# Labor market insecurity for nursing assistants and technicians in the State of Ceará, Brazil

Raimunda Magalhães da Silva (https://orcid.org/0000-0001-5353-7520) <sup>1</sup> Luiza Jane Eyre de Souza Vieira (https://orcid.org/0000-0002-5220-027X) <sup>1</sup> Carlos Garcia Filho (https://orcid.org/0000-0002-0345-6033) <sup>1</sup> Indara Cavalcante Bezerra (https://orcid.org/0000-0003-0647-2490) <sup>1</sup> Ana Neiline Cavalcante (https://orcid.org/0000-0002-6787-7216) <sup>1</sup> Fernanda Colares de Borba Netto (https://orcid.org/0000-0002-2621-1135) <sup>1</sup> Francisca Alanny Rocha Aguiar (https://orcid.org/0000-0002-6281-4523) <sup>1</sup>

**Abstract** The article analyzes the labor market of nursing assistants and technicians in the State of Ceará, Brazil, from 2013 to 2017, concerning job insecurity aspects. Two data sources were employed. The cross-sectional Brazilian Nursing Team Profile Survey (PPEB) was used as the baseline, and the longitudinal Annual List of Social Information (RAIS) database, allowed the study of the trend of some of the variables related to job insecurity. Given the small number of similar studies for this professional category, we opted for an exploratory data approach that supported a critical discussion of the results. The job insecurity of nursing assistants and technicians is supported by empirical evidence in the four perspectives adopted by the International Labor Organization-ILO: time-related, economic, social, and organizational. While it is a market with a positive balance of admissions compared to layoffs, jobs have low salaries, poor work relationships, high turnover, lack of prospect of career advancement, and adverse working conditions such as exposure to violence, discrimination, and accidents. We can conclude that RAIS data corroborate the PPEB findings, and point out that there is no trend of improvement for this situation.

Key words Employment, Job market, Nursing

<sup>&</sup>lt;sup>1</sup> Programa de Pós-Graduação em Saúde Coletiva, Universidade de Fortaleza. Av. Washington Soares 1321, Edson Queiroz. 60811-905 Fortaleza CE Brasil. rmsilva@unifor.br

## Introduction

The first contact of the population in the health service may likely be with the nursing staff, which is half of the Brazilian health workforce and includes more than 2 million workers at the assistant, technical and higher levels, consisting approximately of 23% of nurses and 77% of nursing technicians and assistants<sup>1-4</sup>.

Nursing assistants and technicians work alongside nurses, making up a workforce that has been increasing in recent years, due to the lack of nurses, cost containment, changes in nurses' practice regarding technical skills, specialized functions, and bureaucratic work processes<sup>5</sup>.

The designations of assistants and technicians vary between countries. In England, you may be called a healthcare assistant, healthcare support worker, or nursing assistant; in Australia, attendant assistant; in the United States, certified nursing assistant or unlicensed assistive personnel, depending on registration<sup>5</sup>. In Brazil, designations vary with educational level; the assistant must have completed elementary school and a Nursing Assistant course qualification registered at the Regional Council of Nursing (COREN), and the Nursing Technician, high school and a Nursing Technician course registered at the COREN<sup>6</sup>.

Despite the significant number of professionals in the municipalities, incorporated into the Unified Health System (SUS) and active in the public, private, nonprofit and educational sectors, the nursing workforce is still rarely studied. For this reason, the "Brazilian Nursing Profile" (PPEB) research started in 2013, outlined the profile of this population, with the construction of an extensive database to diagnose and debate the situation of active nurses, nursing technicians, and assistants in Brazil7. So far, their results have highlighted the characteristics of these professionals and the unequal distribution in the national territory, concentrated in the Southeast region and the capitals, with a predominance of the female workforce with low wages and considerable working hours1-4.

Investigations discuss this contingent considering different objects of study, such as the systematization of the nursing work process<sup>8-12</sup> and level of professional satisfaction or dissatisfaction<sup>13</sup>. They identified realms that encompass job insecurity, such as stable relationships, remuneration, workload, and work safety<sup>14-17</sup>, but without exploring topics that imply resolute strategies to improve the quality of life of these professionals,

primarily technical and assistant, and that can compromise health and patient safety.

Like other health professions, nursing faces deteriorated labor relationships, low wages, and inadequate working conditions. Unstable employment relationships are common, which denotes fragility, loss of labor rights, resulting in discouragement, excessive wear, and poor quality of care<sup>16-18</sup>.

Although there is no consensus on the definition of job insecurity in the literature, the International Labor Organization-ILO<sup>19</sup> believes that some realms guide the understanding: the time-related, which refers to the uncertainty about keeping the job; organizational, lack of individual or group control over working conditions; economic, characterized by low wages and no prospect of increase; and social, which refers to inadequate protection against unfair layoff, discrimination, unacceptable working practices and lack of social security benefits.

In Ceará, state of Northeastern Brazil, PPEB covered 42,462 nursing technicians and assistants and pointed out the existence of essential asymmetries in the working conditions in which this professional category performs its activities<sup>7</sup>. While Ceará stands out as one of the pioneers in the adherence to and incorporation of policies and programs to expand people's access to health services and achieve improved indicators, social inequities remain<sup>20</sup>.

The overlapping of these events – the existence of asymmetries within the professional category and in the broader social context – possibly puts the state of Ceará in a conducive condition to the deterioration of job insecurity, considered by the ILO<sup>19</sup> as a global trend.

In this logic, this paper aims to analyze the labor market of nursing assistants and technicians in Ceará, from 2013 to 2017, with emphasis on job insecurity-related aspects in this category, in the time-related, economic, social and organizational realms.

## Methods

This research employed two data sources. The Cross-sectional Brazilian Nursing Team Profile Survey (PPEB)<sup>7</sup> and the Annual List of Social Information (RAIS)<sup>21</sup> from 2013 to 2017. The 2018 RAIS was not adopted since it was unavailable for public access during the drafting of this paper.

The PPEB aimed to analyze the current situation of nursing in the country under several aspects, seeking to identify its dynamics in the Brazilian socioeconomic and political context. Its population comprised Brazilian nurses, technicians, and nursing assistants with active status registration at the Nursing Federal Council (COFEN). The PPEB has national representation, which can generate results for each unit of the federation. Its sampling was random, and the collection instrument was a questionnaire posted to all respondents<sup>7</sup>.

The Annual List of Social Information (RAIS) is a mandatory national administrative record for all establishments, including those without employment. The RAIS is prepared by the Ministry of Economy and aims to provide data for the control of labor activity in the country, subsidize the preparation of labor statistics, and facilitate labor market information to government entities. RAIS Databases are generated from the analysis of the original declarations completed by the establishments. After organizing and checking the data, the databases are made available for public access. Concerning the unit of analysis, employee information is provided for each employment relationship so that a worker may appear on the RAIS more than once, as per the number of their relationships in the collection year<sup>21</sup>.

R language and R-Studio version 1.1.456 software were used to manage RAIS databases and Microsoft Excel to draw charts and tables. A descriptive approach to the data was performed comparing, whenever possible, the two sources. PPBE was used as a cross-sectional baseline, and RAIS as a possibility for a longitudinal study of some of the main variables related to job insecurity of nursing technicians and assistants. Considering the scarce similar studies for this professional category, we opted to perform an exploratory approach to the data that supported a critical discussion of the results.

## Results

The results are shown in the time-related, economic, social, and organizational realms, guided by the definition of job insecurity by the ILO<sup>19</sup>.

## Time-related realm

The PPEB displays a positive overview of the functional situation of nursing assistants and technicians. In 2013, 4.1% reported being unemployed, a situation close to full employment. Regarding unemployment in the last 12 months, based on 2013, the PPEB points to 8.3%.

Of the unemployed professionals, 65.9% had difficulty finding a job, and 31.7% answered negatively to this question. The two main reasons given for the difficulty of finding a job were the "lack of professional experience" (24.2%) and "lack of public examinations" (21%), showing the problematic incorporation of the newly graduated professionals into the labor market. PPEB confirms this situation by pointing out that 67.8% of the professionals perform activities in the public sector.

The number of activities performed by respondents in PPEB (57,070) exceeds the number of respondents (42,016). The mean activity per professional is 1.35. The most frequent activities are performed in the state (27.6%) and municipal (21.5%) public sectors, and cooperative (18.2%), the third most common, even surpassing the private sector activity (15.8%). On the other hand, more than half of the activities performed are in the public sector (51.2%), which is generally seen as a stable job, given the identification of these activities with the statutory condition.

The predominance of public sector activities should, a priori, indicate that the professional category does not suffer from an unstable relationship, one of the characteristics of job insecurity. However, when looking at the types of ties in each of the activities (Table 1), an unexpected situation is observed, since, in the public sector, the relationship through a cooperative (30.7%) competes with the statutory one (35.7%). Fixedterm contracts and provision of services with no relationship are more than half of all employment relationships. In the private and nonprofit sectors, the proportion of consolidated labor laws contract (CLT) relationships is 62.1% and 52.4%, respectively, which can be considered even better than in the public sector, considering the worker's protection provided by CLT compared to more insecure relationships. Considering the category as a whole, 48.1% of the relationships statutory or CLT-related, and the others are through alternative forms, among which relationships through cooperatives, with 24.5%, and the provision of services with 13.5%.

The frequent change of jobs in the category in the last two years, based on 2013, was 11.9% for one change, 3.4% for two changes, and 1.2% for three or more. The reasons were the need to reconcile two or more jobs (19.0%), salary dissatisfaction (19.0%), and dissatisfaction with working conditions (12.7%). The causes pointed by the professionals refer to problems related to the job insecurity of the category.

Table 1. Nursing Assistants and Technicians by type of employment relationship and by sector in 2013.

	Put	Public		Private		Nonprofit		Education		Total	
Relationships	n	%	n	%	n	%	n	%	n	%	
Statutory	10,802	35.2	0	0.0	0	0.0	680	66.7	11,482	26.5	
Consolidated	2,296	7.5	5,018	62.1	1,871	52.4	170	16.7	9,355	21.6	
Labour Laws											
Temporary	1,191	3.9	510	6.3	595	16.7	85	8.3	2,381	5.5	
Service P.*	3,742	12.2	1,276	15.8	851	23.8	-	-	5,869	13.5	
Cooperative	9,441	30.7	1,021	12.6	170	4.8	-	-	10,632	24.5	
worker											
Private	510	1.7	-	-	-	-	-	-	510	1.2	
Foundation											
FPDP**	1,190	3.9	-	-	-	-	-	-	1,190	2.7	
OSCIP***	85	0.3	-	-	-	-	-	-	85	0.2	
OS****	85	0.3	-	-	-	-	-	-	85	0.2	
Partner	-	-	-	-	85	2.4	-	-	85	0.2	
Owner	-	-	85	1.1	-	-	-	-	85	0.2	
Self-employed	-	-	85	1.1	-	-	_	-	85	0.2	
Day Laborer	-	-	-	-	-	-	85	8.3	85	0.2	
Other	1,361	4.4	85	1.1	-	-	-	-	1,446	3.3	
Total	30,703	100.0	8,080	100.0	3,572	100.0	1,020	100.0	43,375	100.0	

Captions: Service P.\* = Service Provider. FPDP\*\* = Private Law Public Foundation. OSCIP\*\*\* = Civil Society Organization of Public Interest. OS\*\*\*\* = Social Organization.

Obs.: (More than one answer allowed for each respondent).

Source: Elaborated from the Brazilian Nursing Profile Survey7.

The total number of weekly worked hours obtained through the PPEB explains why the need to reconcile two or more jobs is such an important reason for the change. Almost half of the professionals (46.6%) work more than 40 weekly hours, the standard public sector workload. We can also observe that 13.8% work more than 60 weekly hours. This data legitimizes the number of activities more significant than the number of professionals. On the other hand, there are few professionals (1.2%) working 20 weekly hours or less.

Labor market dynamics can be studied by the annual balance of admissions and layoffs. Graph 1 shows a positive balance for all the years studied. Thus, it is an expanding job market. However, we can also observe that the balance tends to decrease over time. It is noteworthy that the smallest difference between admissions and layoffs was in 2016 when the political, economic, and institutional crisis in the country escalated.

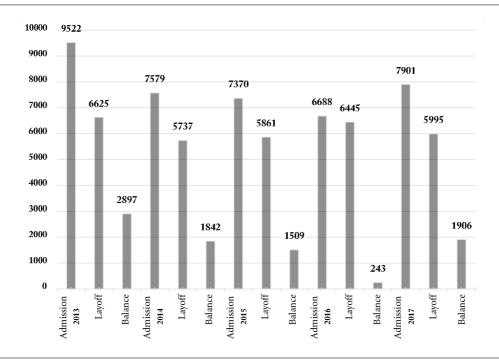
Other information on labor market dynamics is turnover, which can be accessed indirectly in RAIS through the employment time (Table 2). Relationships can be grouped into three groups: about one-quarter of workers are in their first year of employment, half between one and five

years, and the rest above five years. This stability between the groups can suggest that there is no recent migration of workers entering the market for relationships with a perspective of greater stability. The complaint about the rare public examinations made at PPEB can corroborate this hypothesis.

## Economic realm

The income of nursing assistants and technicians signals the job insecurity in this category. Table 3 shows data on the total monthly income of professionals based on the minimum wage of 2013. Table 4 shows the trend of the mean remuneration per relationship in the last five years.

The results of the two tables converge by pointing to a predominant remuneration equal to or slightly higher than the official minimum wage and with no tendency for improvement. The situation of public sector workers is better than that of the private sector, which, in turn, outperforms the nonprofit sector. At PPEB, professionals were asked about the ideal amount of their compensation, and the most prevalent result was between R\$ 1,000.00 and R\$ 2,000.00,



Graph 1. Dalance of admissions and layous by year, 2015-2017.

Source: Elaborated from the RAIS-MTE-2018.

Table 2. Length of service as Nursing Assistants and Technicians from 2013 to 2017.

Months in the	20	13	20	14	20	15	20	16	201	7
job	Abs.V.	%								
Up to 2.9	2,529	8.41	2,222	7.38	2,443	7.90	1,928	6.13	2,224	6.89
3.0-5.9	3,185	10.60	2,184	7.25	2,056	6.65	2,209	7.02	2,231	6.91
6.0-11.9	4,506	14.99	3,936	13.06	3,689	11.93	3,281	10.43	4,077	12.63
12.0-23.9	3,407	11.34	5,461	18.13	4,308	13.93	4,509	14.33	3,618	11.21
24.0-35.9	2,499	8.32	2,253	7.48	3,798	12.28	3,027	9.62	2,835	8.78
36.0-59.9	2,972	9.89	3,201	10.62	3,426	11.08	4,558	14.48	4,712	14.59
60.0-119.9	4,440	14.77	4,158	13.80	4,268	13.80	4,468	14.20	4,565	14.14
120.0 and over	6,498	21.62	6,703	22.25	6,935	22.42	7,462	23.71	8,016	24.83
Unclassified	18	0.06	10	0.03	9	0.03	27	0.09	10	0.03
Total	30,054	100.00	30,128	100.00	30,932	100.00	31,469	100.00	32,288	100.00

Source: Elaborated from the RAIS-MTE-2018.

just one class above the most commonly found. This finding suggests the poor salary expectations of the category.

## Social realm

According to the PPEB (2013), 28.3% of nursing assistants and technicians feel protect-

ed against violence at work. Most respondents state that they do not feel protected (41.7%) or that they feel protected only sometimes (20.0%). These results are consistent with the reported existence of violence at work, as 25.5% of respondents claimed having suffered some occupational violence. The common types of violence suffered were psychological (78.4%), institution-

Table 3. Nursing Assistants and Technicians by Monthly Income in 2013.

Total Income (monthly em reais)	Public	Sector	Private Sector		Nonprofit Sector		Education Sector		Total in Nursing Activities		Ideal Monthly Salary	
reals)	Abs.V.	%	Abs.V.	%	Abs.V.	%	Abs.V.	%	Abs.V.	%	Abs.V.	%
Less than 680*	3,487	12.2	1,786	19.8	1,531	40.1	170	13.3	3,317	7.9	170	0.4
681 - 1000	8,760	30.7	4,253	47.2	1,276	33.4	170	13.3	16,670	39.7	1,446	3.4
1001 - 2000	8,931	31.3	1,021	11.3	255	6.7	425	33.3	11,227	26.7	12,588	30.0
2001 - 3000	1,871	6.6	170	1.9	0	0.0	340	26.7	2,126	5.1	7,400	17.6
3001 - 4000	255	0.9	0	0.0	0	0.0	0	0.0	340	0.8	2,552	6.1
4001 - 5000	85	0.3	0	0.0	0	0.0	0	0.0	170	0.4	1,701	4.0
5001 - 6000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	170	0.4
6001 - 7000	0	0.0	0	0.0	0	0.0	0	0.0	170	0.4	0	0.0
7001 - 8000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
8001 - 9000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
9001 - 10000	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	85	0.2
10,001 - 20,000	0	0.0	0	0.0	0	0.0	0	0.0	85	0.2	85	0.2
More than	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
20,000												
Not Answered	5,103	17.9	1,786	19.8	756	19.8	170	13.3	7,910	18.8	15,820	37.7
Total	28,492	100.0	9,016	100.0	3,818	100.0	1275	100.0	42,015	100.0	42,017	100.0

Source: Elaborated from the Brazilian Nursing Profile Survey7.

Table 4. Nursing Assistants and Technicians minimum wage remuneration by employment relationship from 2013 to 2017.

Remuneration in	20	13	20	14	20	15	20	16	20	17
Minimum Wages	Abs.V.	%								
Up to 0.50	124	0.41	186	0.62	125	0.40	187	0.59	99	0.31
0.51-1.00	1,661	5.53	1,380	4.58	1,442	4.66	1,620	5.15	1,603	4.96
1.01-1.50	15,682	52.18	15,292	50.76	15,986	51.68	16,884	53.65	16,971	52.56
1.51-2.00	6,497	21.62	7,512	24.93	7,547	24.40	7,652	24.32	8,297	25.70
2.01-3.00	3,736	12.43	3,723	12.36	3,466	11.21	3,230	10.26	3,152	9.76
3.01-4.00	555	1.85	614	2.04	583	1.88	550	1.75	517	1.60
4.01-5.00	217	0.72	202	0.67	315	1.02	214	0.68	358	1.11
5.01-7.00	629	2.09	540	1.79	766	2.48	522	1.66	603	1.87
7.01-10.00	272	0.91	275	0.91	258	0.83	149	0.47	187	0.58
10.01-15.00	90	0.30	93	0.31	35	0.11	34	0.11	31	0.10
15.01-20.00	13	0.04	7	0.02	2	0.01	3	0.01	4	0.01
More than 20.00	12	0.04	4	0.01	9	0.03	10	0.03	6	0.02
Unclassified	566	1.88	300	1.00	398	1.29	414	1.32	460	1.42
Total	30,054	100.00	30,128	100.00	30,932	100.00	31,469	100.00	32,288	100.00

Source: Elaborated from the RAIS-MTE-2018.

al (14.2%), and physical (7.5%). It is noteworthy that no professional reported having suffered sexual violence.

The PPEB questionnaire investigated the existence of discrimination at the workplace, which was confirmed by 20.1% of respondents. The most-reported types were gender (48.8%), racial (21.3%), weight/obesity (21.3%), sexual orientation (7.5%) and disabled (1.3%).

Occupational accidents in the last 12 months (base year=2013) were reported in 16% of the private sector, 10.4% of the nonprofit sector, and 8.8% of the public sector. In the same period, sick leave was reported in 16% of the public sector, 13.6% of the private sector, and 6.3% of the non-profit sector.

#### Organizational realm

While the PPEB results do not show specific data on this realm that discusses the lack of individual or group control of working conditions, the analysis considered discussing this aspect in association with the other realms, as it understands that they are all intertwined, so as to intersect at various points in the working and personal life of nursing assistants and technicians. The difference between the work environments of the sectors that involve this category may represent a lack of individual or group control over these conditions.

Among professionals working in the public sector (27,727), working conditions were considered good (35.3%) and fair (35.0%) by most respondents (70.3%). In the private sector (9,186), the answers favored good (40.7%) and excellent (34.3%) conditions, totaling 75.0%. The nonprofit sector encompasses 4,677 professionals, and the responses were concentrated on fair (50.9%) and good (34.5%) conditions, considering the sector that shows the lowest percentage of answers attributing working conditions as excellent (3.6%), when compared to the private (11.1%) and the public (6.1%). Regarding the poor working conditions, respondents increasingly signaled the private (0.9%), nonprofit (3.6%), and public (7.1%) sectors.

## Discussion

The working conditions of health professionals have undergone profound changes as a result of global occupational and health care transformations in the last decades<sup>22</sup>, which challenges governments and civil society in the supply of quality services in health systems<sup>22,23</sup>.

In Brazil, the SUS has become the leading job market for health professionals, significantly increasing nursing jobs in the public network, especially in the municipalities and in the private network, through contracts<sup>24</sup> that do not meet the needs of the professional to enjoy a healthy and decent life.

Regarding the economic and time-related realms, although the PPEB points to a favorable situation regarding the nature of the professional activity of nursing assistants and technicians with "employability" in the public service, these professionals have weak contractual relationships that do not ensure stability nor certify condition for the professional to be governed by the public servant statute. The absence of public examinations reinforces this scenario of weak contractual relationships in this labor market.

Due to multiple employment relationships, with a low activity of 1.35 per nursing professional, assistant or technician, the repercussions on the quality of life are exacerbated, and favor human error that, in most cases, ends up being imputed to these professionals.

High rates of stress, burnout syndrome, physical and mental illness, absenteeism, and dissatisfaction with working conditions, besides the lack of social recognition<sup>22,23</sup>, are found among nursing assistants and technicians.

Increasing demand for health services, work overload and routine changes, intense and continuous interaction with suffering patients, pressure for care, staff shortage, time deficit to perform tasks, turnover of professionals, low salaries, evidence of labor market saturation, fragile professional relationships, among others, led to a declining quality of the service offered, higher levels of errors and fatigue of the professional, expressed by emotional, intellectual and physical exhaustion<sup>22-24</sup>.

The PPEB results show a high turnover of nursing assistants and technicians in the work-place in search of better salaries and working conditions, and the imperative need to reconcile multiple relationships. Overwork with the weekly workload is inhumane and incompatible with careful and responsible care. It is not uncommon for professionals to work for more than 60 weekly hours. Thus, the labor reform proposed in 2016 by the Brazilian government, which provides for an increase in working hours and a predominance of negotiation over the legislature, limiting government action in labor issues<sup>25</sup>, can aggravate and overburden the excessive working hours of the category.

In the Ceará scenario, the perspective of job insecurity expands as the monthly income earned, coupled with multiple relationships, by most of these professionals, ranges from one to three minimum wages, equivalent to R\$ 681.00 to 2,000.00 reais at the time of the research. This low-wage scenario and difficulties in keeping the job are what is called job insecurity, as per the time-related and economic realms from the perspective of the ILO<sup>19</sup>.

The state and municipal public sector absorb the most significant number of professionals, although the cooperative modality rises as an employability panorama in this category, does not guarantee labor rights, widens the gap in the search for decent working conditions, and reveals organizational and social fragility of the labor dimensions.

It is also necessary to consider that the flexibilization of labor relationships occurs through atypical, outsourced recruitment, without public examination, perpetuating a policy that transforms the nature of the State and its intervention<sup>16</sup>.

In this study, attention is drawn to the high percentage of cooperative professionals in Ceará, which confirms the weak labor ties that can trigger severe repercussions on patient safety, thus compromising the quality of care, as shown in the

We highlight the preferred adoption by municipal health managers regarding the "flexible" types of employment contracts; the outsourcing scheme for cooperatives and companies; freelance contracts; and other types that exploit the health workforce. This fact can be observed in many Brazilian municipalities in Primary Health Care (PHC), especially in the Family Health Strategy (FHS)17.

Another significant result is the difference in responses according to the workplace. The private sector shows twice as many occupational accidents as the public sector. The public sector reports almost three times as many sick leave cases as the nonprofit sector. It is not possible, according to PPEB data, to set a clear standard on where the worst and best working conditions are.

Alves<sup>26</sup> argues that insecurity results from unstable labor relationships, flexible and informal labor relationships, which cause a high turnover and the absence of indirect benefits or wages, relationship insecurity, low pay, long working hours, among other losses, to the worker.

In this definition, inadequate working conditions and temporary hiring that denote the feeling of instability caused to the worker are also considered. Insecurity refers not only to the eventual reduction of social protection at work, which implies fewer rights and benefits but to the fact that this type of contract has a short or limited duration, providing a feeling of instability<sup>16,27</sup>.

The types of employment contracts in scenarios intended and driven by neoliberal policies, to the detriment of social policies, as in Brazil, increase the insecurity of the workforce in the health and related sectors, leading national and

international bodies to call for efforts to curb situations that resemble slave labor.

Thus, the term "flexibilization" refers to the various forms of labor law modification that make economic, technological, political, and social changes in the relationship between capital and labor compatible. This phenomenon is due to factors such as technologies, unemployment, globalization, and, mainly, the economic crisis<sup>28</sup>, which overly affect the professions that have not yet achieved decent wages and social recognition.

Expanding in the field of work in this category as self-employed and providing services in the homecare modality is somewhat discrete. The demographic transition in the global and local scenario reveals a promising area of activity for the category, with the potential to increase income, job satisfaction, family, and social recognition.

International studies support this understanding by stating that the number of people in need of home care increases with age, and this home-based care has added more jobs to the economy than any other occupation alone<sup>29,30</sup>.

In the global context, longevity implies increased chronic conditions and compromises the sustainability of health systems. While the number of nursing assistants and technicians working in home care is low (0.5%)3, this field of service delivery has other benefits, such as the declining infection risks in hospital environments, which favors the strengthening of interpersonal relationships in the home environment, reduces clinical complications and streamlines patient recovery time. However, this scenario will increasingly demand qualified training in line with technological innovations that increase the ways of caring for and managing home care in Long-term Care Institutions for the Elderly, Nurseries, and other spaces that shelter people demanding this care.

In contrast, the profile of this category is in educational transition, expanding status and achievements, but with an interpretative-analytical level that must adapt to the requirements of multidimensional knowledge, centered on human, ethical, and legal values. Connecting different knowledge and skills is an essential feature of home nursing work. The transfer of institutional care to home care is one of the most significant changes in modern health care, adding that patients and relatives have become an essential part of the "care network"30.

Home nursing practice is primarily relational, framed in the idea of creating a network around each patient to ensure the necessary care so that people can stay in their homes. It is necessary to introduce knowledge and skills related to teamwork, care organization, and ethical issues embedded in the understanding of proper care and management of care actions by the nursing team<sup>30</sup>.

When analyzing the responsibility of dealing with lives, striving for the non-occurrence of human error and, at the same time, finding oneself unable to maintain the dignity of own life and relatives, plunging this category into a sense of hopelessness is inferred. This can be enhanced by physical exhaustion resulting, among other reasons, from sleep deprivation, besides periods incompatible with physical and mental rest.

The sense of security against violence in the workplace was somehow denied by the most of the respondents (61.7%), attesting to the high levels of violence that make the state of Ceará one of the most violent in the country<sup>31</sup>, showing weak institutional organization and social security aspects.

Importantly, when talking about having suffered some time of violence, there was no mention of sexual violence among respondents. There may have been fears about verbalizing sexual violence, criminalized by law, as it could lead to decision-making that would entail retaliation in employment relationships or job loss.

In contrast, a percentage of participants (20.1%) confirmed the existence of discrimina-

tion in the workplace, and, among these, gender and race discrimination prevailed, categories that have strong links with the occurrence of manifestations of sexual violence<sup>7</sup>.

It can be deduced that there is a bias when relating the totally negative response about "sexual violence" and respondents who claimed having suffered "gender discrimination" which leads to two possibilities: participants' understanding of what sexual violence would be in the collection instrument, which may be strictly related to the act of rape in the workplace; or the hypothesis of negative response through cultural issues related to stigma and prejudice.

## Conclusion

The critical discussion of the results of PPEB for Ceará shows that job insecurity of nursing assistants and technicians is supported by ample empirical evidence. RAIS data corroborate the findings of PPEB and point out that there is no tendency towards improving this situation. The main limitation of this study is that it is based on secondary data, and it is not possible to have an in-depth understanding of the organizational realm of job insecurity. Empirical research would be relevant to understand the implications of the relationship between professionals and institutions in job insecurity.

## **Collaborations**

RM Silva and LJES Vieira participated in the design, analysis, and interpretation of data, drafting and final revision of the paper; CG Filho and IC Bezerra worked on data collection, analysis and interpretation, drafting of the paper; AN Cavalcante, FCB Neto and FAR Aguiar worked on data collection, analysis and interpretation, drafting of the paper.

## References

- Machado MH, Wermelinger M, Vieira M, Oliveira ES, Lemos WR, Filho W, Lacerda WF, Santos M, Junior P, Justino E, Barbosa, C. Aspectos gerais da formação da enfermagem: o perfil da formação dos enfermeiros técnicos e auxiliares. *Enfermagem em Foco* 2016; 7(n. esp.).15-34.
- Machado MH, Oliveira ES, Lemos WR, Lacerda WF, Justino E. Mercado de trabalho em enfermagem no âmbito do SUS: uma abordagem a partir da pesquisa Perfil da enfermagem no Brasil. Divulgação em Saúde para Debate 2016; 56:98-105.
- Machado MH, Oliveira ES, Lemos WR, Lacerda WF, Aguiar Filho W, Wermelinger M, Vieira M, Santos M, Souza Junior PB, Justino E, Barbosa C. Mercado de trabalho da enfermagem: aspectos gerais. *Enfermagem* em Foco 2016; 7(n. esp.):35-53.
- Persegona MFM, Oliveira ES, Pantoja VJC. As características geopolíticas da enfermagem brasileira. Divulgação em Saúde para Debate 2016; 56:19-35.
- Walker F. An examination of a nursing assistant role in an acute hospital setting [thesis]. Melbourne: RMIT University; 2019.
- Conselho Federal de Enfermagem (Cofen). Resolução Cofen nº 418/2011. Atualiza, no âmbito do sistema Cofen/Conselhos Regionais de Enfermagem, os procedimentos para registro de especialização técnica de nível médio em Enfermagem. *Diário Oficial da União* 2011: 6 dez.
- Conselho Federal de Enfermagem (Cofen). Pesquisa Perfil da Enfermagem no Brasil. Banco de Dados. Relatório Final. [internet]. [acessado 2019 Abr 15]. Disponível em: http://www.cofen.gov.br/perfilenfermagem/
- Ribeiro GT. Sistematização da assistência de enfermagem: aspecto substantivo da prática profissional. Escola Anna Nery Revista de Enfermagem 2016; 20(1):5-6.
- Benedet S, Gelbcke F, Amante L, Padilha M, Pires D. Processo de Enfermagem: instrumento da Sistematização da Assistência de enfermagem na percepção dos enfermeiros. Revista de Pesquisa: Cuidado é Fundamental Online 2016; 8(3):4780-4788.
- Soares M, Rodrigues RZ, Camelo S, Souza TF. Gestión de recursos humanos y su interfaz en la sistematización de la asistencia de enfermería. *Enfermería Global* 2016; 15(2):341-375.
- Santos W, Santos AM, Lopes, TRP, Madeira, MZ, Rocha FC. (). Sistematização da Assistência de Enfermagem: o contexto histórico, o processo e obstáculos da implantação. *JMPHC* 2014; 5(2):153-158.
- Gutiérrez MGR, Morais SCRV. Systematization of nursing care and the formation of professional identity. Rev Bras Enferm 2017;70(2):436-441.
- Zavala MOQ, Klinj TP, Carrillo KLS. Quality of life in the workplace for nursing staff at public healthcare institutions. *Rev. Latino-Am. Enfermagem* [Internet].
  2016 [acessado 2019 Abr 25]; 24:e2713. Disponível em: http://www.scielo.br/scielo.php?script=sci\_arttext &pid=S0104-11692016000100355&lng=en

- 14. Miorin JD, Camponogara S, Pinno C, Beck CLC, Costa V, Freitas EO. Prazer e sofrimento de trabalhadores de enfermagem de um pronto-socorro. Texto contexto - enferm. [Internet]. 2018 [acessado 2019 Abr 25]; 27(2):e2350015. Disponível em: http:// www.scielo.br/scielo.php?script=sci\_arttext&pid=S0104-07072018000200305&lng=en
- 15. Vieira GLC. Agressão física contra técnicos de enfermagem em hospitais psiquiátricos. Rev. bras. saúde ocup. [Internet]. 2017 [acessado 2019 Abr 25]; 42:e8. Disponível em: http://www.scielo.br/scielo.php?script=sci\_arttext&pid=S0303-76572017000100206&lng=en
- Druck G. A terceirização na saúde pública: formas diversas de precarização do trabalho. Trabalho, Educação e Saúde 2016; 14(Supl.1):15-43.
- 17. Schimith MD, Brêtas ACP, Simon BS, Brum DJT, Alberti GF, Bidó MLD, Gomes TF. Precarização e fragmentação do trabalho na estratégia saúde da família: impactos em santa maria (RS). Trabalho, Educação e Saúde 2017; 15(1):163-182.
- 18. Rizzotto MLF. Editorial. Divulgação em Saúde para Debate 2016; 56:4-5.
- 19. International Labour Office. From precarious work to decent work: outcome document to the workers' symposium on policies and regulations to combat precarious employment. Geneva: International Labour Office; 2012. [acessado Abr 20]. Disponível em: http://www. ilo.org/wcmsp5/groups/public/@ed\_dialogue/@actrav/documents/meetingdocument/wcms\_179787.
- 20. Rodrigues AMU, Matsue RY, Abreu RNDC, Moreira LC, Frota MA. Estratégias defensivas no trabalho dos profissionais da saúde de uma emergência no Nordeste brasileiro. Divulgação em Saúde para Debate 2016; 56:171-178.
- 21. Instituto Brasileiro de Geografia e Estatística (IBGE). Bases de dados»metadados»MTE»relação anual de informações sociais - RAIS. 2019. [acessado 2019 Abr 20]. Disponível em: https://ces.ibge.gov.br/base-dedados/metadados/mte/relacao-anual-de-informacoes-sociais-rais.html
- 22. Nogueira LS, Sousa RMC, Guedes ES, Santos MA, Turrini RNT, Cruz DALM. Burnout e ambiente de trabalho de enfermeiros em instituições públicas de saúde. Rev. Bras. Enferm. [Internet]. 2018 Apr [acessado 2019 Fev 21]; 71(2):336-342. Disponível em: http://www.scielo.br/scielo.php?script=sci\_arttext&pid=S0034-71672018000200336&lng=en. http:// dx.doi.org/10.1590/0034-7167-2016-0524.
- 23. Mudallal RH, Saleh MYN, Al-Modallal HM, Abdel-Rahman RY. Quality of Nursing Care: The Influence of Work Conditions and Burnout. International Journal of Africa Nursing Sciences. [Internet] 2017 [acessado 2019 Abr 22]; 7:24-30. Disponível em: https:// www.researchgate.net/publication/317693344\_Quality\_of\_Nursing\_Care\_The\_Influence\_of\_Work\_Conditions\_and\_Burnout

- Freire NPF. Trajetória: Fatos e Fotos da Pesquisa Perfil da Enfermagem. Enferm. Foco. 2016; 7(n. esp.):81-86. [online]. [acessado 2019 Fev 21]. Disponível em: http://revista.cofen.gov.br/index.php/enfermagem/ article/viewFile/701/310
- Santos RR, Lima EFA, Freitas PSS, Galavote HS, Rocha EMS, Lima RCD. A influência do trabalho em equipe na Atenção Primária à Saúde. Rev. Bras. Pesq. Saúde 2016; 18(1):130-139.
- 26. Alves G. Neodesenvolvimentismo e precarização do trabalho no Brasil (2003-2013). Cadernos de Ciências Sociais (Porto de Ideias) 2015; 4:81-94.
- Eberhardt LD, Carvalho M, Murofuse NT. Vínculos de trabalho no setor saúde: o cenário da precarização na macrorregião Oeste do Paraná. Saúde em Debate [online] 2015 [acessado 2019 Fev 25]; 39(104):18-29. Disponível em: https://doi.org/10.1590/0103-110420151040432
- Parreira ASM, Rezende CMC, Borges LH, Mendonça CCA, Massaroni L, Ambrósio M PM. A flexibilização das relações de trabalho na saúde: a realidade de um Hospital Universitário Federal. Cien Saude Colet [Internet]. 2015 Oct [acessado 2019 Feb 25];20(10):3043-3050. Disponível em: http:// search.ebscohost.com/login.aspx?direct=true&db=foh&AN=110341746&lang=pt-br&site=eds-live
- Butler SS. Exploring Relationships Among Occupational Safety, Job Turnover, and Age Among Home Care Aides in Maine. New Solutions: A Journal of Environmental and Occupational Health Policy 2018; 27(4):501-523.
- 30. Bjornsdottir K. I try to make a net around each patient': home care nursing as relational practice. Scand J Caring Sci 2018; 32:177-185.
- Waiselfisz JJ. Mapa da violência 2016. Homicídios por Arma de Fogo no Brasil. São Paulo: Flacso Brasil; 2016. [acessado 2019 Abr 25]. Disponível em: https://www. mapadaviolencia.org.br/pdf2016/Mapa2016\_armas\_ web.pdf

Article submitted 29/04/2019 Approved 20/08/2019 Final version submitted 03/10/2019