This article presents a retrospective analysis of the Brazilian Nursing concerning the professionalization of workers at technical level. It also provides some indication about the trends of professional education. There is a clear indication of increased intellectual and conceptual accumulation in the four decades the professional education in nursing at technical level has been part of the public policy agenda. This experience serves as reference for the formulation of new actions directed to other professionals of technical level who deliver direct care to the population. The study shows that there was reformulation of the nursing professional qualification issue, including in the discussion the need to improve the quality of educational processes and extensive supply of continuous education to workers already inserted in the process, in order to keep the constant changes in the Brazilian Health system.

DESCRIPTORS: education, nursing, associate; education, nursing; health manpower
INTRODUCTION

The aim is to present a retrospective analysis of the road Brazilian nursing has followed in the professionalization process of secondary-level workers and to provide some clues about where professional nursing development is heading in terms of technical training. This reflection was based on the analysis of the Brazilian Nursing Association’s (ABEn) document collection related to the period 1926-1976. We consulted theses, dissertations, books and scientific articles with a view to expanding and updating the description and contextualization of the landmarks in the trajectory of secondary-level nursing workers’ professionalization. The theses and dissertations were identified in the physical collection of the ABEn library, while the scientific journal articles and books published after 1980 were surveyed by means of descriptors in virtual libraries, especially www.bireme.br and www.scielo.br. Progress reports about PROFAE, available in the files of the Brazilian Health Ministry (HM), were also consulted to confirm information about the project.

This is an eminently qualitative documentary research. This approach can unveil new aspects of a theme or problem, using any written material about human behavior as a source of information(1). This method is appropriate in this situation, as the reconstruction of historical facts that constituted the professionalization trajectory of secondary-level nursing workers is possible through the records made in official documents, reports, theses and dissertations, more than in scientific articles, which are present from the end of the 1980’s onwards. As to merit, it is fundamental to highlight the centrality of secondary-level workers in the professional nursing category, and the historically and socially relevant aspects of the constant debate about the training of these workers.

Nursing work is characterized by its social and historical determination, integrating the practices of other health workers, with a horizontal and vertical technical division. The horizontal division is manifested by the sharing, cooperation and complementariness of their work in health services, integrating teams composed of other professional categories, such as physicians, pharmacists, nutritionists and others(2). The vertical division(3) occurs through different worker categories, according to the training levels that compose nursing - nurse with higher education, nursing technician with secondary education, nursing aid with basic education, which is an internal work division of the profession. The internal division of nursing work(4), which is a characteristic originated in its institutionalization as a profession, from the 19th century onwards, deserves to be highlighted because of its influence on daily work, on the relations with other health areas and on the quality of care. In the division of responsibilities and roles (vertical division), nurses are in charge of teaching, supervision and management, while technical and auxiliary staff carry out most care activities.

Three important aspects stand out about the current context of the development and trajectory of the nursing profession: the position of the nursing category, manifested through its class organs, about the professionalization of technical-level workers, the regulation of professional exercise through the laws and main initiatives already taken by the public power to induce and promote the professionalization of secondary-level nursing workers in the health sector.

PROFESSIONALIZATION OF SECONDARY-LEVEL WORKERS AND ITS HISTORICAL CONSTRUCTION

The search for the professionalization of secondary-level nursing workers has been a priority on ABEn’s and the public policy agenda, especially in health and education, particularly from the 1970’s onwards. In 1948, ABEn recommended that nursing education in Brazil would demand primary education level for nurses and secondary education for nursing bachelors. Records indicate particular emphasis on this debate in the 1950’s and 1960’s, always in the light of each period’s Law of National Educational Directives and Bases(5).

In this period, nursing workers’ education was regulated by Law 775/49, which determined nursing education in Brazil through two courses: higher education training for nurses and secondary education for nursing aids, to be administered by public schools. Without making any claim of looking at this issue in great depth, we should highlight the detailed analysis already made about the political, social and economic circumstances that gave rise to the official recognition of the course for nursing aids, through the publication of the above mentioned legal instrument, as well as the debates by nursing leaderships in that age, emphasizing the “considerable rejection of the idea
of permitting another course for nursing staff” as a strategy to fight for the preservation of the spaces nurses worked so hard to conquer, as opposed to the pressure these nurses felt to solve the problem of a lack of nursing staff to attend to the country’s needs\(^6\).

This law interiorized some conflicts in the composition of nursing, in its vertical division and in education mechanisms: a) it proposed the establishment of the two nursing courses in colleges; b) it authorized the schools to receive candidates with a basic education degree only; c) it defined that nursing and nursing aid courses would be supervised by travelling inspectors with a nursing degree, subordinated to the Directory of Higher Education of the Brazilian Ministry of Education (MEC); d) the State would grant resources to schools funded for nursing education and would expand resources for existing schools; and e) it regulated obstetric nursing education that functioned independently of nursing education\(^5\-\(^6\).

In view of the great need to train nursing professionals in a context of a population with low education levels and insufficient places in higher education, changes were proposed in the degree requirements for education, including the creation of the nursing aid course and State subsidies to induce and stimulate the creation of new nursing schools. The nursing course only reached the higher education level in 1962 because, although “this law started to require a secondary education degree to enter, given the scarce demand for the course, this requirement was delayed for seven years and then for another five years, accepting a mere primary education degree as an admission requirement”\(^7\). The Law of the Professional Nursing Exercise itself, Law 2995/56, issued in 1956, extended the deadline that restricted requirements for registration in nursing courses.

The historical trajectory of the legal mechanisms that constituted technical nursing training includes Law 2367/54 and Bill 3.082/57. The first determined on secondary-level nursing education in mobile courses. “These courses could be held in places where there were no nursing schools, but which had hospitals with actual possibilities to train aids”\(^5\). The Bill, on the other hand, which was analyzed by the Executive Power in 1957, established nursing and obstetrics teaching, guided by the offering of professional nursing education to young people with different educational backgrounds. This Bill waited for the dissemination of the Law of National Educational Directives and Bases (LDB).

In 1962, when LDB 4024/61 was issued, which defined Brazilian education at three teaching levels (primary, secondary and higher), the large-scale education of technicians at secondary-level in any activity area became a priority in the country. In this Law, article 47 deserves special attention, which regulated technical courses in the industrial, agricultural and commercial areas and delegated to regulation of other areas to the different teaching systems. In 1963, ABEn’s Legislation Commission sent an extract of a study called “Observations about auxiliary nursing teaching in the country” to the competent authorities, affirming that ABEn wanted three course levels: “maintenance of the current higher and nursing aid levels; and the creation of an intermediary course, with a possible duration of three years, to train technicians for hospital nurses, possibly in two years, with a third additional year for obstetric and public health nurses”\(^5\). Both the duration as the curriculum should be approved by a national entity, guaranteeing the validity of the nursing technician degree across the country. The course would be valid as a secondary-level degree.

We highlight some points in this debate due to the contradictions they contain. The first, extremely positive, is ABEn’s concern with the quality of nursing education and development, always supported by the legitimate discussion about the profession’s search for social and economic recognition, for the construction of its own knowledge, for the primacy of its activities and for its constant qualification. The second is that, in this search for the recognition of the profession, a conflict is present: the nurses’ desire for expansion in quantitative terms faced the obstacle characterized mainly by the Brazilian female population’s low education level, which historically constitutes the main part of the nursing work force. Thus, technical education was faced as a factor that could decrease the demand for the higher education nursing course. This position was taken by a group of nurses who, even in view of the concrete demands posed by the health sector to increase the number of nursing technicians, sustained a corporative position, attending to this need, a position that is still present nowadays. The third point is that, in view of the lack of consensus about technical nursing education, the education processes seem to have been conducted by initiatives taken by the public power, with the support of the Law of National Educational Directives and Bases, without a nursing leadership.
INCREASED EDUCATION VERSUS HISTORICAL DEFICIT

According to records, the first course for nursing aids was created at Ana Neri School of Nursing, in 1941, before the regulation of nursing education, which only occurred in 1949\(^5\). The creation of the first technical schools that would graduate nursing aids, although with possible cases of imprecision in the records, occurred in 1965-66, with special attention to the following initiatives: a) In 1965, the State Council of the State of Guanabara creates the Secondary Course in Nursing, and the same was done by the Pernambuco State Education Council; b) In 1966, the State Councils of Goiás and Paraná create, respectively, the technical course at the São Vicente de Paulo School of Nursing in Goiânia and the Experimental Technical Course at the “Catarina Labouré” Technical Nursing School\(^5\).

The curriculum of courses for nursing aids has also been discussed with a view to the adequate education of nursing professionals. The main points are related to the prerequisites for entry, mainly in terms of degree, and the content itself. In view of the low education level of the population interested in courses for nursing auxiliaries, historically, recommendations have been made to compensate for deficiencies, including subjects like Portuguese and mathematics. The curriculum contents, on the other hand, are defined according to each school’s reality, but the main question has been the relative proximity of this education with the higher-level course and with the need for a better preparation in realities where nurses do not exist. This granted elasticity and plasticity to the curriculum. These concerns gave rise to many devices that would regulate this education, such as Opinion 3814/76, by the Federal Education Council, which set the minimum curriculum contents for nursing aids. In the next year, Resolution 07/77 was published, which established the nursing aid and nursing technician courses as secondary-level degrees, as well as Resolution 08/77 by the Federal Education Council, which permitted the preparation of nursing aids at primary level to attend to the emergency situation\(^8\).

LDB 9394/96 introduced changes in professional education, which started to be considered as articulated with different forms of education, with work, with science and technology\(^9\) and this, together with secondary education, was initially regulated by Decree-Law 2.208/97 and currently by Decree 5.154/04.

The creation of schools for training technical professionals remains a concern in the education movement of nursing professionals, because it is confronted with the question about the quality of the schools’ educational infrastructure, with the geographic distribution and with the relation between the public and private sectors. Nowadays, the network of technical education schools in Brazil is mainly characterized by the strong concentration in the private sector in all regions, with stronger evidence in the Southeast. The public sector, although with a smaller share, makes the largest investments at state level, with very little participation by the municipal sphere. The nursing subarea has the highest number of courses in the country and in all Brazilian regions\(^6\).

THE REGULATION OF PROFESSIONAL PRACTICE: STRATEGY TO QUALIFY ATTENDANTS

As to the regulation of the professional practice of secondary-level workers, Law 2604 stands out, issued in 1955, which regulated the category’s professional exercise until 1986, as well as Law 7.498/86, which regulates practice from that year onwards. Before the issuing of Law 2604/55, each of the professions that composed nursing had its own regulation. Thus, there were: (a) diploma nurses - regulated by Decrees 20.109/31 (determined on nursing teaching in Brazil and limited its exercise) and 21.141/32, Law 775/49 and Decree 27.426/49; (b) nursing aids - regulated by Law 775/49 and Decree 27.426/49; (c) licensed practice nurses - regulated by Decrees 22.257/32 and 23.774/34; (d) nurse practitioner - regulated by Decree 8.778/46\(^5\). This Law entitled six professional groups to practice the Nursing profession: 1) nurse; 2) obstetric nurse; 3) nursing aid; 4) midwife; 5) practice nurse; 6) practice midwife and creates the Federal Nursing Council.

While the first Law recognizes and regulates the professional practice of a given composition of the nursing category, the second departs from the existing reality and gives another direction to this composition. Law 7498/86 established the different subcategories that compose the nursing category - the nurse (higher level), the nursing technician (secondary level), the nursing aid (primary level) and the midwife-, recognized the existence of nursing workers acting without adequate professional training - the Nursing Attendant -, and set a term of ten years to solve these professionals’ situation. The approval of this Law was not immediately
accompanied by effective and universal policies to grant nursing workers access to professional qualification. Once the legal term has expired, a technical-political discussion process starts in the national sphere, about the quality, problem-solving capacity and continuity of the nursing functions carried out in health establishments.

The different positions in this debate were characterized as follows:  

a) Nursing leaderships and supervising entities if professional nursing practice exerted pressure on employers to end the practice of hiring nursing attendants and to find an immediate solution for all workers who were active in this condition of aids without certification, which these workers translated as being equal to resignation;  

b) The unions representing uncertified workers exerted pressure on the government to give more time and offer resources in order to facilitate their transition to nursing aids, according to legal determinations;  

c) Employers started to rationalize the use of nursing aids to a maximum and, in many cases, used ruses to hide that they were employing attendants and even hired them under different names*.  

The characterization of this scenario is complemented by the situation of human resources in the health sector in the period of the Health Reform. The main characteristic was the distortion in the occupational structure, with the increasing offering of university-level professionals, mainly physicians; the reduced offering of secondary-level professionals and the high degree of incorporation of staff without any qualification whatsoever. As a result, there was a strong polarization of the work force, with qualified professionals, physicians on the one hand and less qualified professionals like attendants and similar kinds on the other. Some data illustrate this problem. In 1976, nursing attendants occupied 35.8% of all health jobs; decreasing to 29.9% in 1984; 13.8% in 1992 and 5.3% in 1999(11).

**ROUTES ALREADY FOLLOWED FOR THE PROFESSIONALIZATION OF SECONDARY-LEVEL WORKERS**

The State has assumed initiatives for the professional training of nursing technicians. Special attention is given to those implanted at national level: Program for the Training of Nursing Aids in the North, Northeast and Central West, implanted in 1963 by the Health Ministry (HM) in an agreement signed with the Ministry of Education, the Pan American Health Organization (PAHO), the World Health Organization (WHO) and the International Childhood Rescue Fund (ICRF), now called the United Nations Children’s Fund (UNICEF), which continued from 1963 to 1973(5); the Large Scale Health Staff Training Program (Large Scale Project), implanted in different Brazilian states(12-14); the progressive creation of Technical Health Schools in the Single Health System (ETSUS) and Training Centers for Human Resources in Health (Cefor)(12-13) and, finally, the Professionalization Project of Nursing Workers (PROFAE), funded by the Inter-American Development Bank (IDB) and the National Treasury, implanted by the HM in all Brazilian states(14).

First Period: 1960’s and 1970’s

In 1963, the Training Program for Nursing Aids in the North, Northeast and Central West was implanted, aimed at training nursing aids for medical-health care services in the North, Northeast and Central West, through financial aid to the schools. Although the results were not relevant to solve the quantitative deficit of nursing aids(5), it is important to highlight the debates that occurred at that time, which already indicated aspects orienting the qualitative improvement of the education. In the same year, studies carried out and discussed during the XV Brazilian Nursing Congress recommended the improvement of the teaching staff and the revision of these courses’ curriculum, including courses on public health and maternal-infant health. Moreover, they recommended the offering of courses at secondary education level.

In 1967, a seminar was held in Recife to assess the first five years of the program, which recommended 1) authorizing nursing aid courses to offer intensive courses who had finished the second year of secondary education; 2) adding devices so as to allow schools to offer the exclusively professional one-year course as well.

In 1971, another assessment seminar was held in Curitiba, during which the following

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* As the first step in the development of PROFAE, a research was carried out that characterized the demand of workers for qualification, which made it possible to identify and verify a decrease in the number of contracts of Nursing Attendants in the health job market, in parallel with an increase in the number of workers hired under other names, such as: Attendant, Laboratory Attendant, Scrub Nurse, Health Service Aid, Public Health Aid, Stretcher-Bearer, Operational Aid for Different Services, Blood Bank Aid, Health Aid, Health Agent, Hospital Agent and Hospital Service Aid.
recommendations were made: 1) the elaboration of a student assessment system, using the models contained in the Guide on the Curriculum of the Intensive Nursing Aid Course as a reference; and 2) the teaching staff should be better qualified, completing their education with a teaching diploma in nursing.

Second Period: 1980’s and 1990’s

In this second period, from 1981 onwards, the Large Scale Health Staff Training Program (Large Scale Project) was implanted, motivated by the observation that there were about 300 thousand health service workers, practicing health actions, without any kind of qualification, which represented 50% of the health work force in the 1970’s. This project was marked by detailing and methodological deepening, departing from the characterization of the workers already inserted in the services. It previewed the integration between the subject and object in the work environment, supported by the theoretical constructions on adult learning, respecting the subjects’ perception of reality, without denying their knowledge coming from practice, with a view to (de)constructing and reconstructing new and more elaborate knowledge. The contents were organized in four modules called “Curricular Guidelines for Nursing Aid Training”, which became known as the Integrated Curriculum, due to its methodological design and pedagogical model. It proposed the realization of specific pedagogical training for the teaching staff, which included higher-education professionals inserted in services. This training proposal was assumed by State Health Secretaries (SHS) and federal universities during the 1980’s and 1990’s. The experience of SHS from the states of São Paulo and Rio de Janeiro and from the Federal Universities of Minas Gerais and Santa Catarina are ratified in studies that analyze the social and economic results related to the experience of educating young people and adults, who demanded differentiated educational strategies and the acknowledgment of daily experience in these workers’ education process (12-13,15-16).

The progressive creation of public technical schools, under the responsibility of the Health Secretaries, which occurred in the 1980’s and 1990’s, can be accredited to the experience of implanting the Large Scale project. These schools were conceived as “function” schools, with lean and flexible technical-administrative structures, using the physical, material and human resources of the health system itself, with the mission to train professionals for health work and retrain technical-level professionals. Their creation was legally supported by Law 5.692/71 and Opinion CFE 699/72 about adult education, additional education, professional qualification and the function school. Nowadays, they are supported by educational legislation and represent important public spaces for professional health training in Brazil*

In 1996, the National Professional Education Plan was implanted by the Ministry of Labor - PLANFOR, with resources from the Worker Support Fund, used for the professionalization of health workers, funding local initiatives proposed by schools and colleges. Information about its results was not surveyed in this study due to access difficulties.

Third Period: From 2000 onwards

In this last period, the PROFAE was implanted, initially motivated by the estimated number of 250 nursing care workers without formal qualification in 1999, as verified by the realization of two national registers to survey the actual demand. Existing Brazilian public and private technical schools were used to offer, in four years, professional training courses for all registered workers. This initiative made it possible to offer, nursing aid courses, complementary nursing aid courses for nursing technicians and complementary basic education courses and graduated approximately 280 thousand workers.

The program was put in practice through specific actions aimed at providing high-quality training in a decentralized and controlled way. The following stand out: a) funding of courses with resource transfers to contracted professional training schools; b) formulation and distribution of didactical books for students from the nursing aid course, which contained the contents needed for their training; c) creation and implantation of the Specialization Course in Pedagogical Training in Technical-Level Professional Education for Health, offered

* Until the start of 2006, there were approximately 34 schools affiliated with the Secretaries, distributed among the states of São Paulo, Minas Gerais, Rio de Janeiro, Espírito Santo in the Southeast; Paraná and Santa Catarina in the South; Goiás, Mato Grosso, Mato Grosso do Sul and Distrito Federal in the Central West; Bahia, Rio Grande do Norte, Ceará, Pernambuco, Paraíba, Maranhão, Piauí and Sergipe in the Northeast; and Acre, Tocantins, Roraima, Amazonas and Rondônia in the North.
to all nurses inserted in the health services that acted as teachers; d) monthly supervision of the courses by nurses and other related professions, hired through state institutions, with a monitoring and monthly assessment methodology that provided the national management with information for the decision-making process; e) creation of the journal *Formação*, aimed at registering experiences, socializing information and stimulating knowledge production in the area of professional training for the health sector; f) creation of technical and financial stimulation mechanisms for the modernization of public technical schools; g) elaboration of an assessment and certification system for graduates from the nursing aid and technician courses*.[14]

It can be affirmed that the PROFAE reached its main results in terms of training a considerable contingent of nursing aids and technicians, educating specialist nurses to act in teaching and modernizing public spaces for technical training in health. However, studies assessed the impact of the professional training of workers graduated from the PROFAE on the quality of health services, with a view to getting to know and understanding the relations between professional training, job context and quality indicators - incidence of pressure ulcers, incidence of medication errors and performance of nursing techniques*.[17-19]*. The results indicate that, despite training a considerable number of workers, the context of nursing work still demands "expressive investments in professionalization and permanent education, because both the workers’ technical qualification and the care context are jeopardized, with infrastructural inadequacies, especially in the staff and in work organization, with insufficient follow-up by nurses"*.[17] The recurrence of quite problematic care quality indicators, such as high error rates in medication administration by nursing workers, even after training processes, indicate that professional training strategies not accompanied by changes in the organization of practices and improvements in work conditions are insufficient to improve the quality of health services*.

**SYNTHESES AND NEW QUESTIONS**

In analyzing the scenario, it can be appointed that the nursing category has always debated on secondary-level professional training in the sphere of its class organs, despite a lack of consensus about a favorable position towards its stimulation. This is due to the understanding that its growth is opposed to nurses’ quantitative and qualitative growth. However, this position attends to the increasing needs which, as demonstrated by job market data, indicate the progressive incorporation of secondary-level professionals in the sector. The State's stimulus and funding of nursing aid training dates back as far as the 1960’s, and has always been assumed in partnership between the health system and the education system. The first, with funding and with the demand and absorption of workers, and the second with the school institutions that make up the system and the whole legal framework that grants regularity and legality to the education processes. Thus, professional nursing education at technical level, in occupying the agenda of public education policies for human resources in health for more than four decades, has also accumulated intellectual and conceptual maturity, which can serve as a reference framework for the formulation of new educative actions directed at other secondary-level professionals involved in direct care to the population. It can be said that the PROFAE, as the most recent government proposal to intervene in the reality of secondary-level professional training in nursing, joined the main demands, recommendations and lessons from the proposals implanted before and its results provoked a redrawing of the professionalization problem of technical level workers.

Professionalization and professional qualification of secondary-level workers represents the best course to face the increasing incorporation of new technologies and changes in the technical division of work, as the work force goes through successive and constant alterations in terms of occupational composition, qualification and education, and the population’s health care demands are also modified. The quantitative insufficiency of trained workers - at least in nursing - does not seem to be the problem, indicating that the debate scenario should be occupied by the quality and continuity of education. Therefore, technical education schools in health should see to the improvement of education processes, including the Constant training of the teaching staff,

* The methodological design and result of the research in terms of nursing care quality indicators (medication administration errors, incidence of pressure ulcers and performance of nursing techniques) can be read in the Journal *Formação No 6*, available on http://portal.saude.gov.br/portal/sgtes
the reformulation of its pedagogical projects, the stimulus to construct new knowledge about health work in its different dimensions, the creation of didactical materials among other strategies. It means saying that the articulation between education and work needs to be translated into joint actions of schools, health services, management and social control instances, directed at professionals who are already inserted in the job market.

The expansion of the activity base of health and nursing, which has taken form through the expansion of the service offer and the incorporation of new technologies, requires not only adequate and permanent training, but also the development of continuous knowledge construction processes, as the quality of care and education are related with critical reflection about the reality of the work process and the capacity to intervene and propose changes in this reality.

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