



## Training and work characteristics of mid-level nursing teachers

Características de formação e trabalho de professores de nível médio em enfermagem

Característica de formación y trabajo de profesores de nivel secundario en enfermería

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This study aimed to identify teacher training and professional performance of teachers in mid-level nursing training schools. A quantitative study performed in 2012 through questionnaires with 41 teachers from eleven mid-level nursing training schools in the states of Rio Grande do Norte and Santa Catarina. General characteristics of the teacher, initial and continued education and work characteristics are presented. It is concluded that it is necessary to point out guidelines for the training/graduation of mid-level professionals and educators, and it is also necessary to globally value teachers, not only those acting in the federal network.

**Descriptors:** Nursing; Teaching; Faculty Nursing.

Objetivou-se identificar a formação pedagógica e atuação profissional de professores de escolas de nível médio em enfermagem. Estudo quantitativo, realizado no ano de 2012, mediante aplicação de questionário. Participaram 41 professores de onze escolas dos estados do Rio Grande do Norte e Santa Catarina, Brasil. Apresentam-se características gerais do professor, formação inicial e continuada e características do trabalho. Conclui-se que é necessário apontar diretrizes para a formação profissional de nível médio e formação docente, assim como é necessário valorizar de forma global os professores, não apenas os que atuam na rede federal.

**Descritores:** Enfermagem; Ensino; Docentes de Enfermagem.

El objetivo fue identificar la formación pedagógica y el desarrollo profesional de profesores de escuelas de enseñanza de nivel secundario en enfermería. Estudio cuantitativo, llevado a cabo en 2012, mediante aplicación de cuestionario. Participaron 41 profesores de once escuelas de los estados del Rio Grande do Norte y Santa Catarina, Brasil. Se presentaron características generales del profesor, formación inicial y permanente y características del trabajo. En conclusión, es necesario señalar directrices para la formación profesional de enseñanza secundaria y formación docente, así como es preciso valorar de manera global los profesores, no apenas los que actúan en el sistema federal.

**Descritores:** Enfermería; Enseñanza; Docentes de Enfermería.

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## Introduction

According to Law No. 7498 of 1986, mid-level nursing corresponds to the auxiliary and technical categories<sup>(1)</sup>, and from the Decree nº2208 of 1997, it is now only a recommended technical graduation. These mid-level and professional-level personnel correspond to 45.50% of the Brazilian nursing workforce and have the prerogative of participating in the nursing care program, running nursing care actions (except for specialized nursing functions), participating in guidance and supervision of lower level nursing functions and participating in the health team<sup>(1-2)</sup>.

Trained/taught by nurses, mid-level professionals have the curricular organization under the guidance of the Advisory Board/Commission of National Education/Basic Education Chamber N.16 of 1999 in transition with Resolution N.06 of 2012, which provides curriculum guidelines for vocational education; their formation/training also takes under consideration the National Curriculum Guidelines for Health Technical Education. These guidelines consider instruction for development of functions and sub-functions, designed for: diagnosis support, health orientation, protection and prevention, recovery/rehabilitation and health management<sup>(3)</sup>.

Still referring to curriculum proposal of mid-level nursing professional training, it is considered important to take into account the context of change promoted by Law No. 8080 of 1990 establishing the Unified Public Health System, which directs changes in health management, assistance and training, as well as the recent expansion of professional nursing education in the context of private Technical Schools Network associated with market expansion driven by the increase in jobs and demand for mid-level nursing professionals, especially in the Family Healthcare Program.

Based on the assumption that this scenario has expanded professional performance opportunity for nurses, a large portion of these professionals may possibly work as teachers during the beginning

of their careers. Given the magnitude and importance of this workforce, the development of this research is relevant, questioning: what is the profile of mid-level nursing teachers with respect to teacher training and professional performance?

In this scenario of changes and challenges where teaching presents as a side challenge with demand for expertise that transcends disciplinary and technical-scientific knowledge, the objective of this study is to identify teacher training and professional performance training of medium level nursing teachers in the states of Santa Catarina and Rio Grande do Norte, Brazil.

## Methods

A quantitative study of exploratory and descriptive approach conducted with eleven medium level nursing training school teachers located in large cities in the states of Rio Grande do Norte and Santa Catarina in the period from May to December 2012.

These states and their cities were highlighted because of the collaboration between two Graduate Programs in Nursing in Brazil: the Graduate Nursing Program at the Federal University of Santa Catarina and the Federal University School of Nursing of Rio Grande do North, to perform an inter-institutional doctorate, as well as the interface of schools with the work of masters and doctoral students in the line of research training and teacher development in health and nursing.

The data were collected from nursing school records provided by the sections of the Brazilian Association of Nursing of the respective states. To develop the study, fifteen schools that were registered were counted, however only eleven (n = 11) schools responded to the study, thereby constituting a convenience sample<sup>(4)</sup> composed of six public and five private schools. Teacher's emails who taught classes in nursing high school courses were obtained from the schools.

Data collection was conducted by e-mail throu-

gh a questionnaire with open and closed questions built in *Google Drive*. The questionnaire had two parts; the first associated to personal characteristics and academic training for nursing practice and teaching. The second part investigated the professional practice as a nurse and/or as a teacher.

E-mails were sent to all teachers in order to broadcast, raise awareness and invite them to participate in the research. Concomitantly, information and deadlines of the guidelines for the return, term of consent and commitment, as well as the access link to the questionnaire were sent. 129 professionals were able to participate in the research, and 41 teachers responded to the survey, constituting the universe analyzed.

In order to analyze the information, the study variables were divided into four groups: discrete quantitative variables, dichotomous variables, ordered qualitative variables and nominal qualitative variables. Groups of variables were applied to calculate absolute and relative frequency, basic descriptive statistics calculations were made in Excel®. In the first three groups of variables, frequency calculations were performed prior to organization of the material. The data of the group of nominal qualitative variables which constituted the open questions of the study were organized and a preliminary grouping of related answers prior to the frequency calculation was performed.

The results of frequency calculations were exposed to steps of pre-analysis, material exploration and interpretation were then proposed as an analytical process<sup>(5)</sup>. This movement led to the emergence of three categories: characteristics of mid-level nursing teachers, initial training and continuing education of mid-level nursing teachers for the teaching profession and characteristics of the work as a teacher in mid-level nursing. Due to the volume of data and variables, and to enhance visualization and understanding of the data, we chose to present the data in each category as tables.

Ethical guidelines have been met. The study was approved by the Ethics Committee of the Federal

University of Santa Catarina under Opinion No. 28715/2012.

## Results

Table 1, corresponding to characteristics of mid-level nursing teachers presents the results of the variables: age, work experience as a teacher in technical education and training, the presence or absence of other employment in addition to work as a mid-level teacher and the remuneration.

**Table 1** - Characteristics of mid-level nursing teachers

Variables	n (%)
Gender	
Female	37 (90.2)
Male	4 (9.8)
Age (years)	
20 - 39	22 (53.7)
40 - 59	19 (46.3)
Experience in teaching nursing (years)	
≤ 5	15 (36.6)
6 -14	18 (43.9)
≥ 15	8 (19.5)
Teachers with another side job (n=28)	
Working in the education area	16 (88.8)
Working in the health area	12 (11.2)
Main income source	
Education institution	25 (61.0)
Health institution	15 (36.6)
Private Business	1 (2.4)
Income (Minimum wages)*	
1 - 2	2 (4.9)
2 - 5	13 (31.7)
5 - 9	18 (43.9)
> 9	8 (19.5)
Mid-level nursing teachers years of experience (n=36)	
≤ 5	16 (44.5)
6-14	20 (55.5)

\* Minimum wage at that time of the study was equivalent to R\$622 and U\$234

When asked about their motivation to become teachers, most mention that they always had the desire and thought they had a vocation for this kind of work (26.8%), while some also pointed to professional achievement in the activity (17.1%). The motivation also came from experiences in their course work (14.6%) and financial need (14.6%).

With subtle percentage difference, participants usually work longer in mid-level teaching where it is likely they began their teaching activity. However, the more experienced teachers with over 15 years of experience appear as a minority, which can be an indicator that teaching at the secondary level may have an initial and transient characteristic. Another interesting finding is the fact that most teachers have other employment, whether in schools or other health institutions or educational institutions, as most pointed out in the second link.

Table 2, Initial and continuing education of mid-level nursing teachers for the teaching profession, we can see that the majority of teachers are qualified professionals graduated in the 2000s, in public institutions and with some kind of pedagogical preparation before entering the field. This preparation for most was their degree. It is relevant to highlight that the majority have interest in continuing training and education, especially through *stricto sensu* post-graduation programs.

**Table 2 - Initial and continuing education for mid-level teachers**

Variables	n (%)
Graduation year	
1986 to 1996	14 (34.2)
2002 to 2011	26 (63.4)
Not informed	1 (2.4)
Graduated from	
Private	18 (43.9)
Public	23 (56.1)
Previous teacher training	
Yes	23 (56.1)
No	18 (43.9)
Training	
Doctorate	5 (12.2)
Specialization	12 (29.3)
Masters	17 (41.4)
Teaching degree	23 (56.1)
Other	6 (14.6)
Intended education	
Doctorate	18 (43.9)
Masters	19 (46.3)
Other courses	2 (4.8)
Teaching degree	2 (4.8)
Relevant training	
Yes	40 (97.6)
No	1 (2.4)

Table 3, characteristics of the work as a teacher in mid-level nursing schools, highlights school work, employment contract agreement, as well as availability of school initiatives related to teacher training services. Most teachers work in a statutory regime and teach two to four theoretical and practical subjects.

Schools generally perform 6-month training activities considered important by teachers. Most schools foster ongoing teacher training, however 17.7% of teachers noted that incentives of this nature were not present at the school where they work.

**Table 3 - Characteristics of the work as a teacher in mid-level nursing schools**

Variables	n (%)
Type of institution	
Public	32 (78.1)
Private	9 (22.0)
Number of subjects taught	
5 - 6	8 (12.2)
2 - 4	28 (75.6)
Not determined	5 (12.2)
Subject taught is	
Practical	1 (2.4)
Theoretical	5 (12.2)
Practical- theoretical	35 (85.4)
Employment agreement	
Temporary employment	18 (41.5)
Effective (public entrance)	22 (53.7)
Consolidation of Labor Laws	1 (4.9)
Frequency of teacher training activities	
Weekly/Biweekly	3 (7.3)
Monthly	4 (9.8)
Semi-annually	24 (58.5)
Annually	4 (9.8)
Not determined	3 (7.3)
Never	3 (7.3)
School stimulus for training	
Yes	34 (82.9)
No	7 (17.1)
Teacher training activities at their school	
Yes	36 (87.8)
No	5 (12.2)
Engagement in teacher training activities	
Yes	37 (90.2)
No	4 (9.8)

## Discussion

The first thing to point out is that because more than half of the schools in this study are public and research subjects have secure employment relationships, socioeconomic status, working conditions and continuing education presented in the data as mostly prevalent are differentiated and do not reflect the characteristics of training and work of teachers of professional nursing education demonstrated in other schools where they are predominantly paid by the hour<sup>(6)</sup>, with less previous pedagogical training<sup>(7)</sup> and little institutional incentive for continuing education<sup>(8)</sup>. Therefore, it is interesting to explore the contrasts in the data and scientific literature on the professional performance and the pedagogical training of mid-level teachers in public and private nursing institutions.

With the expansion of the Federal Technological Education Network, many teachers were incorporated into a university teaching career, where the professional base salary for exclusive dedication with a degree<sup>(9)</sup> is equivalent to 5.77 times the minimum wage at the time of the research period. Having as a parameter the average salary of Brazilians<sup>(10)</sup>, the income of most participants is above average, which shows value of teachers' work in the federal system and can be an important motivating factor for entering into teaching. However, this is not a corporate policy of the Technical Schools Network of the National Health System or of private education, and does not reflect the global reality of professional teaching education in nursing.

Given that pedagogical practice regardless of level of education is a complex activity that involves basic knowledge coming from academic education, literature in the field, educational materials and institutional and practical experience context<sup>(11)</sup>, the amount of time consumed not only in teaching activities but also with preparation and interaction with students is worrying. Especially when a significant part of teachers have more than one job and administer two to

four different (theoretical and practical) subjects, and considering that continuing in a discipline contributes to better understanding and content domain for the development of educational skills and expertise.

This is a fact that may occur due to the low remuneration and unstable employment, pointing out a precarious scenario in vocational education<sup>(6-7)</sup>. What is the impact of these teaching job characteristics in the training of nursing staff, since teachers and students<sup>(12)</sup> have large volume demands and extracurricular work activities and only have precious few moments in the classroom or in the practice field for interaction?

It is possible that the fact that most teachers have graduated from public institutions is related to graduating prior to entry into the teaching profession, particularly with the significant mention of degrees, since most of the undergraduate nursing courses are offered in public schools. Public schools may also be related with the desire to continue training through entry into master's and doctorate programs. Once most of the country's post-graduate courses<sup>(13)</sup> are concentrated, these institutions may have more condition to introduce a continuity of training perspective to these professionals from the beginning of the course.

Another reason for desiring continuity in training is probably due to the fact that at the beginning of the teaching year the teacher feels the need to increase specific training for teaching<sup>(14)</sup>. It is necessary to emphasize that the current setting of the master's and doctorate courses are understood as privileged for teacher training where it is possible that this teacher does not meet initial expectations, as these courses have turned to the promotion of research competencies and skills, not education<sup>(15)</sup>.

Assigning value to the *stricto sensu* training, yet understanding that it needs to be revisited, along with the possible moments of reflection, collective discussion, and informal exchanges that occur by chance in schools, either in the corridors or in the direction of specific and educational evaluation from teacher me-

etings and advice, it would be interesting to explore their schools training and development activities more, and develop programs and training<sup>(16)</sup>.

In this way it would be possible to obtain the most formative success, satisfaction and participation of teachers held more regularly and accompanied by other initiatives. An example is the monitoring of a more experienced teacher by an apprentice/beginner, constituting support space and institutional recognition<sup>(17)</sup>. Another possibility is to stimulate the creation of spaces for socialization and sharing among teachers beyond the formal spaces as subjects of meetings.

It is relevant when there is the report that most teachers value and participate in teacher training activities conducted by schools that work. This commitment and appreciation of space possibly lies in understanding that in these spaces teachers can share and learn from needs observed in everyday practice. Considering this, developing training activities at work is still challenging for schools<sup>(16)</sup>, infrequently conducting training activities incurs loss in the potential to foster the development of practice and teacher training.

## Conclusion

The intent of this study was to identify the teacher training and professional performance of teachers in mid-level graduate nursing schools. Even with the limitations of an exploratory study confronting the scarce production of mid-level nursing education being necessary, some aspects are noteworthy.

Within the professional practice, there exists a perceived salary gap between public and private, and significant double employment in both. It can also be seen that it is common for teachers to teach multiple and different disciplines. It would be of important action for the State to control the initiation of courses and monitor and evaluate the working conditions of teachers so that they may be appropriate, reflecting policies that lift professional education to a relevant level and correspond to the number of care profes-

sionals graduating and also providing for action in health services.

For training, we can observe teachers with great educational preparation for mid-level teaching and disposal for lifelong learning, with a focus on teacher training and socialization with their peers, but the incentives or training are not always found in schools. It is noteworthy that in addition to the legitimate pursuit of graduate programs, an innovative and successful experience for teacher training would constitute the development of training programs within the schools of nursing training.

Given the above, it is recommended that Brazilian nursing be willing to investigate the average level of training. With regard to this study, it is recommended that studies of teacher practices are conducted, in order to evidence how age pedagogically reasons the teacher. There are still vast themes and subjects such as the curriculum of the courses, the profile of students, educational technologies, among others. The field is vast and there are few studies on the subject that address both performance in the field and social responsibility categories.

## Collaborations

Backes VMS, Menegaz JC and Francisco BS participated in the study design, collection and analysis of data and writing of the article. Reibnitz KS and Costa LM participated in the study design and data analysis.

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