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Received: 9/23/2009 Approved: 3/8/2010

Article available from: www.scielo.br/rsp

# Multiple job contracts of physicians in Ceará, Northeastern Brazil

# **ABSTRACT**

**OBJECTIVE:** To analyze the multiple job contracts of physicians in the Brazilian National Health System in the State of Ceará.

**METHODS:** Documental research was performed about the work contracts of the physicians, based on data of health professional contracts in the municipalities of Ceará state, Northeastern Brazil, in 2008. Indices were created for the quantity of contracts of each physician, as well as the municipalities where each physician maintained work contracts. The distances between the municipalities where they worked was calculated in order to estimate the total weekly hours of work.

**RESULTS:** Of the 7,008 physicians employed by the Ceará state, 3,751 (53.5%) maintain between two and four job contracts and 39 (0.6%) between 11 and 20 contracts. One professional maintained 20 contracts. More than half (51.9%) of the physicians had work contracts that when summed totaled more than 40 weekly working hours and 27.0% (1,894) maintained job contracts with more than one municipality.

**CONCLUSIONS:** In order to increase their work income, physicians undertake various jobs, practicing their profession in different locations and various municipalities, involving constant travel and contributing to the precarious conditions of their own lives and, therefore, of the public health system.

**DESCRIPTORS:** Physicians. Employment. Salaries and Fringe Benefits. Income. Workplace. Single Health System.

## **INTRODUCTION**

The changes in the Brazilian health system and the implementation of the National Health System (SUS) increased the supply of health services in Brazilian municipalities, while trying to make access to quality care available to the various social classes. The Family Health Program (PSF), created in 1994 to focus on primary care, resulted in the SUS implementing several basic health units in small Brazilian municipalities. From 1998 to 2006, the percentage of municipalities with an active PSF increased from 20.4% (1,134 municipalities) to 91.8% (5,106 municipalities). There was a constant and marked increase in the annual measure of municipalities covered, which varied from 46.8% to 80.3%. In the state of Ceará, Northeastern Brazil, one of the pioneers in implementing the PSF, during 1988, 83% of its municipalities already had this program. 17

Although the SUS has increased access for the population to health services, the maintenance of the system faces serious problems in administration, financing and lack of materials and physical space, 3.4.13.14.18 as well as a lack of qualified human resources, failures in care and overlap between the models and programs of the system. 12,16

Physicians are one of the principal agents among the various professionals of the SUS. The medical profession, previously almost exclusively performed in private practice, has been moving its area of practice to hospitals and clinical centers, mainly due to technological advancements.9 In the last decades, physicians have had to adapt to the new order, becoming a salaried worker in both public and private institutions.<sup>10</sup> Although the profession still struggles to maintain office-based practice, during the process of health modernization, physicians face the same conditions as other workers in the modern capitalistic system, such as instability, intense effort, long work hours, reduced salary and loss of control of their activity. 15 Nonetheless, the medical profession is still considered self-regulated, since physicians earn above the average salary of the Brazilian population and have not yet been affected by the elimination of jobs, a characteristic of production restructuring. The greater dependency by the medical profession upon high technology machines increases contract work with a salary as opposed to autonomous work and, since work load is increased it can impact the health of the professionals.<sup>2,11,15</sup>

Machado (2002)<sup>10</sup> shows that 69.7% of physicians in the Northeast of Brazil are in the public sector, 59.3% in the private sector and 74.7% in physician offices, demonstrating that physicians usually maintain more than one type of contract in the job market. Physicians enter the workplace through the public sector, but it is common for physicians to accumulate salaried contracts (with public and private sectors) and private practice activities, thereby having various simultaneous affiliations.

Further complicating this picture, there are large geographical inequalities in the distribution of medical physicians, as demonstrated by Dussault & Franceschini (2006).<sup>5</sup>

The objective of this study was to analyze the diverse contracts of physicians connected to the SUS and its consequences.

## **METHODS**

A documentary study was performed using data provided by the Ceará State Department of Health, in the Northeastern Brazil. This database shows the job contracts of physicians in each health institute among the different municipalities of the state, identifying the professional, municipality, type of contract, work hours and specialty within that contract, for 2008. Nonetheless, the information is available by municipality, which does not in principle allow for individualization for each professional. To perform the analyses, the database was transposed to the SPSS program, where these characteristics were calculated for

each physician: the number of public contracts maintained, including how many and which municipalities the physicians have job contracts; the work hours in each of the affiliations; sex and specialty. The differences according to sex were analyzed by the ANOVA test. Also, the distances in kilometers were calculated between the municipalities where the physician had contracts, and the sum of the work hours for each of the public contracts of the professional was calculated.

#### **RESULTS**

According to the Ceará State Department of Health, there were 19,537 public contracts for 7,008 physicians, i.e., an average of two or more public contracts per physician in 2008. The majority of physicians were male (63.3%). Table 1 shows the distribution of the physicians' contracts by health region. It also shows the corresponding percentage in relation to the number of contracts in the state, as well as the regional population and the contracts per inhabitant. The majority of public contracts with physicians were concentrated in the metropolitan region of Fortaleza (capital), which also includes the regions of Maracanaú e Caucaia (67.3%). Two other regions with high concentrations were the ones of the southern part of the state (Crato, Juazeiro do Norte and Barbalha, 9.0%) and the region of Sobral (4.8%).

Of the 7,008 practicing physicians in public health services, 2,146 (30.6%) had only one public job contract, 3,751 (53.5%) had between two and four contracts and 39 (0.6%) between 11 and 20 contracts. One professional had 20 contracts. Male physicians on average maintained a greater number of contracts in comparison to women (3.08; SD=2.15 and 2.09; SD 1.45, respectively), and this difference was significant (ANOVA: 275.431; p<0.01).

Besides the large amount of public contracts, physicians performed innumerable distinct specializations: one physician worked in different institutions and performed a different specialization in each. The majority of contracts were for clinical physicians (55.4%) and family health physicians (30.7%), together making up 86.1% of the specializations stipulated in the contracts. The number of physicians contracted for different specializations was 47.4%. Table 2 shows the percentage of contracts for each specialization.

The average weekly work hours for the professionals, including the work hours in each public contract, was 51.17 hours (SD=34.645). The most frequent average work hours per week was 40 hours, with a variation between 20 and 70 weekly hours. Therefore, more than half (51.9%) of physicians have work contracts, that when added, equaled a work week greater than 40 hours, within only the public sector. Men on average

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Table 1. Distribution of public physician contracts by health region. Ceará state, Northeastern Brazil, 2008.

Health Region	Physician contracts	%	Population	Contracts/1,000 inhabitants
Fortaleza	11,672	59.7	2,835,911	4.1158
Caucaia	524	2.7	554,478	0.9450
Maracanaú	949	4.9	457,473	2.0744
Baturité	233	1.2	134,185	1.7364
Canindé	201	1.0	191,981	1.0470
Itapipoca	220	1.1	262,261	0.8389
Aracati	240	1.2	156,414	1.5344
Quixadá	414	2.1	292,079	1.4174
Russas	271	1.4	195,277	1.3878
Limoeiro do Norte	286	1.5	217,622	1.3142
Sobral	941	4.8	598,546	1.5721
Acaraú	168	0.9	199,633	0.8415
Tianguá	282	1.4	288,897	0.9761
Tauá	117	0.6	109,810	1.0655
Crateús	271	1.4	294,166	0.9212
Camocim	78	0.4	152,353	0.5120
Icó	179	0.9	167,694	1.0674
Iguatu	409	2.1	296,997	1.3771
Brejo Santo	321	1.6	205,196	1.5644
Crato	657	3.4	319,256	2.0579
Juazeiro do Norte	1,104	5.7	398,477	2.7705
Total	19,537	100	8,328,706	2.3457

perform a longer work week than the women (55.68 hours; SD=36.73 and 43.40 hours; SD=29.13, respectively; ANOVA: F=210.703; p<0.01).

Although the majority of physicians had job contracts only in one municipality (73.0%), 27.0% (1,894) had contracts in more than one municipality. Of these, 840 traveled up to 50 km per week, 848 traveled between 51 and 300 km and 206 traveled more than 300 km. Thus, more than half (55.7%) of those that commuted undertook routes of more than 50 kilometers, adding at least one hour of travel to their work hours, and close to 10% commute more than 300 kilometers per week. Women have job contracts in less municipalities, and therefore, travel less than men (mean of municipalities with which they maintain contracts: men=1.49, SD=0.86 and women=1.22, SD=0.55; ANOVA: F=194.763; p<0.01).

# **DISCUSSION**

The results show that in the public sector in Ceará 53.5% of the 7,008 physicians contracted provide services to various institutions and close to 27% do so in institutions located in different municipalities. These contracts do not always stipulate the same specialization. Thus, a single physician performs various jobs contracts

weekly, in different institutions and municipalities, providing care in different specializations. This type of practice is not exclusively Brazilian and is common in various developing countries. One of the main factors that maintain this situation is the lack of professionals and the resulting possibility of increasing professional income by maintaining various contracts.<sup>8</sup>

The majority of job contracts are in the municipality of Fortaleza, the state capital, demonstrating regional inequalities in terms of physician contracts per inhabitants. Dussault & Franceschini (2006)5 emphasize that in almost all countries the distribution of physicians is not well balanced between urban and rural areas, with a large concentration of physicians in urban areas. Individuals, who are male, young and born in small cities, tend to practice medicine in non-urban areas, but this decision depends on individual expectations and plans for the development of a professional career. Since conditions conducive to professional growth are difficult to encounter in poor regions, physicians tend to not remain in areas of greater need and leave in search of work opportunities where they can develop their resources and abilities.

The mean work week for these physicians is approximately 51 hours. Work hours in excess of 40 hours per week are a risk factor for the health of physicians,

**Table 2.** Frequency and percentage of medical specialty according to contracts. Ceará state, Northeastern Brazil, 2008.

2008.			
Specialty	Frequency of responses (N=19,531)	%	% of Cases (N=7,008)
Acupuncturist	48	0.3	0.7
Allergist and Immunologist	48	0.3	0.7
Anatomical pathologist	63	0.3	0.9
Anaesthesologist	1,354	6.9	19.3
Angiologist	47	0.2	0.7
Bronchoesophagologist	5	0.0	0.1
Clinical oncologist	14	0.1	0.2
Cardiologist	658	3.4	9.4
Cardiovascular surgeon	282	1.4	4.0
Head and neck surgeon	45	0.2	0.7
Digestive system surgeon	25	0.1	0.4
General surgeon	1,192	6.1	17.0
Pediatric surgeon	93	0.5	1.3
Plastic surgeon	193	1.0	2.8
Thoracic surgeon	44	0.2	0.6
Vascular surgeon	38	0.2	0.5
Cytopathologist	120	0.6	1.7
Clinician	3,881	19.9	55.4
Family health	2,151	11.0	30.7
Dermatologist	205	1.1	2.9
Occupational	44	0.2	0.6
Electroencephalographic physician	3	0.0	0.0
Endoscopic physician	208	1.1	3.0
Intensive medicine physician	337	1.7	4.8
Nuclear medicine	12	0.1	0.2
Radiologist and image diagnostician	708	3.6	10.1
Endocrinology and metabolism	135	0.7	1.9
Physiatrist	9	0.1	0.1
Phoniatrist	1	0.0	0.0
Gastroenterologist	137	0.7	2.0
General practicioner	21	0.1	0.30
Geneticist	9	0.1	0.1
Geriatric physician	47	0.2	0.7
Obstetrics and gynaecology	1,816	9.3	25.9
Hansenologist	12	0.1	0.2
Hematologist	106	0.5	1.5
Hemotherapeutic physician	12	0.1	0.2

To be continued

Table 2 continuation

Specialty	Frequency of responses (N=19,531)	%	% of Cases (N=7,008)
Homeopathic physician	8	0.0	0.1
Infectologist	80	0.4	1.1
Breast cancer physician	106	0.5	1.5
Nephrologist	212	1.1	3.0
Neurosurgeon	182	0.9	2.6
Neurophysiologist	2	0.0	0.0
Neurologist	188	1.0	2.7
Neutrologist	1	0.0	0.0
Opthamologist	947	4.9	13.5
Oncologist	138	0.7	2.0
Oncological surgeon	26	0.1	0.4
Pediatric oncologist	8	0.0	0.1
Orthopedic physician and traumatologist	753	3.9	10.7
Ear, nose and throat physician	286	1.5	4.1
Clinical pathologist	48	0.3	0.7
Pediatrician	1,489	7.7	21.3
Forensic pathologist	7	0.0	0.1
Pneumologist	148	0.8	2.1
Proctologist	92	0.5	1.3
Psychiatrist	329	1.7	4.7
Radiotherapy physician	18	0.1	0.3
Rheumatologist	57	0.3	0.8
Public health physician	18	0.1	0.3
Urologist	265	1.4	3.8
Total	19,531	100.00	278.7

as demonstrated by Cabana et al (2007),<sup>2</sup> and are an indicator of reduced quality of life for these physicians and possibly for the care they provide. In addition, some physicians travel 300 km in order to reach their different work locations.

High work loads can cause health problems. Nascimento Sobrinho et al (2006), <sup>15</sup> demonstrated that physicians in the city of Salvador, northeastern region, entered into a state of psychological stress due to high work effort and the conditions they perform their functions. Cabana et al² (2007) report a high frequency of common mental disturbances among physicians of a public hospital in the city of Recife, Northeastern Brazil, which they relate to the following: work contracts with the state, several jobs, high weekly work load (>70 hours, when counting not only work hours performed in the hospital but also those

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of other jobs), feeling of work overload and remuneration from the hospital of up to five minimum salaries (considered a low wage for these professionals).

The results show a worrying situation for physicians and the system, and they partially explain the difficulties encountered by the SUS in developing an occupational model devoted to local community health. Physicians holding several jobs and the consequent high weekly work hours can be considered factors that weaken the health system. By holding various jobs, physicians no longer become as involved as they should with the community attended and with issues related to working in the institution; they behave as a visitors, a provider of mobile services.

The three principles of the SUS – universality and equity; complete care by recognizing the social determinants of the disease process and the ability to come to resolutions<sup>7</sup> – are difficult to realize considering the flexibility of physician work hours. This brings up the question of to what extent do multiple physician job contracts contribute to the system not realizing its goals.

The quantity of public contracts by physicians, the high weekly work load and long commutes to perform the work contract can be reflected in the care given and thereby constitute a factor that weakens the SUS. It is questionable how a health professional can work more than 50 hours per week and also be in two places at the same time. Physicians probably contract with several jobs in order to reach a higher standard of living, which is socially constructed and seen as a distinction between professional categories, and to preserve their image as "super-professionals". 9,10

There is high supply of work for physicians, especially in poorer states like Ceará, where higher salaries are offered in comparison to other health professionals. Nonetheless, physicians refuse to exclusively work for one institution, and as the results show, they do not follow the guidelines for work hours, since they have to handle several work contracts in different municipalities.

On the other hand, the public health system suffers from excess demand in the referral centers and lack of physicians in the basic health units. Although data obtained from the Ceará Department of Health show that all the municipalities in the state were covered by medical professionals in 2008, these physicians are not always encountered in the workplaces. If they are not in their workplace, they are likely in a mobile cycle in search of greater remuneration. In this process, there is a divergence between physicians and patients: while physicians try to improve their salaries by working in diverse health institutions, the patients seek better care and accompaniment for their health by the SUS. In conclusion, the pursuit of the idealized remuneration is the main cause of multi-contracting, but often physician complaints about salary levels are not in line with reality. The medical profession is still one of the most lucrative in Western countries, providing social power and prestige. In the medical practice, there is not a single table or ceiling for prices and salaries, in contrast to what occurs in other work areas.11 Maybe this occurs due to the lack of physicians in some regions. A potential solution for this problem, according to the economic rule of supply and demand, would be to create new regional medical courses, increasing the supply of physicians where they are most needed. It is important to consider the varying levels of infrastructure in the network of municipalities, as well as regional particularities and the exact needs of the SUS when contemplating the education of professionals well prepared for the system.6

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The authors declare that there are no conflicts of interest.