

HEALTH WORKFORCE AND HOSPITAL NETWORK IN THE 9th HEALTH REGION OF PARANÁ¹

Cintia Teixeira Rossato Mora*
Maria Lucia Frizon Rizzotto**

ABSTRACT

The hospital network and health workforce are distributed unevenly in the country, reflecting the hegemonic model of attention and organization as from the services offer. The study aimed to analyze the hospital network and its composition and distribution of health workforce of the 9th Health Region hospitals of Paraná. Descriptive, quantitative research had as data source the National Register of Health Facilities. The statistics showed that 84.62% of hospitals are private; 61.54% are small; there are 2,307 registered occupations and, of these, 57.91% are educated level; 69.27% of the working relations are precarious and out of them, 23.50% of workers had more than one job. It was also identified shorter week working hours and higher precariousness among the educated level occupations. The results confirmed the need for greater participation of the state in the regulation of public and private institutions, particularly in work management, and planning the distribution of the health workforce.

Keywords: Personnel, Hospital. Hospital Units. Labor Force.

INTRODUCTION

The Brazilian hospital network presents inequalities regarding the incorporation of technology, the complexity of offered services and the uneven distribution throughout the country. Moreover, the concentration of beds in the private sector and low SUS regulation capacity (National Health System), associated with the difficulty of coordination between the public and private sectors, does not meet the demands and population access needs to these health care level services⁽¹⁾.

The health workforce⁽²⁾ is composed of health professionals with specific training in the area and by health workers without specific training. Nationally, health macro sector employs 5.064.697 workers in the formal sector, generating impact of 11% in the economy. Out of these, 17.75% work in hospitals⁽³⁾.

The changes resulting from the restructuring process, from the global integration of financial markets, from the internationalization of the economy and from the deregulation and market opening influenced the health sector with implications for the labor management and for the SUS itself. The hospital environment has undergone major changes in work management

and in its organization as from the incorporation of guidelines of neoliberal thinking and the private business management models⁽⁴⁾.

Furthermore, internal issues such as the constitutional guarantee of the right to health and changes in the epidemiological profile of the population, resulted in expansion of coverage, diversification and enlargement of health services with increasing complexity of care, which, associated with the underfunding of the sector, have resulted in deterioration of labor relations in the called health complex⁽⁵⁾.

Such deterioration is characterized by the flexibility of contracts, without the guarantee of rights, and by the precariousness of labor relations, through outsourcing and temporary contracts that weaken worker situation and accentuate inequality in the capital-labor relation⁽⁴⁾.

Precarious work can be defined as one without labor rights and social protection, that is, the one that does not guarantee “[...] the benefits that provide security and life quality for workers, which includes, among others, retirement, enjoyment of annual vacation, thirteenth salary and paid leave of various types^(6,4).”

One of the most popular forms of precarious work is outsourcing, which can be defined as “[...] the whole process of hiring workers

¹Extracted from the dissertation intitled “Gestão do Trabalho nos Hospitais da 9ª Região de Saúde do Paraná”, presented to Biosciences and Health Program, 2015.

*Physiotherapist. Master - UNIOESTE/PR. Foz do Iguaçu, Paraná, Brasil. E-mail: cintiatr_mora@hotmail.com.

**Nurse. Doctor. Professor at the Nursing Department of UNIOESTE. Cascavel, Paraná, Brasil. E-mail: frizon@terra.com.br.

through a third company, whose ultimate goal is to reduce costs of workforce and (or) externalization of labor conflicts^(7:331).”

The precariousness of work is seen as an obstacle to the development of the public health system, impairing the workers with the system, jeopardizing the quality and continuity of services. In addition, it affects the organization of work processes, interfere in interpersonal relations, promoting an environment of insecurity and uncertainty, facing social unprotection of workers who live in the same working environment with different wages and inequalities of rights, benefits and obligations⁽⁴⁾.

In the case of hospitals, besides the impact of neoliberal measures, the work performed associated with factors inherent to the function increase the risk of injury and illness making the workers more vulnerable⁽⁸⁾.

The research aimed to analyze the hospital network and the composition and distribution of the health workforce of the hospitals of the 9th Health Region of Paraná.

METHODOLOGY

Descriptive, quantitative research, conducted from data of the National Register of Health Facilities (CNES). This system covers all health facilities in the country and compiles data on physical area, human resources, equipment, type of outpatient and hospital services, among others.

Data collection took place in April 2014 and the sample consisted of all health professional, higher and technical level of education of the 13 hospitals of the 9th of Paraná Health Region, registered in the system. The whole search was conducted on the CNES website, which features a public access database.

Initially, municipalities of the 9th Health Region of Paraná were identified, after hospitals, and finally, the occupations described in each unit.

For the definition of higher education professionals it was used the resolution of the National Health Council No. 287 of October 1998, which identifies the 14 professions in the health area. As for the technical level professionals were considered all workers with specific training in health⁽⁹⁾.

The survey of the workforce was made, first, based on occupations, which according to the

Ministry of Labor and Employment, is “[...] the aggregation of job or similar work situations as the activities carried out^(10:7).” This means that the same professional may be registered in the system more than once and in different institutions. The identification of the amount of professional was done from the name of the registered professional.

All data were recorded in Microsoft Excel 2010 program tables, making its own database for further analysis.

Hospitals were analyzed according to: hospital size, the host city, the size of the city, the administrative level, the nature of the organization and general and additional beds. The occupations were analyzed according to: the training, the type of bond, the workload and the distribution in the hospital network.

For statistical analysis, we used the In Stat Graph Pad program version 3.4, chi square test was held considering the significance level $p \text{ value} \leq 0.05$.

The Ethics Committee in Research approved the study with human beings of the State University of Western Paraná (UNIOESTE) opinion No. 535,238/2013.

RESULTS AND DISCUSSION

The 9th Health Region, study setting, is located in the extreme west of Paraná, comprising the triple frontier (Brazil, Argentina and Paraguay). It consists of nine cities (Foz do Iguaçu, Santa Terezinha de Itaipu, São Miguel do Iguaçu, Itaipulândia, Medianeira, Matelândia, Serranópolis do Iguaçu, Ramilândia and Missal), out of these, five (56%) are considered small towns 1 (up to 20,000 inhabitants), three (33%) small towns 2 (20,001 to 50,000) and one large municipality (100,001 to 900,000). The population living in the region is 388,795 inhabitants. The region average Human Development Index (HDI), which uses as parameters the education data, longevity and income, is considered high (0.733), above the national average which is 0.727⁽¹¹⁾.

The region is characterized economically as agricultural and important tourist pole, being Foz do Iguaçu the second foreign destination in the country. It is considered one of the most multicultural cities in Brazil, with about 70 ethnic groups and an intense flow of people, creating

challenges for the local health system.

Paraná has a network of general hospitals composed by 428 units, of which 13 (3.04%) are located in the 9th Health Region, being one (7.69%) in Itaipulândia, one (7.69%) in Santa Terezinha Itaipu, two (15.38%) in Missal, two (15.38%) in Matelândia, three (23.08%) in Medianeira and four (30.77%) in Foz do Iguacu. All hospitals have ambulatory and hospital care levels, and only one unit performs highly

complex activity⁽¹²⁾.

Among the 13 existing hospitals in the 9th Health Region, 11 (84.62%) are private, six (46.15%) private companies, four (30.77%) charitable nonprofit organizations and one (7.69%) private foundation. The other two (15.38%) are public hospitals, one with local direct administration, and other indirect management (Table 1).

Table 1. Characteristics of hospitals according to the host city, county size, administrative level, organizational nature and beds in relation to the size of hospitals. 9th Health Region of Paraná, 2014.

Municipalities	Small Port		Medium Port		Large Porte		Total		P-value
	n=8	%	n=4	%	n=1	%	n=13	%	
Foz do Iguacu	1	7,69	2	15,38	1	7,69	4	30,77	0,577
Santa Terezinha de Itaipu	0	0	1	7,69	0	0	1	7,69	
Itaipulândia	1	7,69	0	0	0	0	1	7,69	
Missal	2	15,38	0	0	0	0	2	15,38	
Medianeira	2	15,38	1	7,69	0	0	3	23,08	
Matelândia	2	15,38	0	0	0	0	2	15,38	
Total	8	61,54	4	30,77	1	7,69	13	100	
Town Size									
Small Size 1	5	38,46	0	0	0	0	5	38,46	0,14
Small Size 2	2	15,38	2	15,38	0	0	4	30,77	
Large Size	1	7,69	2	15,38	1	7,69	4	30,77	
Total	8	61,54	4	30,77	1	7,69	13	100	
Administrative Level									
City	1	7,69	1	7,69	0	0	2	15,38	0,77
Private	7	53,85	3	23,08	1	7,69	11	84,62	
Total	8	61,54	4	30,77	1	7,69	13	100	
Nature of Organization									
Private Company	2	15,38	1	7,69	1	7,69	4	30,77	0,68
Charitable nonprofit organizations	1	7,69	0	0	0	0	1	7,69	
Direct health administration	0	0	1	7,69	0	0	1	7,69	
Indirect health administration	1	7,69	0	0	0	0	1	7,69	
Private Institution	8	61,54	4	30,77	1	7,69	13	100	
Total	4	30,77	2	15,38	0	0	6	46,15	
Beds									
SUS beds	113	14,21	138	17,36	69	8,68	320	40,25	0,003
Non-SUS beds	237	29,81	398	50,06	160	20,13	795	100	
Total	124	15,6	260	32,7	91	11,45	475	59,75	
Additional beds									
SUS beds	9	9,68	27	29,03	9	9,68	45	48,39	<0,0001
Non-SUS beds	9	9,68	44	47,31	40	43,01	93	100	

Source: CNES, 2014.

Regarding to the hospitals size, eight (61.54%) are small (up to 50 beds), four (30.76%) of medium-sized (51 to 150 beds) and one hospital is characterized large (151 to 500 beds)⁽¹³⁾. The total number of beds is 795, out of these, 475 (59.75 %) are SUS and half of the beds, 398 (50.06 %) are in the medium or small hospitals (Table 1).

A similar situation is found in the state of Paraná as a whole, in which 331 (72.3 %) of the 428

existing general hospitals are small. Similar data are also evidenced nationally, where 60% of beds are in small establishments and in municipalities with less than 50 thousand inhabitants. Such units generally have low technological input, idle occupancy rate and reduced ability to solve more complex problems, overloading the referral hospitals^(13,14).

Although most beds are in Foz do Iguacu (51.32 %), including for the SUS (53.33%), this city is the

one with the lowest ratio beds/inhabitants, with 1.6/1,000 in Total and 0.9/1,000 when analyzing only the SUS beds.

The regional average is 2.0 beds/1,000 inhabitants in general and 1.2 beds/1,000 inhabitants attending the SUS, below the recommended which is 2.5 to 3.0 beds/1,000 inhabitants⁽¹⁵⁾. Among the 22 Health Regions of Paraná, the 9th has one of the lowest rates, losing only to the regions of Paranaguá, Telêmaco Borba and Cianorte⁽¹⁴⁾.

It is important to point out that to assess the real need of beds it should be checked not only the number of inhabitants, but also other parameters such as the percentage of admissions, the occupancy rate and the length of stay⁽¹⁵⁾. The estimated need for additional beds (intensive care unit adult, pediatric and neonatal) is 4% to 10% of the total number of

beds⁽¹⁵⁾. The 9th Health Region has 93 additional beds, thus 10% of the beds, when analyzed only the additional beds which meet the SUS were identified 48, corresponding to 9 % of SUS beds, that is, in the guidelines (table 1).

Were identified 2,307 occupations and 1,626 professional in 13 studied hospitals, with 1,336 (57.91%) higher-level occupations and 971 (42.09%) of technical level. The occupations of the nursing staff, nursing assistants/technicians and nurses, totalize 1,063 (46.08%), followed by medical category with 1,050 (45.51%), which shows that more than 90% of occupations in hospital network of the 9th Health Region belong to these two groups of professions. The other professional categories represent 8.41% of the total (table 2).

Table 2. Distribution of professional categories according to occupation, number of professional and relation with occupation/professional. Hospitals of the 9th Health Region of Paraná, 2014

Professional categories	Occupations	%	Professionals	%	Occupations /Professional	p-value
Medical doctor	1050	45,51	451	27,74	2,33	
Nurse	154	6,68	149	9,16	1,03	
Pharmacist	37	1,60	35	2,15	1,06	
Physiotherapist	28	1,21	27	1,66	1,04	
Nutritionist	16	0,69	16	0,98	1,00	
Audiologist	13	0,56	11	0,68	1,18	
Dentist	13	0,56	9	0,55	1,44	
Psychologist	10	0,43	10	0,62	1,00	
Social worker	7	0,30	7	0,43	1,00	
Biomedic	6	0,26	6	0,37	1,00	
Biologist	2	0,09	2	0,12	1,00	
Nursing assistant	763	33,07	705	43,36	1,08	<0,0001
Nursing technician	146	6,33	143	8,79	1,02	
Surgical technologist	22	0,95	22	1,35	1,00	
Tecnician in clinical pathology	15	0,65	9	0,55	1,00	
Technician in radiology and imaging	13	0,56	12	0,74	1,08	
Clinical analysis laboratory assistant	3	0,13	3	0,18	1,00	
Nurse's aid	3	0,13	3	0,18	1,00	
Technical in orthopedic immobilization	3	0,13	3	0,18	1,00	
Pharmacy attendant	1	0,04	1	0,06	1,00	
Technical optics and optometry	1	0,04	1	0,06	1,00	
Technician in nutrition and dietetics	1	0,04	1	0,06	1,00	
Total	2307	100,00	1626	100,00	1,08	

Source: CNES, 2014.

An important aspect to note is the amount of higher-level occupations in the hospital network (57.91%) compared to primary care. Study in western macro-region of Paraná, which used the same database, showed that the majority (62.15%) of occupations registered in Primary are professionals trained in elementary or technical level⁽¹⁶⁾. This can be explained by differences in the complexity of the procedures performed, the amount of medical specialties performed in hospitals and by the insertion of new professions of higher education,

such as nutritionist, physiotherapist, psychologist, pharmacist, dentist, speech therapist, social worker, biomedical and biologist, as shown in table 2. But also the highest number of higher-level professionals in hospitals can be a result from the maintenance of the curative, hegemonic medical model, which has hospitals as privileged space for treatment of diseases.

By analyzing the relationship between the quantity of jobs and the number of registered professionals (data with statistical significance), it

was found that 376 professionals (23.50%) are registered with more than one job. Among doctors, the ratio was 2.33 occupations/professional (Table 2), with a maximum of eight occupations for a single professional. Most of them work in the same municipality, but 37 professionals of the sample had

registered occupations in two municipalities and six professionals in three municipalities. Flexibility in working hours, especially the higher-level professionals who work as autonomous (55.27 %) (Table3), may help to explain these findings.

Table 3. Distribution of health occupations, according to city, county size, type of contract and working hours. Hospitals of the 9th Health Region of Paraná, 2014.

Variables	Higher Education n=1336	%	Technical Education n=971	%	Total n=2307	%	p - value	
City								
Foz do Iguaçu	985	42,70	801	34,72	1786	77,42	<0,0001	
Santa Terezinha de Itaipu	15	0,65	7	0,30	22	0,95		
Itaipulândia	14	0,61	16	0,69	30	1,30		
Missal	14	0,61	11	0,48	25	1,08		
Medianeira	240	10,40	112	4,85	352	15,26		
Matelândia	68	2,95	24	1,04	92	3,99		
<i>Total</i>	<i>1336</i>	<i>57,91</i>	<i>971</i>	<i>42,09</i>	<i>2307</i>	<i>100,00</i>		
City Size								
Small Size 1	96	4,16	51	2,21	147	6,37	<0,0001	
Small Size 2	255	11,05	119	5,16	374	16,21		
Large Size	985	42,70	801	34,72	1786	77,42		
<i>Total</i>	<i>1336</i>	<i>57,91</i>	<i>971</i>	<i>42,09</i>	<i>2307</i>	<i>100,00</i>		
Type of bond								
Autonomous	1003	43,48	272	11,79	1275	55,27	<0,0001	
Employees	139	6,03	566	24,53	705	30,56		
Verbal/informal contract	3	0,13	0	0,00	3	0,13		
Cooperative	10	0,43	0	0,00	10	0,43		
Public employee	3	0,13	0	0,00	3	0,13		
Statutory	0	0,00	1	0,04	1	0,04		
Temporary contract	75	3,25	41	1,78	116	5,03		
Owner	2	0,09	0	0,00	2	0,09		
Residence	9	0,39	0	0,00	9	0,39		
Without type	92	3,99	91	3,94	183	7,93		
<i>Total</i>	<i>1336</i>	<i>57,91</i>	<i>971</i>	<i>42,09</i>	<i>2307</i>	<i>100,00</i>		
Working hours								
Greater than or equal to 30h/w.	279	12,09	905	39,23	683	51,32		<0,0001
Less than 30h/w.	1057	45,82	66	2,86	1624	46,42		
<i>Total</i>	<i>1336</i>	<i>57,91</i>	<i>971</i>	<i>42,09</i>	<i>2307</i>	<i>100,00</i>		

Source: CNES, 2014.

As for the distribution of occupations in the cities, the vast majority 1,786 (77.42 %) are in the city of Foz do Iguaçu (Table 3), which besides being regional headquarters, has four hospitals and most beds (51,32%) in the region.

The distribution imbalance of the workforce and health services impedes access for users to the system. It is important to note that knowledge and proper planning of the formation and distribution of the workforce is key aspect of the quality of care offered by SUS⁽¹⁷⁾. However, the profile and distribution of the health workforce are influenced by many factors, including the

model of attention, social, political, economic, cultural and interest groups⁽¹⁸⁾.

Regarding to the types of bonds (Table 3), the majority (55.27 %) of occupations is autonomous and of higher-level professionals (43.48%), but the largest workload is among the technical professionals (39.23%). The autonomous is a type of bond considered poor, for example, has no guarantee of labor rights. Bonds are considered protected the employees, most found in the technical occupations (24.53%), and statutory. Analyzing the data, there was no statistical difference between the upper and technical level

occupations that refers to the city, type of bond, county size and working hours, showing a relationship between training, work location and type of contract.

Study with nurses from a public hospital in Cuiabá identified 55.1% of temporary bonds/services, 18.8% deviation function, and wage inequality, due to lack of public contest for entrance, which made the auxiliary/ nursing technicians who have completed graduation, starting to exercise higher-level functions, however, remaining in jobs/mid-level career, which might also be happening in the analyzed hospitals⁽¹⁹⁾.

With regard to the types of protected and precarious bonds (Table 4), it was found that the majority (69.27 %) has poor bond, in hospitals

public sphere (22.02%), as in the private level (47.25%). And yet, that precarious bonds were more present in the charitable nonprofit organizations (31.08%), in the medium-sized hospitals (29.65%) and among the higher-level professionals (51.76%) (Table 4).

Eberhardt, Carvalho and Murofuse⁽²⁰⁾, who analyzed the links of health workers in the western macro-region also observed greater precariousness among higher education professionals (85.28 %), highlighting the hospital level (53.45%) in relation to other levels of care. The study of Nodari⁽¹⁶⁾ assessed only Primary Care bond types in the same macro-region also identified more precariousness at the higher level (28.2%) in relation to the technical level (6.26%).

Table 4. Distribution of work contracts according to the administrative level, nature of the organization, hospital size and level of training. 9th Health Region of Paraná

	Protected	%	Precarious	%	Total	%	p-value
Administrative sphere							
Public	4	0,17	508	22,02	512	22,19	<0,0001
Private	705	30,56	1090	47,25	1795	77,81	
<i>Total</i>	<i>709</i>	<i>30,73</i>	<i>1598</i>	<i>69,27</i>	<i>2307</i>	<i>100,00</i>	
Nature of organization							
Private company	95	4,12	155	6,72	250	10,84	<0,0001
Charitable nonprofit organizations	608	26,35	717	31,08	1325	57,43	
Direct health administration	0	0,00	30	1,30	30	1,30	
Inirect health administration	4	0,17	478	20,72	482	20,89	
Private institution	2	0,09	218	9,45	220	9,54	
<i>Total</i>	<i>709</i>	<i>30,73</i>	<i>1598</i>	<i>69,27</i>	<i>2307</i>	<i>100,00</i>	
Hospital size							
Small Size	79	3,42	390	16,91	469	20,33	<0,0001
Medium Size	171	7,41	684	29,65	855	37,06	
Large Size	459	19,90	524	22,71	983	42,61	
<i>Total</i>	<i>709</i>	<i>30,73</i>	<i>1598</i>	<i>69,27</i>	<i>2307</i>	<i>100</i>	
Education level							
Higher education	142	6,16	1194	51,76	1336	57,91	<0,0001
Technical education	567	24,58	404	17,51	971	42,09	
<i>Total</i>	<i>709</i>	<i>30,73</i>	<i>1598</i>	<i>69,27</i>	<i>2307</i>	<i>100,00</i>	

Source: CNES, 2014

FINAL CONSIDERATIONS

The analyzed data showed that the 9th Region of Health of Paraná, presents, mostly small hospitals (61.54 %), distributed in small towns 1 (38.46%) and 2 (30.77 %), of private nature (84.62%), provide outpatient and hospital level care and only one hospital offers services of high complexity. The amount of existing hospital beds proved insufficient to meet the

region's population, according to national and international guidelines.

It was also showed a variety of types of employments⁽¹⁰⁾ and a large number of unprotected workers (69.27 %), which requires greater regulation of the state, both in public and in the private or nonprofit institutions, as that all are part of the SUS and must follow the rules of the system and labor laws in the country.

Still on the distribution of workforce in the 9th Health Region of Paraná, it was possible to

observe that it follows the offer of jobs in hospitals according to their size, and the amount of available beds.

It was not possible to identify if the distribution of beds and health workforce is adequate to the real health needs of the population of the municipalities that make up

the 9th Health Region of Paraná, indicating the limitation of the study and the need for research to examine these aspects, as well as other related training of workers. Finally, it also noted the need for greater state participation in the planning of training, distribution and management of the health workforce.

FORÇA DE TRABALHO EM SAÚDE E REDE HOSPITALAR NA 9ª REGIÃO DE SAÚDE DO PARANÁ

RESUMO

A rede hospitalar e a força de trabalho em saúde se distribuem de maneira desigual no território nacional, refletindo o modelo de atenção hegemônico e a organização a partir da oferta de serviços. O estudo teve por objetivo analisar a rede hospitalar e a composição e distribuição da força de trabalho em saúde dos hospitais da 9ª Região de Saúde do Paraná. Pesquisa descritiva, quantitativa que teve como fonte de dados o Cadastro Nacional de Estabelecimentos de Saúde. A estatística descritiva revelou que 84,62% dos hospitais são privados; 61,54% de pequeno porte; existem 2.307 ocupações cadastradas e destas 57,91% são de nível superior; 69,27% dos vínculos de trabalho são precários e 23,50% dos trabalhadores apresentavam mais que um vínculo empregatício. Identificou-se, ainda, menor jornada de trabalho semanal e maior precarização entre as ocupações de nível superior. Conclui-se pela necessidade de maior participação do Estado na regulação das instituições públicas e privadas, sobretudo na gestão do trabalho, e no planejamento da distribuição da força de trabalho em saúde.

Palavras-chave: Recursos humanos em hospital. Unidades hospitalares. Força de trabalho.

FUERZA DE TRABAJO EN SALUD Y RED HOSPITALARIA EN LA 9ª REGIÓN DE SALUD DE PARANÁ

RESUMEN

La red hospitalaria y la fuerza del trabajo en salud se distribuyen de forma desigual en el país, lo que refleja el modelo de atención hegemónico y la organización a partir de la oferta de servicios. El objetivo del estudio fue analizar la red hospitalaria y la composición y distribución de la fuerza de trabajo en salud de los hospitales de la 9ª Región de Salud de Paraná-Brasil. Investigación descriptiva, cuantitativa que tuvo como fuente de datos el Registro Nacional de Establecimientos de Salud. La estadística descriptiva mostró que 84,62% de los hospitales son privados; 61,54% pequeño porte; hay 2.307 ocupaciones registradas y de estas 57,91% son de nivel superior; 69,27% de los vínculos laborales son precarios y 23,50% de los trabajadores tenían más de un empleo. También fueron identificadas menos horas de trabajosemanal y más relaciones precarias entre las ocupaciones de nivel superior. Los resultados confirmaron la necesidad de una mayor participación del Estado en la regulación de las instituciones públicas y privadas, sobre todo en la gestión del trabajo, y la planificación de la distribución de la fuerza de trabajo en salud.

Palabras clave: Recursos humanos en hospital. Unidades hospitalarias. Fuerza de trabajo.

REFERENCES

- Machado JP, Martins M, Leite IC. O mix público-privado e os arranjos de financiamento hospitalar no Brasil. *Saúde em Debate*. 2015 [acesso em 12 maio 2016]; 39: 39-50. Disponível em: URL: <http://www.scielo.br/pdf/sdeb/v39nspe/0103-1104-sdeb-39-spe-00039.pdf>
- Girardi SN, Mass LWD. Informações sobre Mercado de Trabalho em Saúde: conceitos e bases de dados. *Estação de Pesquisa de Sinais de Mercado*, Belo Horizonte, 2011 ago.
- Brasil. Ministério da Saúde. Formação, regulação profissional e mercado de trabalho em saúde. In: *A saúde no Brasil em 2030: diretrizes para a prospecção estratégica do sistema de saúde brasileiro*. Rio de Janeiro (RJ): Fiocruz, 2012.
- Alves SMP, Coelho MCR, Borges, LH, Cruz, CAM, Massaroni, L, Maciel, PMA. A flexibilização das relações de trabalho na saúde: a realidade de um Hospital Universitário Federal. *Ciência e Saúde Coletiva*. 2015 [acesso em: 12 de maio 2016]; 20 (10): 3043-3050. Disponível em: URL: <http://www.scielo.br/pdf/csc/v20n10/1413-8123-csc-20-10-3043.pdf>
- Dedecca C, Trovão CJB. A força de trabalho no complexo da saúde: vantagens e desafios. *Ciência e Saúde Coletiva*. 2013 [acesso em: 10 de nov. 2013]; 18 (6): 1555-1567. Disponível em: URL: <http://www.scielo.br/pdf/csc/v18n6/08.pdf>
- Brasil. Ministério da Saúde. Secretaria de gestão do trabalho e da educação na saúde. Departamento de gestão e da regulação do trabalho em saúde. Programa Nacional de Desprecarização do Trabalho no SUS: DesprecarizaSUS: perguntas e respostas. Brasília, DF: Editora do Ministério

da Saúde, 2006 [acesso em 09 de nov 2014]. Disponível em: URL:

http://bvsmms.saude.gov.br/bvs/publicacoes/desprec_cart.pdf

7. Marcelino P., Cavalcanti S. Por uma definição de terceirização. *Cad. CRH* [online]. 2012, [acesso em 13 ago 2016] 25 (65): 331-346. Disponível em: URL:

<http://www.scielo.br/pdf/ccrh/v25n65/v25n65a10.pdf>

8. Karino ME, Felli VEA, Sarquis LMS, Santana LL, Silva SR, Teixeira RC. Cargas de trabalho e desgastes dos trabalhadores de enfermagem de um hospital-escola. *Cienc Cuid Saude*. 2015 [acesso em 16 maio 2016]; 12(2): 1011-1018. Disponível em: URL:

<http://www.periodicos.uem.br/ojs/index.php/CiencCuidSau de/article/view/21603/14750>

9. Brasil. Ministério da Saúde. Conselho Nacional de Saúde. Resolução n. 287 de 8 de outubro de 1998. Brasília, DF: CNS, 1998 [acesso em 17 jun 2013]. Disponível em: URL:

http://www.aids.gov.br/sites/default/files/anexos/page/2010/241/resol_cns_287_1998_pdf_91145.pdf

10. Brasil. Ministério do Trabalho e Emprego. Classificação Brasileira de Ocupações. Brasília, DF. 2010 [acesso em 20 ago 2016]. Disponível em: URL: <http://wp.ufpel.edu.br/observatoriosocial/files/2014/09/CB O-Livro-1.pdf>

11. Instituto Brasileiro de Geografia e Estatística. Cidades. 2010 [acesso em 03 maio 2014]. Disponível em: URL: <http://www.ibge.gov.br>

12. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Cadastro Nacional de Estabelecimentos de Saúde, 2014 [acesso em 15 abr 2014]. Disponível em: URL: <http://cnes.datasus.gov.br>

13. Brasil. Ministério da Saúde. Projetos de Apoio ao desenvolvimento institucional do SUS.

Dimensionamento de número de leitos e tipologia hospitalar: o desafio de fazer as perguntas certas e de construir suas respostas. 2012 [acesso em ago 2016]. Disponível em: URL: <http://rbce.org.br/wp->

content/uploads/2014/10/59_Barbosa_Z_Tipologia_Hospitalar_LIGRESS_2012.pdf

14. Paraná. Secretaria de Estado da Saúde do Paraná. Plano Estadual de Saúde do Paraná 2012-2015, Curitiba, 2013 [acesso em 20 maio 2013]. Disponível em: URL: http://www.saude.pr.gov.br/arquivos/File/plano_estadual_saude_1104.pdf

15. Brasil. Ministério da Saúde. Portaria n° 2.224/GM. Brasília, DF, 5 dez. 2002 [acesso em 23 abr 2013]. Disponível em: URL: <http://dtr2001.saude.gov.br/sas/PORTARIAS/Port2002/Gm/GM-2224.htm>

16. Nodari SAB. Força de trabalho em saúde na atenção básica: características e distribuição geográfica na macrorregião Oeste do Paraná. 2015. [dissertação]. Cascavel (PR). Mestrado em Biociências e Saúde – UNIOESTE. 2015.

17. Paz MRD. A crise da força de trabalho em saúde. *Cad. Saúde Pública*. 2013 [acesso em 16 maio 2016]; 29 (10): 1924-1926. Disponível em: URL: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-311X2013001000002

18. Carvalho M, Santos NR, Campos WS. A construção do SUS e o planejamento da força de trabalho em saúde no Brasil: breve trajetória histórica. *Saúde debate* [online]. 2013 [acesso em 12 nov 2014]; 37(98): 372-387. Disponível em: URL:

<http://www.scielo.br/pdf/sdeb/v37n98/a02v37n98.pdf>

19. Ribeiro AC, Ramos, LHD, Mandú ENT. Perfil Sociodemográfico e profissional de enfermeiros de um hospital público de Cuiabá-MT. *Cienc Cuid Saude*. 2014 [acesso em 10 dez 2015]; 13(4): 625-633. Disponível em: URL:

http://www.periodicos.uem.br/ojs/index.php/CiencCuidSau de/article/view/20480/pdf_237

20. Eberhardt LD, Carvalho M, Murofuse NT. Vínculos de trabalho no setor saúde: o cenário da precarização na macrorregião Oeste do Paraná. *Saúde em Debate*. 2015; 39(4): 18-29.

Corresponding author: Cintia Teixeira Rossato Mora. Rua Barra Mansa, 152, Jardim Ipê, CEP 85869-686. Foz do Iguaçu, Paraná, Brasil. Telefones: (45) 3524-1790/(45) 9975-6066. E-mail: cintiater_mora@hotmail.com.

Submitted: 27/01/2016

Accepted: 08/09/2016