RESEARCH | PESQUISA

Brazilian nurses' sociodemographic changes in the first decade of the 21st century

Enfermeiros no Brasil: transformações socioeconômicas no início do século XXI

Enfermeros en Brasil: transformaciones socioeconómicas a principios del siglo XXI

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ABSTRACT

Objective: analyze income and work conditions of nurses in Brazil in 2000 and 2010. **Methods:** based on demographic census samples, socioeconomic characteristics of nurses were described according to income and work hours. Statistic models estimated the chances (odds ratios) of nurses having lower income despite working more than 40 hours per week. **Results:** the nurse population in Brazil grew at a rate of 12.5% per year. In the two study periods, approximately 11.0% of nurses received the lowest incomes and worked more than 40 hours per week. The most pronounced chances of belonging to this group were observed for those residing in the interior the South and Southeast regions of Brazil. They were also more elevated for nurses whose color/race was black or brown (pardo) and who lived with their parents. **Conclusion and implications for practice:** the expressive increase in nurses occurred within the context of reduced socioeconomic inequalities. Less favorable work conditions were most evident for those classified as black and brown who lived in their parents' homes. We argue that the scenarios described may be related to the expansion of university educational institutions during the first decade of the twenty-first century, among other aspects.

Keywords: Nursing Human Resources; Socioeconomic Factors; Censuses; Brazil.

RESUMO

Objetivo: analisar condições de renda e trabalho dos enfermeiros no Brasil em 2000 e 2010. **Método:** a partir das amostras dos censos demográficos, foram descritas características socioeconômicas dos enfermeiros segundo rendimento e jornada de trabalho. Modelos estatísticos estimaram as chances (*Odds Ratio*) de os enfermeiros pertencerem ao grupo que, apesar de trabalhar mais de 40 horas, possuía rendimentos mais baixos. **Resultados:** no Brasil, a população de enfermeiros cresceu a uma velocidade de 12,5% ao ano. Nos dois períodos, aproximadamente 11,0% dos enfermeiros recebiam os menores rendimentos e trabalhavam mais de 40 horas semanais. As chances mais expressivas de pertencerem a esse grupo foram observadas para aqueles que residiam no interior das regiões Sul e Sudeste. Também foram mais elevadas para enfermeiros de cor ou raça preta e parda, que moravam com os pais. **Conclusão e implicações para a prática:** o expressivo aumento de enfermeiros ocorreu no contexto de redução das desigualdades socioeconômicas. As condições menos favoráveis de trabalho foram mais evidentes para os classificados pretos e pardos que moravam na casa dos pais. Argumentamos que os cenários descritos podem estar relacionados, dentre outros aspectos, à expansão de centros de formação universitária ao longo da primeira década do século XXI.

Palavras-chave: Recursos Humanos de Enfermagem; Fatores Socioeconômicos; Censos; Brasil.

RESUMEN

Objetivo: analizar las condiciones de trabajo y renta de los enfermeros que residían en Brasil en 2000 y 2010. **Método:** a partir de los datos muestrales de los censos demográficos se describieron características socioeconómicas de los enfermeros según rendimiento y jornada de trabajo. Los modelos estadísticos estimaron las probabilidades de que los enfermeros pertenecieran al grupo que a pesar de trabajar más de 40 horas, tenían ingresos más bajos. **Resultados:** en Brasil, la población de enfermeros aumentó rápidamente a lo largo del período (12,5% a.a), con mayor participación de hombres y reducción de la renta mensual. El segmento que trabajaba por más tiempo y poseía menores rendimientos mensuales residía en las regiones Sudeste y Sur y se declararon de color 'negro' o 'parda'. **Conclusión e implicación para la práctica:** el crecimiento acelerado de los enfermeros ocurrió en el contexto de desigualdades socioeconómicas y regionales, lo que puede estar relacionado, entre otros aspectos, a la expansión de centros de formación universitaria a lo largo de la primera década del siglo XXI.

Palabras clave: Personal de Enfermería; Factores Socioeconómicos; Censos; Brasil.

INTRODUCTION

Over the last century, although in different ways, populations in all countries have been experiencing a similar trend regarding life expectancy increase. Although manifested in different contexts, with faster or slower, the processes of population aging, in different places, happen together with the increase of the burden of chronic non-communicable diseases. These are scenarios that pose challenges to plan public health policies, among which are the availability and performance of health professionals[1-3].

At a global level, people increasingly lack health care, which has led to the emergence of new professions related to this field[3-4]. Nevertheless, in the current reality of several countries, including Brazil's[2-3], doctors and nurses represent the largest share among health professionals[1-2].

In Brazil, more than half of the health professionals are from the Nursing area; however, only 20% of these professionals are have completed undergraduate courses in Nursing[5-6]. The population of nurses with higher education, hereinafter referred to as "nurses", is unequally distributed in the different regions of the country, whose concentration is highest in the Southeast[5]. In addition to the regional distribution, other sociodemographic characteristics have been observed in relation to nurses, such as, for example, the increase in male professionals and younger age groups[5,7].

The political and macrossocial scenarios that characterized Brazil in the first decade of the 21st century favored the success of a health care model, supported by preventive care and the work of multiprofessional teams. The operationalization of this care model, centered on actions to promote health and prevent injuries, also characterized an accelerated increase in the training of new health professionals, especially nurses[4,6]. Between 2000 and 2010, the number of undergraduate courses in Nursing grew from 176 to 799 in Brazil, and the increase in private courses exceeded three times those of public institutions, with an important concentration in the Southeast region[8].

One of the first national surveys on the characteristics of Nursing workers and their insertion in the labor market dates to the mid-1950s. At that time, there was already an increase in the number of courses, especially in the southern regions of the country, despite a low demand for vacancies[9]. Nevertheless, the most recent reality of Nursing professionals is marked by socioeconomic disparities between the categories - high and upper educational levels -, showing a maintenance of regional inequalities, already seen more than fifty years ago[9-10].

The Nursing Profile survey in Brazil (*Perfil da Enfermagem no Brasil*) showed an increased share of undergraduate professionals, greater participation of young people (who are under 30) and males, in addition to a significant concentration in the metropolises, especially in the Southeast region[5,10]. The survey also recorded extensive working hours, precarious relations and a substantial difference in income between nurses and nursing technicians (middle level), especially those working in the public sector[5]. It should be mentioned that this study was carried out based on data from the council that regulates the professional

practice of Nursing categories in Brazil, the Federal Nursing Council. Nevertheless, information is not publicly accessible, which impedes comparative initiatives and the conduct of longitudinal studies. On the other hand, data collected by demographic censuses, representative of all countries, are sources available for research of specific demographic dynamics of the various professional categories[11].

National censuses are recognized tools to enable the creation of representative indicators of the entire population and provide subsidies for the implementation and evaluation of public policies. In addition, in defining the socioeconomic and demographic profiles of specific groups, censuses also reflect collective identities, including the occupational categories investigated[11-12]. Data collected by national censuses have been widely used as sources for the socioeconomic characterization of the population of nurses in countries such as the United States[11], Canada[13], the United Kingdom[14], Mexico, Peru[15] and Brazil[16].

Thus, based on data from the censuses conducted in Brazil in 2000 and 2010, the objective of this study was to analyze characteristics of the population of nurses according to their monthly income and weekly working hours.

METHOD

The data come from the census samples collected in Brazil by the Brazilian Institute of Geography and Statistics (*IBGE*) in 2000 and 2010. In the data collection, both surveys used two instruments: the Basic Questionnaire, which collected information of all households; and the Sample Questionnaire, applied to a part of the population, which, in addition to the basic questions, answered a larger number of questions on the most varied aspects, including work and income[17-18].

In describing the way by which national censuses are operationalized, *IBGE* clarifies that obtaining populational information, representative of demographic and social dynamics, is a very complex task. In the case of research on "work and income", in addition to referring to constructs of different natures - weekly working time measured in hours, and remuneration for work measured in monetary values, for example - the questions and categories of answers are constantly revised updated, especially for international comparisons[18].

The Brazilian censuses conducted in 2000 and 2010 investigated the professions through the more than 500 categories of "occupations" at work, referred to by the people interviewed in the samples. These categories include the 10 main occupation groups - including "health professions" - defined by the Brazilian Classification of Occupations based on recommendations of the International Labor Organization, whose definitions are covered by the International Standard Classification of Occupations[18]. According to IBGE, the occupational categories investigated by the censuses of 2000 and 2010 were made compatible, allowing comparisons over time[18].

Those investigated in this study were interviewed in the national census samples, included in the following criteria: 1) occupation in the main job (categories "Undergraduate level

nurses and related ones" [code 2235], in 2000; and "Nursing professionals" [code 2221] in 2010); 2) last completed undergraduate course (Nursing); 3) age greater than or equal to 20 years old; and 4) monthly per capita income between 1 and 19 minimum wages. Thus, from the Census 2000 sample, 4,718 people (83.5% of the total number of "Undergraduate Nurses") were selected, and from the 2010 sample, 11,896 people (49.5% of the total classified as "Nursing professionals"). It should be clarified that in the national censuses conducted in Brazil, mid-level (technical) Nursing professionals are assesses using a specific occupational category.

After selecting people according to the criteria above, it was verified that half the nurses of the 2000 Census declared an income of up to 5.7 minimum wages, whereas in the 2010 Census the average income was equal to 3.9 minimum wages. In both censuses, the average of the weekly workload (WW) in the main job was 40 hours. Then, those with a monthly income below the average value were identified and, at the same time, reported WW over 40 hours per week in the main job, representing 11.2% of the nurses in the 2000 Census, and 11.6% in the 2010 Census. For analysis, the nurses assigned to these groups were considered in less favorable working conditions.

The nurses with the lowest incomes and highest WW were characterized according to the distribution in the geographic regions of Brazil - North, Northeast, Southeast, South and Center West -, and lived in the capitals of the Federated Units. In addition, the following variables were analyzed: sex (male and female), age (<40 and ≥ 40), color or race (white, *pardo* and black) and role they played at home (person in charge/spouse/child). The nurses were classified as "yellow" and "indigenous people" in questions regarding color or race - together accounting for 2.9% of the total in 2000, and 1.4% in 2010 were not included in the analysis. In order to highlight characteristics of nurses living in their parents' house (19.1% in 2000, and 16.8% in 2010), those occupying the roles of "person in charge" and "spouses or leaders" were analyzed together.

The distribution of nurses in the country's regions was analyzed by means of population rates (per 100,000 inhabitants), whose denominators were obtained in the Aggregated database of IBGE (https://sidra.ibge.gov.br/). Average annual growth rates (% a.a.) of the population of nurses with the lowest incomes (< average minimum wage) and the highest WW (> 40 hours per week) were compared with the rates of the population that reported receiving the highest income (≥ average minimum wage) and the lowest WW (≤ 40 hours per week), projected for the 2000-2010 period. The calculations were performed using the following formula:

$$r = \left[\left(\sqrt[n]{\frac{Pt}{Po}} \right) - 1 \right] x\, 100$$

In which:

r = annual growth rate;
Pt = final period;
Po = initial period and
n = years in the period

Multivariate logistic models were generated to verify the probabilities (estimated by *OddsRatio* - OR) of the nurses belonging to the group that presented less favorable conditions of work and income, according to the characteristics included in the analyzes, for the two periods. The nurses whose job and income conditions were more favorable - (income above the average wage and less than 40 weekly WW composed the reference group. At this stage, it was defined that the accuracy of the estimates would allow sample errors of up to 5% (*p* value ≤ 0.05).

The estimates were generated taking into account methodological aspects employed by the IBGE in obtaining the samples, in both censuses, characterized by the probabilistic selection of households and people representing Brazil (complex sampling multiple levels) and applying individual sampling weights [17-18]. The statistical packagesurveyof Stata 13.0 was used.

As for the ethical aspects, it should be noted that the sample of Brazilian Census micro-data, in addition to not identifying respondents, are in the public domain and have free access. Thus, it didn't require the assessment of the Protocol of this study by the Ethics Committee on Research Involving Human Beings, as advocated by the legislation in force in Brazil, that is, the resolution No. 466/2012, of the National Health Council.

RESULTS

According to the population censuses carried out in Brazil in 2000 and 2010, the population of nurses was estimated at approximately 45,500 and 145,800 people, respectively. When considering the annual growth rate of 12.3%, the number of nurses in the country has tripled over the first decade of the 21st century. In 2000, the group of nurses in the group whose working conditions were less favorable represented 11.2% of the total ($CI_{95\%}$ 10.4-12.0), and in 2010 the same group represented 11.6% ($CI_{95\%}$ 11.0-12.2) (Table 1).

Higher proportions of those observed for the entire Brazil in both periods (>11.0%) were recorded among nurses living in the Southern region and municipalities. They were also more expressive among males, under 40, *pardo* or black, and who lived in their parents' house (Table 1).

The comparison between the two periods allows the verification that, in all Brazil, there was a discrete increase of the ratio of nurses who worked longer hours and received the less wages (+0.4%). The variations were more significant in the regions of Brazil - with emphasis on the Southeast and Center-West - where the proportional increase of this segment surpassed in six and nine times, respectively, the national averages. The proportions of nurses whose working conditions were less favorable were also higher among those aged over 40, and of race black or white in both censuses (Table 1).

Between both censuses there was an increase in nurses classified as blacks and pardosin the question about color or race, and among these the reduction in the proportion of those identified in less favorable conditions of work and income could be observed. That is, in 2000, they represented 18.0% ($CI_{95\%}$ 14.0-22.8) of all black nurses, and in 2010 the percentage went

Table 1. Sociodemographic characteristics of nurses belonging to the group with the lowest monthly income and the highest weekly workload. Brazil, 2000 and 2010.

	2000 Census			2010 Census		
	N	%	(CI 95%)	N	%	(CI 95%)
Total	**45,513**	**11.2***	**(10.4-12.0)**	**145,829**	**11.6***	**(11.0-12.2)**
Region						
North	2,761	7.9	(5.4-11.3)	7,572	5.6	(4.0-8.0)
Northeast	10,381	10.9	(9.4-12.6)	30,633	7.6	(6.5-8.8)
Southeast	23,026	11.1	(10.0-12.2)	78,927	13.5	(12.6-14.4)
South	6,390	14.3	(12.3-16.5)	20,248	11.6	(10.3-12.9)
Center-West	2,955	9.8	(7.4-13.0)	8,449	13.3	(11.0-16.1)
Capital						
Yes	25,076	9.1	(8.1-10.1)	70,257	8.6	(7.7-9.5)
No	20,437	13.8	(12.7-15.0)	75,573	14.4	(13.6-15.2)
Sex						
Male	3,976	15.1	(12.4-18.3)	17,400	13.4	(11.8-15.3)
Female	41,537	10.8	(10.0-11.6)	128,429	11.3	(10.7-12.0)
Age (years)						
< 40	28,995	12.5	(11.5-13.6)	101,074	12.4	(11.7-13.2)
≥ 40	16,518	8.9	(7.8-10.1)	44,756	9.6	(8.6-10.6)
Color or race**						
White	32,664	10.5	(9.7-11.4)	94,941	11.3	(10.6-12.1)
Pardo	9,373	12.7	(11.0-14.6)	39,113	11.8	(10.6-13.0)
Black	2,134	18.0	(14.0-22.8)	9,682	12.6	(10.2-15.5)
Role played at home						
Person in charge/Spouse	34,017	8.8	(8.0-9.6)	96,192	9.0	(8.4-9.7)
Child	8,623	19.1	(16.9-21.5)	36,876	16.8	(15.5-18.2)

* The coefficients of variation calculated for all categories were under 0.5%.

**The "yellow" and "indigenous" categories were excluded from the analyzes (<2.0% in both periods).

Source: 2000 and 2010 Demographic Censuses (*IBGE*)

up to 12.6% (CI$_{95\%}$ 10.2-15.5) (Table 1). Similarly, there was a decrease of 2.3 percentage points among nurses who lived in their parents' house (children). Of the total number of nurses identified as the children of the person in charge at home in the 2000 Census, 19.1% (CI$_{95\%}$ 16.9-21.5) were subjected to less favorable working conditions. In the following census, they represented 16.8% (CI$_{95\%}$ 15.5-18.2) of the total number of children (Table 1).

As mentioned, between 2000 and 2010, the population of nurses in Brazil grew at a rate of 12.5% per year (a.a.). Growth rates close to the national rate were found for the geographic regions, ranging from 10.8% a.a. in the North region to 13.3% in the Southeast. The groups assessed according to weekly workload and income, the specific growth rates presented different variations in the regions of Brazil (Figure 1).

The share of nurses who reported income above the average value and, concurrently, worked less than 40 hours per week, increased at a rate over 10.0% per year in all regions of Brazil, ranging from 10.6% in the Center-West to 12.8% in the Southeast (Figure 1). On the other hand, the growth rates of those with less favorable working conditions were broader across the regions. Whereas in the North and Northeast of Brazil this segment grew at approximately at 7.0 a.a., growth rates twice as high were recorded in the Southeast and Central West regions (15.4% and 14.5% a.a., respectively) (Figure 1).
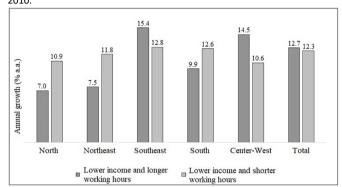
Table 2 presents, for the two censuses, the probabilities of nurses belonging to the group whose working and income conditions were less favorable. Estimates were adjusted according to the characteristics selected in this study, namely: Brazilian regions, whether they resided in capitals, sex, age, color or race and role at home.

In both periods, the lowest proportions of nurses in less

favorable conditions of work and income were observed in the North, and at the beginning of the decade (Census 2000) these conditions were not related to the regions of the country, except

Figure 1. Annual growth rates of the population of nurses (% a.a.), regarding monthly income and weekly workload related to the regions of Brazil, 2000-2010.

in the South region, where they were twice as likely to belong to the less favored group, compared to the North (OR = 1.99, p = 0.017). By the end of the decade (Census 2010), working conditions were related more significantly to the regions of Brazil. With the exception of the Northeast, the odds of belonging to this group were significantly higher in all regions of the country when compared to the North (p <0.001). There was also a significant (> 10.0%) increase in the probability of nurses working over 40 hours a week and receiving lower wages when they lived in the countryside (p <0.001) (Table 2).

The fact that they belonged to the group with longer working hours and lower income was not associated with their sex and age, which can be observed in both periods analyzed. Nevertheless, the magnitudes of the probabilities were quite significant as to the differences between the color or race groups, with more pronounced work disadvantages for nurses classified as black and *pardos* compared to white ones (Table 2).

In 2000, nurses classified as black had twice the odds of

Table 2. Odds Ratio (OR) to belong to the group of nurses who declared lower monthly income and greater weekly working day. Brazil, 2000 and 2010

	2000 Census		2010 Census	
	*Odds Ratio**	*p*-value	*Odds Ratio**	*p*-value
Region				
North	1.00	-	1.00	-
Northeast	1.54	0.104	1.18	0.501
Southeast	1.36	0.240	2.36	0.000
South	1.99	0.017	1.85	0.011
Center-West	1.34	0.365	2.50	0.000
Capital				
Yes	1.00	-	1.00	-
No	1.51	0.000	1.71	0.000
Sex				
Female	1.00	-	1.00	-
Male	1.39	0.048	1.11	0.275
Age (years)				
< 40	1.23	0.080	1.04	0.642
≥ 40	1.00	-	1.00	-
Color or race				
White	1.00	-	1.00	-
Pardo	1.41	0.008	1.29	0.003
Black	2.18	0.000	1.36	0.038
Role at home				
Person in charge/Spouse	1.00	-	1.00	-
Child	2.32	0.000	1.98	0.000

* OR adjusted for all characteristics described in the Table (complete model). Source: 2000 and 2010 Demographic Censuses (IGBE)

Source: 2000 and 2010 Demographic Censuses (IGBE)

belonging to the group whose conditions were less favorable when compared to white ones (OR = 2.18, p = 0.000). Likewise, those classified as *pardos* were approximately 40% more likely to belong to this group (OR = 1.41, p = 0.008). In the following Census (2010), there was a reduction in the magnitude of the iniquities related to the working conditions of white and black/*pardo* nurses. However, for those black or *pardo*, higher chances of working longer and receiving lower wages (p <0.05) stood out (Table 2).

In the analyzed decade, about three out of ten nurses lived in their parents' house (guardian/spouse). Significant odds of belonging to the group were observed, whose working and income conditions were less favorable to those whom the census identified as children. Influenced by factors unrelated to sex and age, nurses who lived with their parents had twice the odds of those who played roles of person in charge or spouse at home (p = 0.000) (Table 2).

DISCUSSION

This study analyzed aspects related to the working conditions of nurses living in Brazil, based on census data collected at the beginning (year 2000) and at the end (year 2010) of the first decade of the 21st century. For the purposes of the analyzes, nurses with less favorable socioeconomic conditions were those who, at the same time, reported a higher weekly workload and lower monthly income, whose rates were 11.2% and 11.6%, in 2000 and 2010, respectively.

The Nursing population tripled over the analyzed period, increasing at a rate of 12.5% per year. The hypotheses concerning this dynamics are related, more closely, to the occupational categories investigated in the censuses of 2000 and 2010, as well as to the excessive growth of new Nursing undergraduate courses, especially in the Southeast and South regions of the country. In general, the data analyzed in the present study represent nurses who experienced increased working hours and reduced remuneration over the decade. Aligned with studies based on census data, the results were related to the increase of male professionals[6,10] who lived in the countryside[6,16].

Among the analyzed characteristics, the higher chances of belonging to the share with less favorable working and income conditions were observed for nurses living in the most industrialized regions of the country (South and Southeast), in cities in the countryside of the states. Chances were also more significant among nurses classified as black or *pardo*, who lived in the their parents' home. In general, no differences were observed between male and female odds and the halves of younger and older age groups. With the exception of the 2000 Census, when men had the opportunity to belong to that group, the odds of making up the less favored segment - in terms of income and WW - were not related to gender and age groups.

The high number of nurses in the South and Southeast regions (> 60% in both periods), described from the census data, accompany the expansion effects of Nursing undergra-

duate courses, which has been occurring more significantly in these regions[8,19]. Although the availability of nurses, in terms of population coverage, is insufficient for health needs[19-20], it is important to recognize that the unequal distribution of courses in different regions of the country causes differentiated dynamics in the health work market, whose direction points to a substantial wage depreciation due to the expressive supply of places with higher education[20]. It is noteworthy that the number of Nursing undergraduate courses jumped boosted from 106, in 1991, to 799, in 2011, representing a growth of 754% in Brazil[8].

The high increase in higher education courses had, as a consequence, the increase in the population of nurses in Brazil - especially in the Southeast - during the first decade of this century. As a result of this phenomenon, the search for opportunities to act as nurses overlaps the supply of vacancies in the labor market, being this important factor related to the socioeconomic conditions verified in the present study. Information from professional records of nurses working in Brazil in 2013[5] noted that approximately 40% of the total number of professionals received up to four minimum wages. According to the study, in the case of undergraduate professionals who work in the health sector, said their income range is considered a "sub-income"[5,10].

The expansion of vacancies and undergraduate courses was more expressive in private institutions[5], which, together with government policies to support university education, enabled the entry of young people. Between 2000 and 2010, the volume of nurses aged 20-29 increased by 11.3%, signaling that, in addition to the process of "masculinization", the category was also likely to receive a larger number of younger students.

The demographic trend that characterize age and sex structures of nurses in Brazil are similar to those observed in international scenarios[2,11,14-15]. There is an expressive set of information that points out men and women receiving different wages, even when they perform similar functions and work the same hours[14,21]. Women are increasingly present in different jobs, which, and in many cases, mean they have a "double" working day, as they continue to be responsible for domestic activities, a reality faced even by a large number of nurses[21-22].

The participation of men in the Nursing work market refers to the recurrent theme in the debates that surround this profession, that is, the professional identity. Based on this question, qualitative studies have shown the importance of gender relations established in the scope of nurses' activities. Despite the increase in male representation - whether in Europe[14], or in Latin America[15]-, the time men stay in this profession has been decreasing.

In Brazil, the history of the professional identity of nurses began to be told in the early twentieth century, more precisely in the 1920s, with the performance of US sanitarian nurses[23-24]. At that time, the legitimacy of women's participation in the labor market was strongly linked to eugenic ideals motivated by the "cleanliness and hygiene" not only of environments, but also of patients, mostly black and poor[24]. Nursing as a profession of religious, wealthy and white women was the model idealized

throughout the American continent, receiving a strong influence from institutionalized racism in the United States[11,23].

Today, the debate about race relations is complex and leads to a deeper argument in the field of Sociology, which is concerned with labor market scenarios. From the present analysis, it should be pointed out that the stratification of the population into categories of color or race - according to census nomenclature - presents itself as a relevant marker of socioeconomic inequalities.

As shown, in both periods (2000 and 2010), more than 60% of the nurses were classified as white; however, black and *pardo* nurses had, comparatively, chances for belonging to the group with less favorable socioeconomic conditions higher than 30%. In 2000, when compared to white professionals, black or *pardo* nurses of had roughly double the chances of belonging to that group. Although the socioeconomic differences between white, black and *pardo* nurses have decreased, in the 2010 Census the inequalities,regarding the racial classification, remained significant.

In Brazil, nurses with the lowest incomes and who work over 40 hours per week lived in the countryside of the Southernmost regions of the country. Professionals who declared themselves as black or *pardo* and who lived in their parents' house had significant chances of belonging to this socioeconomic stratum.

CONCLUSIONS AND IMPLICATIONS FOR THE PRACTICE

Data from the Brazilian demographic census are in line with some estimates made by some other research and indicate, for the Nursing population, sociodemographic phenomena in change. The most expressive are those that account for the trend of concentration of nurses in the country's regions where the largest metropolises are located, the increased participation of men and black or *pardo*professionals. These characteristics were related and strongly associated with the group of nurses who reported the lowest incomes and, concurrently, a longer working day.

Considering limitations on census data (self-reported information), this study demonstrated consistent patterns in the changes in the socioeconomic profile of resident nurses in Brazil, and are aligned with analyzes performed at an international level. The exponential growth of undergraduate Nursing professionals during the first decade of the twenty-first century was not accompanied by improvements in the aspects of wages, nor in excessive weekly workload. What can be seen from the census data analysis is that, in terms of public policies, the national agencies that regulate the Nursing work must pay attention to evidence of socioeconomic disparities as well as the processes of uncritical expansion of university training centers.

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