

## Socio-demographic and academic characteristics of nursing students in professional training

## Características sociodemográficas e acadêmicas de estudantes de enfermagem em formação profissional

Mari Saho<sup>1</sup>   
Georgina Almeida Lomanto<sup>2</sup>   
Isabel Cristina de Barros Salviano<sup>3</sup> 

Erenice Santos Reis<sup>4</sup>   
Karla Ferraz dos Anjos<sup>5</sup>   
Darci de Oliveira Santa Rosa<sup>6</sup> 

<sup>1</sup>Corresponding author. Centro UNIVERSO Salvador (Salvador). Bahia, Brazil. sahomarijk@gmail.com

<sup>2</sup>Associação Salgado de Oliveira de Educação e Cultura (Salvador), Bahia, Brazil. georginalomanto@hotmail.com

<sup>3</sup>Centro UNIVERSO Salvador (Salvador). Bahia, Brazil. isabel.salviano@gmail.com

<sup>4,6</sup>Universidade Federal da Bahia (Salvador). Bahia, Brazil. erereis@yahoo.com.br karla.ferraz@hotmail.com, darcisantarosa@gmail.com

**ABSTRACT | OBJECTIVE:** To describe nursing students' sociodemographic and academic characteristics from a higher education institution regarding their professional training. **METHOD:** Descriptive, quantitative study, carried out with 197 undergraduate nursing students enrolled in all course periods. Data were collected through a closed, self-administered questionnaire applied from May to August 2017. **RESULTS:** Among nursing students, there was a predominance of females (82.2%), singles (76.1%), with insertion in the formal labor market (49.7%), have children (44.7%), live far from the teaching unit (69%), use public transport to travel to the HEI (82.7%) and uses the internet as the main resource for studies (91.4%). Among the areas of action desired during training, there is assistance and obstetric nursing. **CONCLUSION:** Possible contributions to the structuring of the pedagogical project of the course were verified since the study brings elements that characterize the profile and some academic demands of students who attend the undergraduate nursing course of an educational institution.

**DESCRIPTORS:** Nursing Education. College education. Nursing students.

**RESUMO | OBJETIVO:** Descrever as características sociodemográficas e acadêmicas de estudantes de enfermagem de uma instituição de ensino superior sobre sua formação profissional. **MÉTODO:** Estudo descritivo, quantitativo, realizado com 197 estudantes do curso de graduação em enfermagem, matriculados em todos os períodos do curso. Os dados foram coletados por meio de um questionário fechado autopreenchido e aplicado no período de maio a agosto de 2017. **RESULTADOS:** Evidenciou-se entre os estudantes de enfermagem o predomínio do sexo feminino (82,2%), solteiros (76,1%), com inserção no mercado de trabalho formal (49,7%), possuem filhos (44,7%), residem distantes da unidade de ensino (69%), utilizam transporte coletivo para deslocar para a IES (82,7%) e faz uso da internet como principal recurso para os estudos (91,4%). Entre as áreas de atuação almeçadas durante a formação, tem-se a de assistência e da enfermagem obstétrica. **CONCLUSÃO:** Verificou-se possíveis contribuições à estruturação do projeto pedagógico do curso, uma vez que o estudo traz elementos que caracterizam o perfil e algumas demandas acadêmicas dos estudantes que frequentam o curso de graduação em enfermagem de uma instituição de ensino.

**DESCRITORES:** Educação em Enfermagem. Educação superior. Estudantes de Enfermagem.

## Introduction

The Nursing teaching developed in the curricular proposals of nursing education has undergone a transformation in recent decades, mainly from the new Law of Guidelines and Bases of National Education (LDB/1996). The changes brought new responsibilities to Higher Education Institutions (HEIs), professors, students, and society in general because it allows the formulation of different professional profiles from the vocation of each course/school to better adapt to the world of work since educational institutions obtained autonomy to define a considerable part of their full curricula.

For the higher education course of Nursing, the Resolution of the National Council of Education (CNE/CFE N. 03/2001), which defines the National Curriculum Guidelines for the Undergraduate Nursing Course (DCENF), brought concrete proposed changes in the teaching and learning process for the training of nurses with the implementation of a Pedagogical Project of the Course (PPC) aligned with the principles and guidelines of the Unified Health System (UHS).<sup>1</sup>

The DCENF1, among others, describes the expected profile of the graduate from generalist training<sup>1</sup>, which needs to be considered by the HEI. In relation to undergraduate Nursing courses, the privatization trend of teaching was accentuated in the early years of 2000, when 63.6% of the existing nursing courses in Brazil belonged to the private school system. It is also worth noting that this process of privatization of the courses achieved a growth of 75.7% in the period from 2010 to 2013. Meanwhile, nursing graduates in the public network from 1990 to 1999 represented 59.1% of the total decreased to 19% in the period from 2010 to 2013.<sup>2</sup>

When one observes the territorial distribution of nursing courses and the performance of professionals, a regional asymmetry is observed in the country, for example, the marked existence of undergraduate and postgraduate courses in large regions, such as the South and Southeast, to the detriment of other regions, such as North, Northeast, and Midwest. The permanence of nursing professionals in capitals and large urban centers in states is a trend.<sup>2</sup>

It is also observed the average increase in the age group of nursing students and those already inserted in the high school labor market who aim at professional qualification through access to higher education and who choose the Nursing course as a profession.<sup>2</sup> It should be emphasized that, in parallel to the changes that have been taking place in the profile of students seeking professional qualification at a higher level, the proposal to train a generalist, humanist, critical and reflective nurse, endowed with scientific and intellectual rigor based on ethical principles contained in the DCENF, requires a change in the construction of a pedagogical project of the Nursing course (PPC) that contemplates transformations in the teaching and learning process.<sup>3-4</sup>

In the 2001 DCENF proposal, education is understood as a permanent learning process that begins in undergraduate studies, extends throughout professional activities, maintains a partnership relationship between the HEIs and health/community services and other civil entities.<sup>1</sup> In this training perspective, together with the community, it is necessary to build the PPC, collectively, focusing on the student as an active subject of the learning process and the professor as a mediator of this process under the construction of a curriculum in an integrated way, which privileges the interdisciplinarity of knowledge for the training of the competent person professionally, with a citizen and solidarity spirit.<sup>4</sup>

In this scenario, professor-centered teaching shifts to emphasizing student learning through the reconfiguration of knowledge through the reduction of classical dualities: scientific knowledge/popular knowledge, science/culture, education/work. One seeks to reorganize the theory/practice relationship, breaking with the traditional view that theory precedes practice. Likewise, it moves towards mediation between the subjectivities of those involved and knowledge, contemplating the dimension of relationships, mutual respect, the bonds established between the actors, emphasizing the active participation of students in pedagogical decisions in favor of personal, original, and creative production.<sup>3</sup>

Therefore, the guiding axes of current public education policies envision the education of generalist nurses capable of acting in the reality of health care that is complex and dynamic. The priority revolves around primary health care (PHC), a critical reflection of the population's processes involving health, disease, and individual and collective care. This reflection covers the work process in care products, using the pedagogical framework of competence and interdisciplinarity that covers themes such as ethics, multidisciplinary teamwork, and humanization of health care.<sup>5</sup>

In the learning process, it is essential to approach the professor to the students of the course, knowing their profile, life project, personal, historical, and social specificity. This approach makes it possible to know the student, their personal and social interests concerning their professional nursing education.<sup>5</sup> Thus, it is justified to carry out the proposed study, knowing the profile of students on the sociodemographic characteristics and their desires in relation to teaching within the scope of a nursing course to contribute to the elaboration of a course project more consistent with the real demand of the students.

In this context, the study had the following research questions: what are the sociodemographic characteristics of nursing students who attend an HEI present? What are their academic desires in relation to the training course of the professional nurse?

This study aims to describe nursing students' sociodemographic and academic characteristics from a higher education institution about their professional education.

## Method

It is a descriptive study of quantitative nature, developed in an HEI in the city of Salvador-Bahia. The study population consisted of nursing students from all periods that make up an undergraduate course in a higher education institution in the municipality of Salvador-Bahia, composed of 197 interviewees, corresponding to 70% of the total number of students matriculated in the semester 2017.1. In addition, there was the participation of a small number of students

from the last two nursing periods due to the difficulty in reuniting them, and consequently, their adherence because they were matriculated in practical curricular components and were in fields of practice.

The inclusion criteria considered were regularly matriculated, who attended classes during the data collection period (May to August 2017), and were aged 18 years or older. Besides, students who were temporarily absent from the classroom due to medical leave and family and/or personal problems were excluded from the sample.

On the day and time of data collection, all students present in the classroom were invited to participate in the research. After acceptance, the Informed Consent Form was made available. Then, the students delivered and completed the questionnaire containing 22 questions about sociodemographic, academic, and professional characteristics. It is emphasized that the instrument allowed the study participant to answer more than one alternative in each question presented, such as practical experiences, desired functions in professional life. In total, there were 280 eligible students, and at the end, 197 study participants.

Data collection was performed from May to August 2017 and was conducted through interviews to apply a questionnaire in the post-class period, combined with anticipation with students and professors responsible for the research. It was completed by the interviewee and delivered to one of the researchers.

It was necessary to construct a closed-question questionnaire-like instrument that allowed collecting data that represented their reality to characterize students attending an undergraduate nursing course in a private HEI. This instrument contained the following variables: sociodemographic data (gender, age, occupation, insertion in the labor market, origin in terms of place of residence), academic data (time dedicated to studies and pedagogical techniques valued), and professional expectations (area of future performance and the functions desired when practicing the nursing profession).

The collected data were stored in Excel 7 spreadsheet. For the analysis, descriptive statistics were applied, presenting in absolute and relative frequencies.

Regarding the ethical aspects of the study, it follows the precepts of Resolution 466/12 of the National Health Council, approved by the Research Ethics Committee of the Nursing School of UFBA, with CAAE: 62976316.50000.5531, and approval opinion granted by number 1.977.500, on March 22, 2017.

## Results

Of the 197 students, most 82.2% (162) were female, 43.1% (85) aged between 20 and 30 years, 76.1% (150) single, and 54,8% (108) did not have children, 49.7% (98) had an employment relationship, and among these, 18.8% (37) in the health area; 69.5% (137) own their own home, 82.7% (163) traveled by public transportation, 31% (61) lived in neighborhoods near the college, as explained in table 1.

**Table 1.** Sociodemographic features of undergraduate student students in Nursing, Salvador, Bahia, Brazil. 2017

Variable	n	%
<b>Gender</b>		
Female	162	82.2
Male	35	17.8
<b>Age group (years)</b>		
< 20 years	34	17.3
20-30 years	85	43.1
30-40 years	46	23.6
40-50 Years	27	13.7
>50 years	4	2.0
<b>Marital status</b>		
Single	150	76.1
Married	36	18.3
Divorced	8	4.1
Widowed	2	2.0
<b>Children</b>		
No	108	54.8
Yes	88	45.2
<b>Occupation</b>		
Only student	112	56.9
Healthcare	37	18.8
Administration	33	16.8
Business	5	2.5
Overall services	5	2.5
Teaching (professor)	4	2.0
<b>Housing</b>		
Owned	137	69.5
Rented	35	17.8
Given	3	1.5
Others	22	11.2
<b>Transportation of locomotion to travel</b>		
Collective	163	82.7
Own car	26	13.2
Walking	7	3.6
<b>Place of living</b>		
Distant neighborhoods	125	63.5
Nearby neighborhoods	61	31.0
SSA/Interior Metropolitan Region	11	5.6

Regarding the time dedicated to studies outside the classroom, it was around 3 to 4 hours daily for 36% (71) of the interviewees and above 4 hours of study for 32.5% (64). Regarding the preference of the study site, the household with 85.3% (168) had a higher percentage. The material frequently used for studies came from the internet with 91.4% (180), with the preference of the individual study 72.9% (143), then with 31% of group study (61). The teaching techniques experienced in the course mentioned most frequently were seminars between 60.4% (119) of the interviewees and 57.4% (113) expository class; the most reported practical activities were: 40.1% (79) educational lectures and 35% (69) health fair (Table 2).

**Table 2.** Academic features of students from the undergraduate course in Nursing, Salvador, Bahia, Brazil. 2017

Variables	n	%
<b>Time dedicated to the course out of classroom</b>		
< 1 h	1	0.5
1 -2 hs	39	19.8
3 - 4 hs	71	36.0
>4 hs	64	32.5
<b>Place preference for studies*</b>		
Household	168	85.3
Course	64	32.5
Library	55	27.9
Work	41	20.8
<b>Material used for studies*</b>		
Site/Internet	180	91.4
Books	148	75.1
Journals	14	7.1
Others	4	2.0
<b>Preference in study group*</b>		
Individual study	143	72.6
Group study	61	31.0
Double study	42	21.3
<b>Experienced teaching techniques*</b>		
Seminar	119	60.4
Expository class	113	57.4
Group	98	49.7
Group dynamic	71	36.0
Panel	20	10.2
Workshop	14	7.1
<b>Practical activities experienced*</b>		
Educational lectures in the waiting room	79	40.1
Health Fair	69	35.0
Health care in services	55	27.9
Technical visit with reporting	48	24.4
Participation in continuing education	43	21.8

\* More than one alternative response to every question

Regarding the previous school trajectory, 77.7% (153) studied in the capital Salvador and 78.9% (155) in the public network. The reasons for choosing the nursing course were varied, with the predominant health area, 62.4% (123).

Regarding the area of activity desired as a future professional nurse: 38.6% (76) indicated obstetric nursing and 34.5% (68) surgical center. Regarding the role of nurses desired by the future professional, the highest proportion of respondents preferred the care function with 73.6% (145), followed by managerial function 43.1% (85) (Table 3).

**Table 3.** Previous school trajectory, nature of the high school course, justification for the choice of nursing course and professional area of professional performance for students of the undergraduate course in Nursing, Salvador, Bahia, Brazil. 2017

Variables	n	%
<b>Previous school trajectory</b>		
Capital	153	77.7
Countryside	36	18.3
Other state	7	3.5
<b>Nature of the high school course</b>		
Public	155	78.9
Private	89	19.8
<b>Justification for choosing the nursing course</b>		
Affinity with the health area/ enjoy caring	123	62.4
Promising labor market	32	16.2
Willingness to enter the higher course	22	11.2
Already acts in the health area	20	10.2
<b>Area of operation desired as a professional future*</b>		
Obstetric nursing	76	38.6
Surgical center	68	34.5
Care to patient in a critical status	58	29.4
Pediatric nursing	55	27.9
Geriatric nursing	29	14.7
Collective health	24	12.2
Worker's health	22	11.2
Mental health	17	8.6
Others	18	9.1
<b>Nurse function desired*</b>		
Assistance	145	73.6
Managerial function	85	43.1
Risk control with other professionals	30	15.2
Teaching function	28	14.2

(\*) More than one alternative response to every question

## Discussion

In the present study, there was a predominance of females among students in the undergraduate nursing course. This result is in line with other studies conducted in the area of the nursing profession.<sup>4,6</sup> This datum has been prevalent in studies with this public because the nursing profession is historically predominantly female despite the gradual increase in males.<sup>7</sup>

Regarding the age group of this study, the course consists of young students between 20 and 30 years old, mostly single and without children. These results are similar to the sociodemographic characteristics of studies conducted in other regions of the country.<sup>6,7</sup> However, it presents divergence when 44.7% of the interviewees answered that they had children and 23.4% were 30 to 40 years old. This fact demonstrates that the profile of nursing university students, although it is of younger people, older adults, has been increasingly included in higher education.

Nursing students who sought training in the private education network have a differentiated profile of students from public universities, corroborating studies developed in other regions of the country.<sup>7-8</sup> Another relevant aspect is that almost half of the population studied already works, has children, lives far from the educational institution, and travels with public transportation. This data demonstrates that, during professional training, there is a need to consider these factors and the physical exhaustion resulting from the time spent on locomotion for work or college.

For students, the preferred place of study outside the classroom is home, autonomously. This relationship of students' preference to individual study to the detriment of group study, therefore, the ability to dialogue with others and work in a team in an interdisciplinary way is one of the competencies required for current and future professionals, which aims to achieve common objectives. This capacity should be stimulated since the student time in various ways in the training of nurses, considering the primary function of the professional who implies in the management of people with efficient interpersonal relationship maintenance.<sup>9</sup>

It is noteworthy that the professional education of nurses, which is based on the pedagogical approach that reorients and qualifies, should be supported in professional practice based on the knowledge, experiences, and expectations of the subject in training as the basis of the teaching and learning process in the field of professional training.<sup>10</sup>

Therefore, the use of active methodologies that can stimulate student learning can also contribute to the training of the competent nurse professional in the dimensions involved in technical, scientific, political, and ethically acceptable aspects and is increasingly considered a fundamental element in meaningful learning valued in educational practices. Furthermore, it is believed that this reflective learning can help the student become responsible for his/her own learning and have autonomy in the search for pertinent knowledge.<sup>11</sup> However, in the interviewees' response, the practice in the classroom of knowledge transmission through exhibition classes or seminary resources developed by students and professors still predominates.

The recognition by students of the importance of integration among students, health professionals, and the community in the search for interdisciplinary work actions and interrelation of those involved becomes fundamental. Moreover, as learning, there is a need for reflection on health teamwork that emphasizes its formative power, integrality in the performance, democratization of work relations, and responsibility as a professional in the period corresponding to the education of nurses.<sup>12</sup>

The data obtained in the study demonstrate students' preference for the area of practice in obstetric nursing. Despite the need to continue investing in child and female health care, the epidemiological profile of the Brazilian population and regional demands point to other needs beyond this area. The regional health characteristic highlights the growth of the elderly population, chronic diseases, degenerative diseases, and neoplasms, which points to the need for investment in the training of professionals with expanded health knowledge capable of working in health promotion, disease prevention, and health recovery, integrated with other professionals from various sectors to cope with social demands.<sup>13</sup>

Thus, it is expected that the professional gathers technical, scientific competence and has a more expanded and integral view of the human to perform his/her attribution as a professional with ethical values, being able to identify his/her needs and seek constant learning. This requirement goes beyond the search for the degree of the higher level. It aims to train a critical and reflective professional endowed with a broader view of society capable of acting within establishments, whether at the primary, secondary or tertiary care.<sup>14</sup>

Studies conducted in other regions of the country on the nursing profession and the labor market show the lack of knowledge of young people and adults about the role of nurses, their potentialities, opportunities, and difficulties that involve this professional in the labor market. The nurse is considered as the professional who cares for the patients. This care is in the care environment, predominantly, without reporting the managerial aspect of nursing work, teaching, and risk control in interdisciplinary work with other professionals. The authors identified gaps pointed out by the interviewees during the academic trajectory and the current nursing labor market, considering the importance of approaching the reality of the professional field during the course through the integration of practical theory in its development in a gradual and comprehensive way.<sup>15-16</sup>

Recent research on the nursing labor market and the insertion of graduates in the work point to facilitating elements in the process: leadership capacity, people management, interpersonal relationships, and preparation for teaching during graduation in order to develop work in areas of management, care, research, and teaching.<sup>17</sup> Thus, the result of the study indicates the need to discuss with students, during the course, the regional health problems, and skills necessary of the professional to cope with the situation of each moment.

This study presents limitations, such as being carried out in a single HEI of a private nature and the little participation of students from the last two periods of the nursing course. This could have influenced the identification of different sociodemographic and academic characteristics due to other HEIs and by graduating students having greater experience.

The closer to completion of the course, the expected undergraduate students, the more expectations they have regarding their professional training.

## Conclusion

The results showed that, among the sociodemographic and academic characteristics of nursing students, there was a predominance of females, from 20 to 30 years of age, single, living far from college and using public transportation to travel to the HEI, using the internet as a resource for studies, and aiming to act in obstetric nursing care after professional training.

There is a need to stimulate nursing students' skills and competencies during graduation for teamwork and coping with challenges arising from work in the health area, which can be achieved from interdisciplinarity in training and direct contact with health services the population. One possibility would be the adoption of pedagogical activities with active and group methodologies to achieve common objectives. Thus, exercising the formation of a reflective and critical professional capable of acting in the reality of health and demand.

It is believed that, despite the limitations mentioned, the results obtained in the study serve as subsidies in the reformulation and updating of the Pedagogical Project of the Course (PPC) currently running in the institution and that contribute to the training of the critical, reflective and competent nurse in the exercise of his/her profession.

## Authors' contributions

Saho M, Lomanto GA, and Salviano ICB participated in the conception and design of the study, writing, and review of intellectual content, data collection, and analysis until the final version of the manuscript. Reis ES, Anjos KF, and Rosa DOS participated in the writing and reviewing intellectual content until the final version of the manuscript.

## Conflict of interest

No financial, legal, or political conflict involving third parties (government, companies and private foundations, etc.) has been declared for any aspect of the work submitted (including, but not limited to grants and financing, participation in the advisory board, study design, manuscript preparation, statistical analysis, etc.).

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