in Brazil, within a historical and social framework that constitutes the society the HEI are inserted in.

\* The expansion movement of undergraduate nursing courses has been monitored by the researchers of the Research Group EXERCE from the Nursing College of the Federal University of Bahia since 2000, through data collection from the Ministry of Education's websites and official documents, and further entry into an electronic spreadsheet.

### Legal Frameworks of the higher education expansion movement in Brazil

The LDB/1996<sup>(3)</sup> set the guidelines and bases for national education and reaffirmed education as a duty of the State which should be inspired by the “principles of freedom and the ideals of human solidarity” aiming at “the full development of the people being educated, their preparation for exercising their citizenship and their professional qualifications”. It highlighted the “coexistence of public and private institutions of education”, defining that “education is open to private enterprises” and, therefore, “the guarantee of minimum quality standards of education”, the “connection between education, work and social practices” should be assured, in addition to “incentives to research work and scientific investigations, aiming at the development of science, technology and the creation and dissemination of culture, thus developing the understanding of human beings and the environment they live in”. The autonomy of HEI was also assured, allowing them to “create, expand, change and terminate courses; to increase and reduce places and develop course programs”. The obligation of inseparability between education, research and extension was introduced only for universities<sup>(3)</sup>.

This same legal provision established for the State the duty to “ensure the national evaluation process of higher education institutions [...]; authorize, recognize, accredit, supervise and evaluate, respectively, the courses offered by higher education institutions and the establishments that are part of their educational system” and also the responsibility to “develop the National Education Plan”, as well as to ensure the national evaluation process of higher education institutions<sup>(3)</sup>.

The National Education Plan (PNE), Decree number 10172 of 9/01/2001<sup>(4)</sup>, presented a State policy for the decade 2001-2010, based on three basic concepts, that is, education as a right for everyone, as a factor of social and economic development of the country and as a tool for fighting poverty and for social inclusion. Among other goals, an increased provision of places in higher education courses was established, compatible with 30% of young

people between 18 and 24 years of age, in line with the World Declaration of Education for All. The referred Plan also defined the need to “institutionalize a broad and diversified system of internal and external evaluation that encompasses both the public and private sectors and promotes improvements in the quality of education, research, extension and academic management”<sup>(4)</sup>.

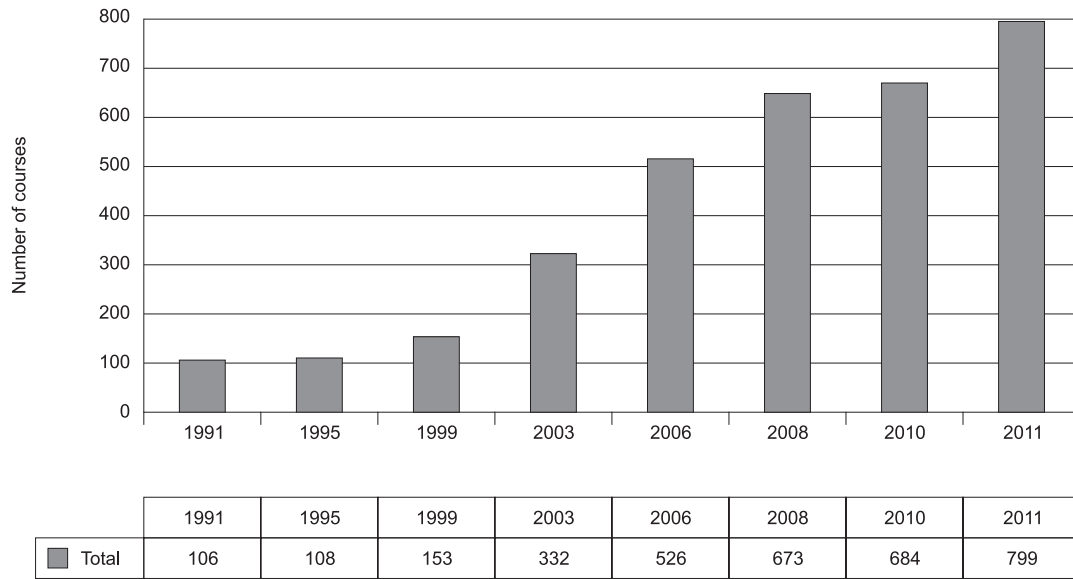
Despite recognizing the need to expand courses and places, the PNE recommended caution and planning of this expansion, aiming to achieve high-quality education and to avoid “the easy way of massification”<sup>(4)</sup>.

This Plan also recognized the contribution provided by the private sector, which already provided the largest part of higher education places and “has an important role to play, since the parameters of quality established by the educational system are respected”. It also highlighted the “uneven distribution of places by region” and noted that this inequality “is due to the concentration of enrolments in private institutions located in the most developed regions”. To correct this inequality, the PNE had the objective to “establish an expansion policy that reduces the existing inequalities in the provision of places among different regions of the country”<sup>(4)</sup>.

On the other hand, this legal document emphasized the “need to expand public universities to meet the increasing demand of students, particularly those with financial constraints, as well as the development of the research field [...] which depends on these institutions, given that they perform more than 90% of the national research and graduate programs”. In this expansion movement, the public sector should provide an increase in places that maintains a ratio of no less than 40% of the total<sup>(4)</sup>.

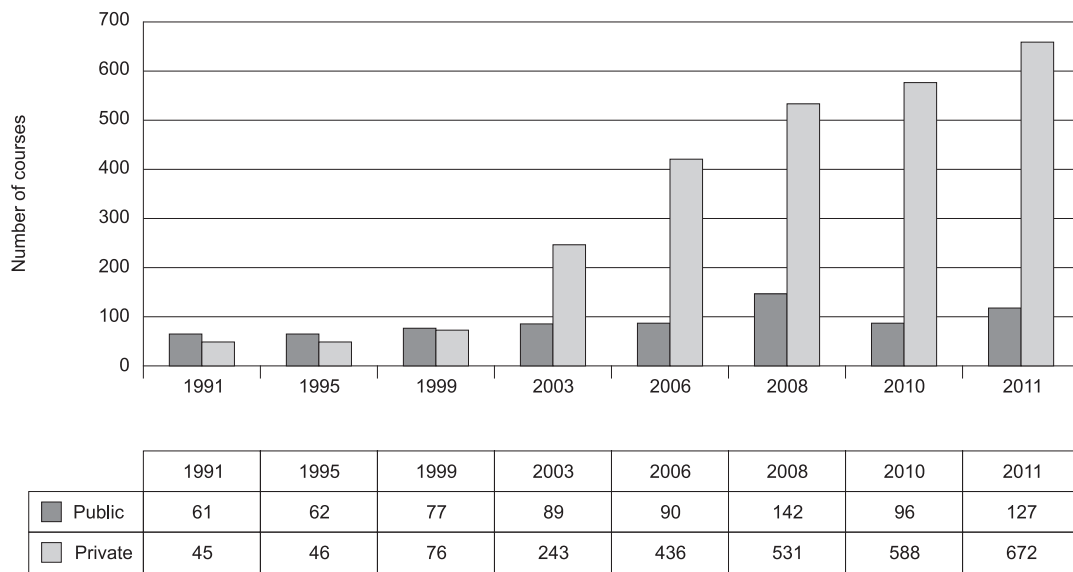
### The expansion of undergraduate nursing courses in Brazil

The charts below show the *expansion* of undergraduate nursing courses as a result of the higher education expansion movement in Brazil in the last two decades.



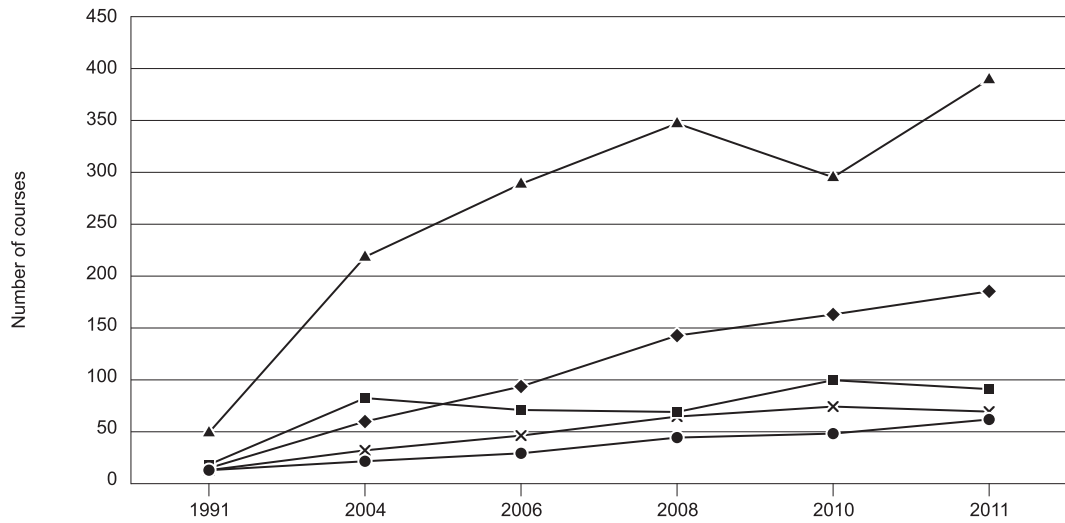
Source: INEP/ME/e-MEC

Figure 1 – Expansion of undergraduate nursing courses in Brazil from 1999 to 2011



Source: INEP/ME/e-MEC

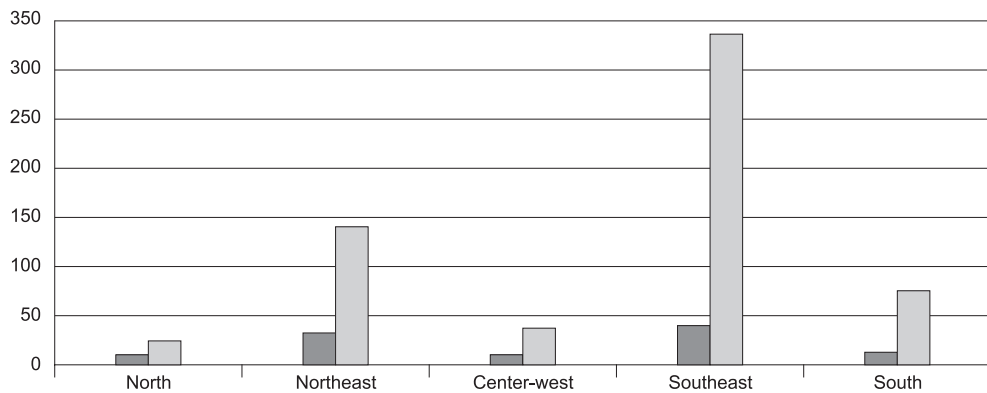
Figure 2 – Expansion of undergraduate nursing courses in Brazil from 1991 to 2011 by administrative category



	1991	2004	2006	2008	2010	2011
× Center-west	5	29	43	67	75	69
▲ Southeast	50	220	288	346	294	388
■ South	21	84	77	71	100	92
◆ Northeast	22	61	90	144	165	187
● North	8	21	28	45	50	63

Source: INEP/ME/e-MEC

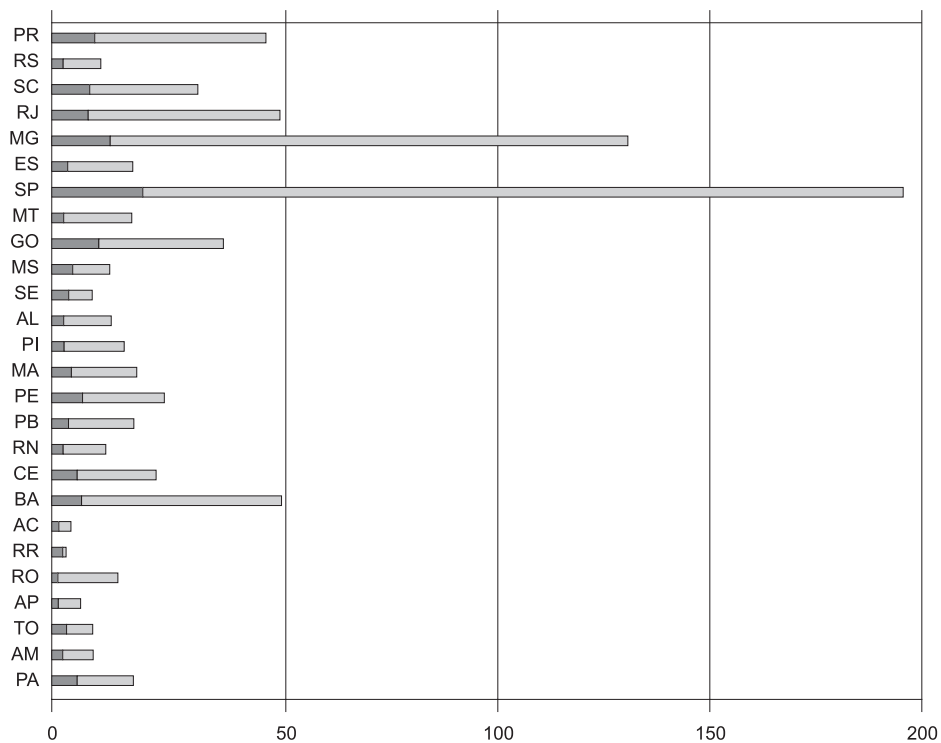
Figure 3 – Expansion of undergraduate nursing courses in Brazil from 1991 to 2011 by geographical region



	North	Northeast	Center-west	Southeast	South
■ Public	15	33	16	44	19
■ Private	48	154	53	344	73

Source: INEP/ME/e-MEC

Figure 4 – Expansion of undergraduate nursing courses in Brazil in 2011 by administrative category and geographical region



	PA	AM	TO	AP	RO	RR	AC	BA	CE	RN	PB	PE	MA	PI	AL	SE	MS	GO	MT	SP	ES	MG	RJ	SC	RS	PR
Public	5	2	3	1	1	2	1	6	5	2	3	6	4	2	2	3	4	10	2	20	3	13	8	8	2	9
Private	13	7	6	5	13	1	3	46	18	10	15	19	15	14	11	6	9	28	16	170	15	116	43	25	9	39

Brazilian states: PA (Para), AM (Amazonas), TO (Tocantins), AP (Amapa), RO (Rondonia), RR (Roraima), AC (Acre), BA (Bahia), CE (Ceara), RN (Rio Grande do Norte), PB (Paraíba), PE (Pernambuco), MA (Maranhao), PI (Piaui), AL (Alagoas), SE (Sergipe), MS (Mato Grosso do Sul), GO (Goiania), MT (Mato Grosso), SP (São Paulo), ES (Espírito Santo), MG (Minas Gerais), RJ (Rio de Janeiro), SC (Santa Catarina), RS (Rio Grande do Sul), PR (Parana)

Source: INEP/ME/e-MEC

Figure 5 – Expansion of undergraduate nursing courses in Brazil in 2011 by administrative category and state

## Discussion

The data presented in relation to the trajectory of the undergraduate nursing courses showed a strong and disorderly expansion in the number of courses during the period from 1991 and 2011, and particularly since 2001, as a result of the LDB and the PNE, demonstrating huge differences between the regions as a challenge the category needs to face.

The number of undergraduate nursing courses rose from 106 in 1991 to 799 in 2011, which represented an increase by 754% (Figure 1).

Also, the numbers of nursing courses offered in the public and private sectors were very uneven (Figure 2). This finding contradicts the PNE, which recommends an increase in the public sector at a ratio of no less than 40% of the total number of courses, so that a balance between the two sectors is maintained. The expansion of the public sector has become even more relevant,

given its responsibility for 90% of research and graduate programs in Brazil<sup>(4)</sup>.

On the contrary, based on the autonomy principles of universities, the LDB established the right for the universities to create new courses and freely increase the number of places in existing courses, thus supporting the expansion of higher education, even without considering the university model focused on the inseparability between education, research and extension, which caused dozens of universities to create new courses and freely increase the number of places, without proper regulation by the Ministry of Education. Such legal action supported the increasing expansion movement and limited higher education to educational institutions<sup>(10)</sup>.

This scenario has shown that, while supporting the quantitative expansion of educational institutions and increasing the number of courses and places, it also permitted the graduation of professionals without

the support of research and extension, contributing to a graduation that does not comply with the obligation of inseparability between education, research and extension and, consequently, without stimulating the creation of new thoughts and the curiosity that leads to the discovery of new things.

The inseparability between education, research and extension constitutes a strategy to cope with emerging and rapidly changing social demands, more closely approximating nursing education to modern, complex and unpredictable demands, which are characteristics of the healthcare work process<sup>(11)</sup>.

Inequality remained in relation to the analysis of course distribution across the different regions of the country (Figures 3, 4 and 5), a fact that had already been highlighted by the PNE, which proposed, among other measures, the establishment of a policy to reduce these differences.

This scenario was a reflection of regional economic development. It should be considered that the increase in the number of courses is directly proportional to the concentration of public investments, where the already established qualified human resource and pre-existing infrastructure is already considerably high. In places where there are higher Gross National Products or numbers of courses, the absolute value of investments has been proportionally higher<sup>(10)</sup>.

It is also important to mention that the LDB, while seeking to show the trajectory lying ahead, did not make propositions or corrections for the system, that is, no actions to improve the quality of education and/or its transformation were evident in the document. Furthermore, the actions to evaluate higher education adopted by the Ministry of Education, although well intentioned, have not been sufficient to induce and/or maintain the quality of education in the constitution process of a new perspective for nursing education in the country.

Monitoring and evaluation of higher education policies have been directed, through formal and bureaucratic mechanisms, to a course authorization and accreditation process, but without suggesting a systematic course performance monitoring mechanism, which is in contradiction with the PNE.

Therefore, the expansion of courses/places without quality control is far from being the only or the best way of educating and bringing knowledge. Providing courses without monitoring their quality can be risky, mainly in the healthcare field, where the life of the population is at stake.

Evaluation should not only be directed at observation and diagnosis of a situation, but mainly at the self-evaluation of those who live and participate in the institution, being educational in so far as it provides opportunities for action and transformation<sup>(12)</sup>.

## Conclusion

The higher education expansion policy, implemented in Brazil during the last two decades, has been showing compliance with market requirements and pressures by civil society groups to open new courses and opportunities of access to higher education, and not to meet the need for graduating qualified professionals to solve regional inequalities.

This policy, while segmenting higher education by encouraging the expansion of courses, naturalized this sector as service and, in most cases, limited higher education to educational institutions, without focusing on quality.

The actions proposed by this expansion policy sought to recreate the system by indicating the direction to be taken, however, without recommending actions to improve the quality of education and/or its transformation.

The undergraduate nursing course expansion movement has not been followed by a study about the specific needs and demands of each region. Rather, this movement has been reflecting the commercialization of education, which considers the needs and demands of the market (concerning health and education).

This finding suggests the need to recover the public power's capacity to appropriately regulate, evaluate and supervise the higher education institutions, whether they are private or public. Without this, it is impossible to consider improving the quality and establishing legal frameworks compatible with the goal of turning higher education, more specifically in the nursing field, into an essential factor in the quality of healthcare delivery to the population.

The need for new nursing professionals is a reality. However, while it is necessary to increase the number of nurses in the country, it is also necessary that these professionals graduate from courses of renowned quality, which are able to prepare nurses with the profile and ability to positively intervene in the healthcare models.

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