Cogitare Enfermagem

ORIGINAL ARTICLE

# PUBLIC FUNDING FOR HEALTH CARE IN MUNICIPALITIES OF THE STATE OF PARANÁ LOCATED IN THE BORDER REGION (2000 – 2016)*

Cleide Teresinha dos Santos[1], Maria Lucia Frizon Rizzotto[2], Manoela de Carvalho[3]

**ABSTRACT**
Objective: To analyze the history of public funding of health actions and services in four bordering municipalities of Paraná/Brazil, from 2000 to 2016.
Method: Quantitative study that uses data from the Information System on Public Health Budgets (SIOPS), analyzed through simple descriptive statistics.
Results: The results show the growth of absolute and relative values applied in healthcare actions and services over the study period; greater participation of the municipalities in the funding, and a bit of recognition of the issues related to the border region by the federal and state governments, through the implementation of specific programs.
Conclusion: The problem of health funding in border municipalities was not solved after the enactment of Constitutional Amendment No. 29, in 2000, due to the chronic underfunding of the system and the discontinuation of specific programs. The results contribute to a better understanding of the right to health of border residents.

**DESCRIPTORS:** Unified Health System (SUS); Health Spending; Health Care Funding; Health Management; Health Care in Border Municipalities.

*Article extracted from the masters dissertation "Financiamento público para a saúde em municípios de fronteira do estado do Paraná de 2000 a 2016" (Public Funding for health care in municipalities of the State of Paraná located in the border region, from 2000 to 2016). Universidade Estadual do Oeste do Paraná, 2018.

HOW TO REFERENCE THIS ARTICLE:
Santos CT dos; Rizzotto MLF; Carvalho M de. Public funding for health care in municipalities of the state of Paraná located in the border region (2000 – 2016). Cogitare enferm. [Internet]. 2019 [access "insert day, monh and year"]; 24. Available at: http://dx.doi.org/10.5380/ce.v24i0.61110.



[1]Nurse. Master in Public Health at the Border Region. Foz do Iguaçu, PR, Brazil.
[2]Nurse. PhD in Collective Health. Professor of the Postgraduate Program in Public Health in the Border Region at Universidade Estadual do Oeste do Paraná. Foz do Iguaçu, PR, Brazil.
[3]Nurse. PhD in Collective Health. Professor of the Postgraduate Program in Public Health in the Border Region at Universidade Estadual do Oeste do Paraná. Foz do Iguaçu, PR, Brazil.

ARTIGO ORIGINAL / ARTÍCULO ORIGINAL

# FINANCIAMENTO PÚBLICO PARA A SAÚDE DE MUNICÍPIOS PARANAENSES EM REGIÃO DE FRONTEIRAS (2000 – 2016)

**RESUMO**

*Objetivo: analisar a trajetória do financiamento público com ações e serviços de saúde em quatro municípios fronteiriços do Paraná/Brasil, no período de 2000 a 2016.*

*Método: pesquisa quantitativa desenvolvida com dados do Sistema de Informação sobre Orçamentos Públicos em Saúde, analisados por meio de estatística descritiva simples.*

*Resultados: os resultados mostram crescimento dos valores absolutos e relativos aplicados em ações e serviços de saúde ao longo do período; maior participação dos municípios no financiamento; e certo reconhecimento da problemática da fronteira pelos governos federal e estadual por meio de programas específicos.*

*Conclusão: o problema do financiamento da saúde em municípios de fronteira não está equacionado no período posterior à promulgação da Emenda Constitucional nº 29, em 2000, face ao subfinanciamento crônico do sistema e da interrupção de programas específicos. Os resultados contribuem para melhor compreensão acerca do direito à saúde dos residentes na fronteira.*

*DESCRITORES: Sistema Único de Saúde; Gastos em Saúde; Financiamento da Assistência à Saúde; Gestão em saúde; Saúde na Fronteira.*

# FINANCIACIÓN PÚBLICA PARA LA SALUD DE MUNICIPIOS DE PARANÁ EN LA REGIÓN DE FRONTERAS (2000 – 2016)

**RESUMEN**

*Objetivo: evaluar cómo ocurre la financiación pública con acciones y servicios de salud en cuatro municipios de frontera de Paraná/Brasil, en el periodo de 2000 a 2016.*

*Método: investigación cuantitativa desarrollada con datos del Sistema de Información sobre Presupuestos Públicos en Salud, analizados por medio de estadística descriptiva simple.*

*Resultados: los resultados apuntan crecimiento de los valores absolutos y relativos aplicados en acciones y servicios de salud a lo largo del periodo; mayor participación de los municipios en la financiación; y algún reconocimiento de la problemática de la frontera por los gobiernos federal y estadual por medio de programas específicos.*

*Conclusión: el problema de la financiación de la salud en municipios de frontera no fue investigado en el periodo posterior a la promulgación de la Enmienda Constitucional nº 29, en 2000, considerando la subfinanciación crónica del sistema y la interrupción de programas específicos. Los resultados contribuyen para la comprensión acerca del derecho a la salud de las personas que viven en la frontera.*

*DESCRIPTORES: Sistema Único de Salud; Gastos en Salud; Financiación de la Asistencia a la Salud; Gestión en salud; Salud en la Frontera.*

## INTRODUCTION

The Unified Health System (SUS) is one of the main achievements of Brazilian society in the twentieth century with regard to social rights, being a model for other countries. This is one of the major public policies in force in Brazil, despite the numerous unresolved problems in three decades of existence, among them, the guarantee of stable and sufficient public financing to meet the needs of universalization of health actions and services for all the population[1].

The funding of SUS has been regulated and is carried out by the three governmental spheres, and the percentages were defined in Constitutional Amendment No. 29 of 2000 (EC-29/2000) and Constitutional Amendment No. 86 of 2016 [2-3].

The decentralization of health to the state and municipal spheres implied the transfer of responsibilities to these levels of government, compelling municipal managers to organize themselves both politically and administratively to local health management. Thus, one of the challenges to be faced was to provide an adequate level of services with the available resources, which requires local planning based on reliable information [4].

Public managers, especially from small municipalities, face difficulties associated to insufficient administrative structures that cannot adequately manage public resources. Also, health professionals are not familiar with the complex legislation of these structures.

The debate about funding is growing and becoming more complex when it comes to municipalities in an international border region, both because of the increased demand for cross-border services and because of the lack of specific, durable policies for these regions[5-7].

Brazil has a land border strip of 15,719 kilometers, which accounts for 27% of the national territory, with about 10 million inhabitants. In this border strip, 588 municipalities are located in 11 Brazilian states that border 10 countries of South America, with the typical symmetries and asymmetries of such territorial spaces [8].

The border strip of Paraná includes 139 municipalities and shares borders with two Mercosur countries, Paraguay and Argentina. Thus, Paraná ranks second among the states that most share border cities in Brazil [9]. Among these cities, four are characterized as twin cities: Foz do Iguaçu, Guaíra, Barracão and Santo Antônio do Sudoeste, as they have a maximum degree of interaction.

Twin cities can be used as an analytical, economic and political instrument of integration between countries, since they favor the strengthening of international agreements[10-11]. In these cities, health problems have new features, due to the free movement of people and the disparity between the health systems and social protection between the countries, which are major challenges to be faced at all levels of government. Ensuring the right to health in these regions requires specific policies that go beyond the managerial capacity of local public managers and the restricted notion of citizenship, and funding is an important aspect to be analyzed.

Thus, the present study aimed to analyze the history of public funding of actions and health services in four bordering municipalities of Paraná/Brazil, from 2000 to 2016.

## METHOD

Quantitative and cross-sectional study covering the municipalities of Foz do Iguaçu, bordering Puerto Iguazu (Argentina) and Ciudad de Leste (Paraguay); Guaíra which borders Salto del Guairá (Paraguay); Santo Antônio do Sudoeste, which borders the city of San Antônio (Argentina); and Barracão that borders Bernardo de Irigoyen (Argentina), all

characterized as twin cities.

Data on financing was obtained at the Brazil's Information System on Public Health Budgets (SIOPS), which, since its creation in 2000, has been an important tool to monitor compliance with the constitutional provision that determines the minimum level of spending on public healthcare actions and services. The data contained in the SIOPS are declaratory and seek to be consistent with the accounting information generated and maintained by the states and municipalities, in addition to being in conformity with the classification of revenues and expenses defined by the Ministry of Finance. The system offers various types of queries, reports and indicators.

Mandatory investments in health by the entities of the federation began in 2000. The data used are publicly available. Thus, it can be used for scientific purposes without the need for approval by the Research Ethics Committee.

The data collected was codified and tabulated in an Excel® worksheet and presented in the form of tables and graphs for later analysis and interpretation.

## RESULTS

The municipalities of Foz do Iguaçu and Guaíra are located in the western region of Paraná, and the municipalities of Santo Antônio do Sudoeste and Barracão, in the Southwestern region. Of the municipalities assessed in this study, Foz do Iguaçu has the highest gross domestic product (GDP) per capita (BRL 29,829.88), the lowest percentage of people living in extreme poverty (n = 9.500 or 3.61%) and the highest percentage of persons with health insurance plans (n = 70,043 or 26.54%). However, it has a lower population covered by the family health strategy (ESF) (n = 121,400 or 46%) compared to the other municipalities (Table 1).

Table 1 - Characteristics of border municipalities according to demographic indicators and population coverage by the ESF in different years. Foz do Iguaçu, Guaíra, Santo Antônio do Sudoeste and Barracão, PR, Brazil, 2010-2017

| Municipal Indicators | Foz do Iguaçu | Guaíra | Santo Antônio do Sudoeste | Barracão |
|---|---|---|---|---|
| Population (2016) | 263,915 | 32,784 | 20,059 | 10,273 |
| Extremely poor population (in % 2010) | 3.61 | 4.80 | 9.74 | 6.04 |
| Per capita GDP (in BRL 2011) | 29,829.88 | 15,029.05 | 11,356.78 | 14,462.37 |
| Population with health insurance plans (in % 2017) | 26.54 | 10.09 | 2.66 | 6.80 |
| Population covered by the ESF (% 2017) | 46 | 78 | 100 | 100 |
| Number of ESF teams implanted (2017) | 34 | 7 | 9 | 4 |

Source: Atlas do Desenvolvimento Humano no Brasil (2013) [12], IPARDES (2017) [13].

The opposite happens with the small municipality of Santo Antônio do Sudoeste, with the lowest GDP per capita (BRL 11,356.78), the highest percentage of the population in extreme poverty (n = 1,945 or 9.74%), and fewer people covered by health insurance

plans (n = 542 or 2.66%), but with 100% coverage by the ESF. Barracão, with the lowest population among the cities included in the study, and also a small municipality, has better indicators than Santo Antônio do Sudoeste regarding per capita GDP (BRL 14,462.37), as well as regarding the percentage (n = 616 or 6.04%) of the extremely poor population (Table 1).

As for the percentage of population covered by health insurance plans, except for Foz do Iguaçu, which has 26.54% of the population covered, this coverage in the other municipalities is relatively low compared to the national average of approximately 24.5% of the population[14].

Table 2 summarizes the per capita investments in the referred municipalities in the 2000-2016 period, considering two situations, as follows: in the first situation, all spending in health actions and services was computed, which includes the two large groups of expenses: current expenditures (personnel and charges) and capital expenditures (construction, remodeling and equipment acquisition). In the second situation, capital investments were excluded, since such investments fluctuated significantly over the period analyzed and could de-characterize the health investment history.

Table 2 - Per capita health investment in border municipalities, according to total expenditure (1) and current expenditure (2) Foz do Iguaçu, Guaíra, Santo Antônio do Sudoeste e Barracão, PR, Brazil, 2000-2016

| YEAR | Foz do Iguaçu | | Guaíra | | Santo Antônio do Sudoeste | | Barracão | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) |
| 2000 | 111,78 | 107,61 | 76,66 | 72,46 | 37,88 | 37,82 | 81,35 | 76,98 |
| 2001 | 139,3 | 136,08 | 73,79 | 70,06 | 47,09 | 45,65 | 83,6 | 77,95 |
| 2002 | 155,51 | 154,06 | 96,87 | 97,58 | 78,16 | 67,1 | 101,77 | 98,12 |
| 2003 | 189,09 | 182,88 | 117,62 | 115,29 | 87,82 | 80,56 | 119,02 | 117,8 |
| 2004 | 216,18 | 212,83 | 147,08 | 145,58 | 108,36 | 102,19 | 148,35 | 145,92 |
| 2005 | 266,86 | 251,31 | 196,67 | 185,79 | 117,77 | 113,4 | 167,56 | 161,12 |
| 2006 | 303,59 | 276,94 | 267,73 | 203,97 | 137,13 | 125,09 | 196,03 | 186,25 |
| 2007 | 329,11 | 312,02 | 259,71 | 192,2 | 159,2 | 149,2 | 239,86 | 237,76 |
| 2008 | 342.14 | 323,93 | 228,19 | 205,74 | 186,98 | 179,8 | 282,13 | 271,62 |
| 2009 | 355,19 | 320,61 | 248,95 | 229,8 | 227,41 | 222,74 | 375,96 | 365,71 |
| 2010 | 572,01 | 542,56 | 287,35 | 255,34 | 260,78 | 252,55 | 349,93 | 347,47 |
| 2011 | 634,26 | 608,92 | 339,47 | 322,37 | 302,57 | 293,84 | 428,43 | 414,88 |
| 2012 | 744,28 | 718,57 | 404,93 | 367,25 | 429,97 | 342,37 | 544,66 | 511,59 |
| 2013 | 753,47 | 737,25 | 578,42 | 416,37 | 571,11 | 436,18 | 589,96 | 517,63 |
| 2014 | 876,07 | 846,55 | 631,95 | 508,74 | 724,15 | 492,32 | 743,77 | 652 |
| 2015 | 857,12 | 829,73 | 601,13 | 534,12 | 668,01 | 574,18 | 818,93 | 732,43 |
| 2016 | 903,77 | 875,66 | 926,9 | 805,59 | 649,79 | 576,06 | 969,43 | 860,44 |

Source: SIOPS, 2017[15].

Legend: (1) total per capita investments (current and capital expenditure); (2) per capita investments based on current expenditure.

Although the investment increased, its growth was not linear in the period. All municipalities had negative growth in at least one year of the series when considering the total investment: Foz do Iguaçu in 2015, Guaíra in2007, 2008 and 2015, Santo Antônio do Sudoeste in 2105 and 2016 and Barracão in 2010 (Table 2). When the per capita investment without capital resources was analyzed, Foz do Iguaçu was found to have a negative growth in 2009 and 2015, Guaíra in 2002 and 2007 and Barracão in 2010, Santo Antônio do Sudoeste did not have any negative growth year when only current expenditure was considered, but ranked far below the other municipalities throughout the historical series.

In some of the years there was a significant increase in the per capita investment when the total investment was considered, e.g. Foz do Iguaçu, in 2010, with a 61.04% increase compared to 2009; Guaíra in 2016, with an increase of 54.19%, and Santo Antônio and Barracão, in 2014, with increases of respectively 26.79% and 26.07% . The municipality with more regular increases during the historical series was Barracão, which ended the period with the highest total per capita value (BRL 969.43) and the second largest value when only current expenditure (BRL 860.44) was considered, after Foz do Iguaçu (BRL 875.66) (Table 2). Figure 1 shows the increase in the municipalities' spending in health actions and services in the period.

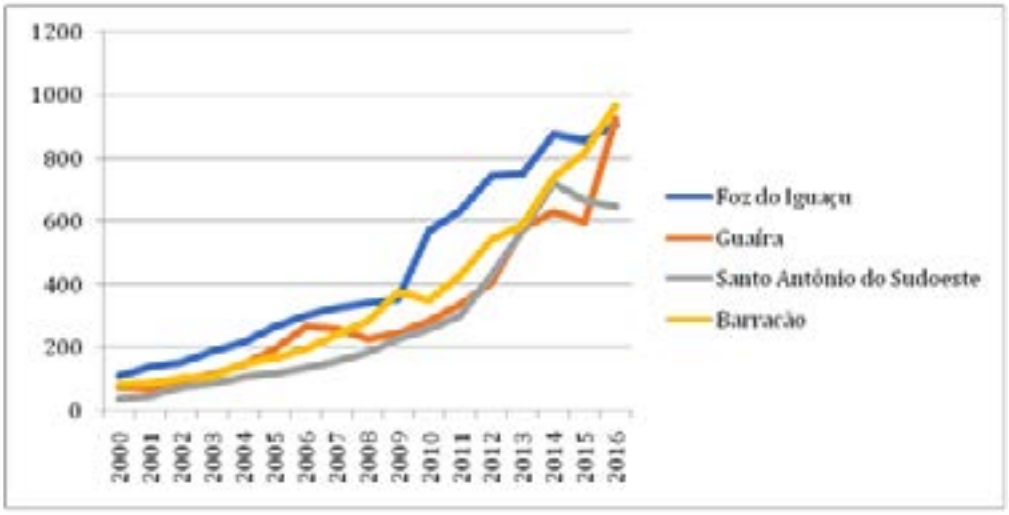


Figure 1 - Evolution of the per capita health investment (current and capital expenditure) in border municipalities. Foz do Iguaçu, Guaíra, Santo Antônio do Sudoeste e Barracão, PR, Brazil, 2000-2016
Source: SIOPS, 2017[15].

Figure 2 shows the evolution of capital (2a) and current (2b) expenditure, whose irregularity can be explained by the sporadic transfers established by parliamentary amendments and others related to specific programs such as *Sis-Fronteira, Compensação de Especificidades Regionais* and *Saúde do Viajante*, described later in this article. Irregular transfers for capital investment explain the increase in per capita investment in some of the years, but which did not occur in the subsequent years.

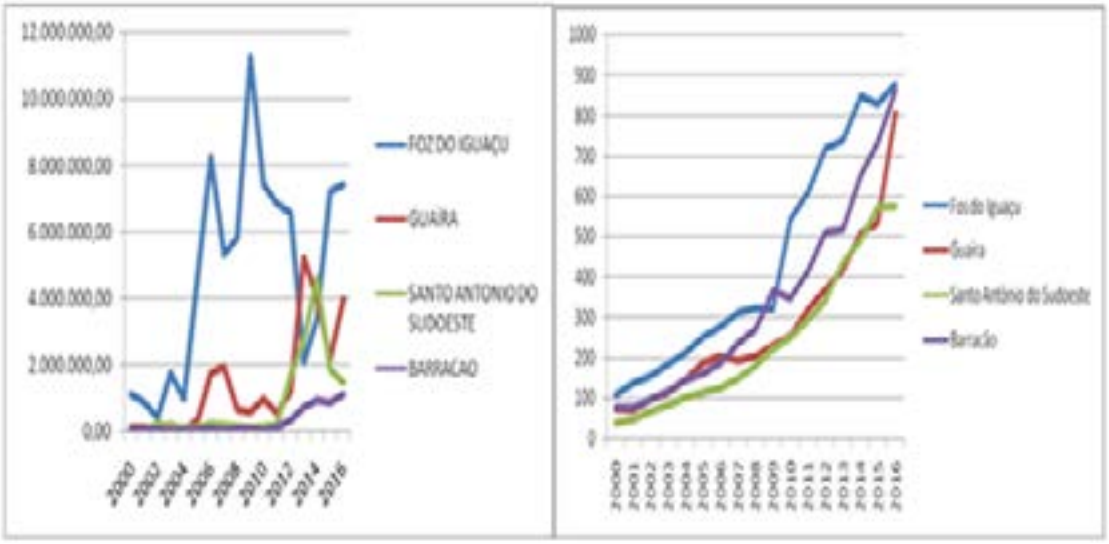


Figure 2 - Evolution of per capita health expenditure considering capital expenditure in border municipalities (2a) and Evolution of per capita health expenditure, considering current expenditure (cost and personnel) in the border municipalities (2b) Foz do Iguaçu, Guaíra, Santo Antônio do Sudoeste and Barracão, PR, Brazil, 2000-2016
Source: SIOPS, 2017[15].

Barracão had the lowest volume of capital investment throughout the series. However, the per capita investment performance was one of the best among the municipalities assessed.

Figure 3 shows the evolution of health expenditures according to the sphere of government (3a), considering the average of the four municipalities and the municipal revenues according to Constitutional Amendment (EC) 29/2000 (3b). This amendment established the minimum application of 15% of municipal health resources and the obligation to allocate these resources to SIOPS in 2002. For this reason, the historical series begins in 2002. On the other hand, the municipalities' contribution to the SIOPS increased from 25.30% in 2002 to 31.40% in 2016, an increase of 6%. With a smaller share, the state government allocated less resources to the SIOPS: 22.60% in 2002, and 25.60% in 2016.

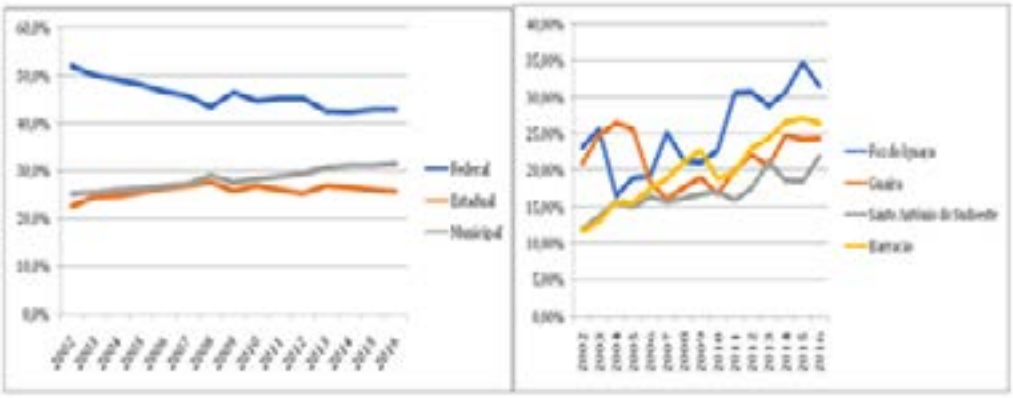

Figure 3 - Percentage of investment in health actions and services, according to the sphere of government in the border municipalities (3a) and municipal resources invested in health by border municipalities (3b). Foz do Iguaçu, Guaíra, Santo Antônio do Sudoeste and Barracão, PR, Brazil, 2002-2016
Source: SIOPS, 2017[15].

Despite the fluctuations in all the municipalities throughout the period, in 2007, Foz do Iguaçu and Barracão invested more resources than the other municipalities. Barracão surpassed Foz do Iguaçu in percentage values, a city that is generally said to have the highest percentage of municipal resources applied in health. After an initial period in which it destined more than 20% of its own resources to health, Guaíra reduced its share in 2006 and 2007, and then increased its share again in the following years, destining 24.29% of the municipal resources in health, in 2016. The municipalities of Santo Antônio do Sudoeste and Barracão only reached the minimum level of spending on public healthcare actions and services established by the legislation in 2004, and in 2006, Barracão began to destine more and more municipal resources in health, surpassing Santo Antônio do Sudoeste, which has the worst performance among the assessed municipalities.

Three programs were identified through which resources were transferred to the municipalities located in a border region. Two of them are federal (*Sis-Fronteira* and *Compensação de Especificidades Regionais*) and one is a state program (*Saúde do Viajante*), although the latter has also received federal resources.

The Sis-Fronteira was the first program to destine resources to the municipalities from 2006 to 2008. Through this program, Foz do Iguaçu received BRL 314,253.00; Guaíra, BRL 128,996.58; Santo Antônio do Sudoeste, BRL 90,900.84, and Barracão BRL 52,227.11.

At the same time, in 2007, border municipalities began to receive resources called *Compensação de Especificidades Regionais* (transfers to compensate municipalities with regional specificities) as part of the incentives for the Variable Basic Health Care Floor (Variable PAB), and in 2013 these funds were incorporated into the Fixed PAB. Through this program, Foz do Iguaçu received a BRL 239,490.60; Guaíra received BRL 114,013.86; Santo Antônio do Sudoeste, BRL 93,890.62, and Barracão, BRL 74,330.00.

In 2015 and 2016, there was a significant transfer of funds through the program *Saúde do Viajante* (Traveler's Health program). The highest values of extra resources received by municipalities during the analyzed period under the referred program, are as follows: Foz do Iguaçu received BRL 14,000,000.00; Guaíra received BRL 1,697,893.78; Santo Antônio do Sudoeste, BRL 521,418.12, and Barracão, BRL 268,154.76.

Municipal Health Plans (PMS), Annual Health Programs (PAS) and Annual Management Reports (RAG), available in the Management Report Support System (SARGSUS, 2017) from 2011 on, when their availability in the system became mandatory, were analyzed. That search aimed to identify how funding issues and/or access to funding of municipalities in cross-border areas have been reported in the municipal management instruments.

Only in the PMS of Barracão, in 2011 there is mention to the fact that it is a border municipality, and it is stated that despite the decrease in the population, according to the 2010 census, the municipality provides assistance to a population that was not computed by the Brazilian Institute of Geography and Statistics (IBGE). The PMS also cites the *SIS-Fronteiras* (Integrated Border Health System program) and the Intermunicipal Border Consortium (CIF) with the purpose of maintaining and improving the partnership in healthcare areas especially hospital care and patient transport through the consortium. This topic was not addressed in the instruments of other municipalities.

## DISCUSSION

The low coverage by the ESF, detected in Foz do Iguaçu, is a phenomenon that occurs in several medium and large municipalities, especially in the central areas of cities where the population with the highest income and with the highest coverage of health insurance is concentrated. Small municipalities, with less than 20 thousand inhabitants, have better coverage of Primary Care (AB) and less coverage by health insurance plans [16-17], a situation found in the municipalities of Santo Antônio do Sudoeste and Barracão.

Despite the advances after the Federal Constitution of 1988 regarding access to public health services, especially AB, the system remains a public-private mix that favors double coverage of health services, and one quarter of Brazilians have private health plans and, therefore, double access. This double coverage in the SUS results in inequalities and injustices in the access to health services, favoring population groups that have private plans and hence better health conditions compared to those groups that do not have private health plans[18].

The increase in the coverage of basic care (AB) programs in recent years in Brazil was not very significant. The family health teams had an estimated coverage of 63.62% in 2016, with 40,067 teams implanted in 5,382 municipalities, an increase of only 0.2% compared to 2015 (63.45%). The results show that despite the advances, some challenges must be overcome to ensure that the relevant policies have an impact on the organization of services and the improvement of the health status of the population [19].

The EC-29 established a minimum of spending of 15% of municipal resources plus constitutional transfers on public healthcare actions and services. Data from the Institute for Applied Economic Research (IPEA) [20] show that, at the national level, the expenditure per capita of the three spheres on SUS doubled between 2000 and 2011, from BRL 403.00 to BRL 830.00.

A survey conducted by the Federal Council of Medicine in 2016 showed that health spending in 2013 was BRL 1,419.84, or approximately US$ 523, far below the average spending in the Americas, whose per capita investment of the public sector, was BRL 1,816.00. In 2015, when the latest figures were calculated by IBGE, the per capita value of public spending was BRL 1,131.94[21]. In the present study the per capita values were below the national data. However, it should be noted that municipalities receive inputs from the federal and state governments (medicines, vaccines, equipment, among others) that are not computed in the amounts calculated as current and capital expenditure at the state level of government, only at the federal level.

The federal government is still responsible for the highest percentage of resources for health financing in the municipalities examined (43%), followed by municipalities (31.4%) and states (25.6%). However, in the Brazilian tax system, highest collection capacity is concentrated in the federal government. Authors have denounced the growing lack of accountability of the federal government for health funding [22-23].

Regarding specific programs for border regions, the SIS-Fronteira program was the first recognition of the need to deal with difficulties in the health funding in these regions. The program was created to expand the right to health care services for foreign residents in the Border area, but due to administrative discontinuity, lack of support and changes in the staff of the Ministry of Health, the limited right of foreign dwellers to healthcare persisted[24].

Assessment of the results of the implementation of this program did not change significantly. On the contrary, difficulties were identified in the management and implementation of a network of services that contributed to improve healthcare services to the border population [24].

The funds of the Compensação de Especificidades Regionais are a financial incentive created by the federal t under the Pact for Health in 2006, aimed to meet regional specificities such as seasonality, migration, difficulties in maintaining health professionals, among others. In 2012, the incentive was incorporated into the Fixed Basic Health Care Floor (PAB-fixed) of each municipality [25].

The Saúde do Viajante (Traveler's Health) program was created by the government of Paraná, in 2015, and is composed of three main axes: information, surveillance and assistance. Through this program significant resources were transferred to border municipalities [26]. The program did not define specific criteria for the transfer of resources to the municipalities, but was welcomed by the managers for allowing its use to fund health

care.

It should be emphasized that after the approval of EC 95 in 2016, the SUS faced greater budget constraints, and new cuts in essential areas such as social security, including health programs and actions such as vaccination and maintenance of public hospital beds and basic sanitation, which has serious implications for the health and epidemiological profile of the Brazilian population [27].

One limitation of this study is the lack of data on the cross-border population in the assessed municipalities, which may interfere with the calculations of the per capita values invested in health over the study period.

## CONCLUSION

The study of health funding in border municipalities allowed a greater understanding of the problem experienced by health managers and workers, including nursing, which has only been recognized in the last decade, although the border and its related social problems have been present to a higher or lower degree since the definition of the boundaries of the current national territory. Although greater financial contributions do not directly and necessarily imply better quality of the services provided, insufficiency and instability of resources prevent the planning and provision of services that meet the needs of the population that depend on SUS services.

It is believed that initiatives such as SIS-Fronteira, Compensação de Especificidades Regionais and Saúde do Viajante have contributed to increase the visibility of the health problem in the border region, but have not had a lasting impact on financial and health indicators.

Health funding in these areas, as well as in the country as a whole, has not yet been resolved. However, in border municipalities the problems are aggravated by the free movement of people from neighboring countries that are not computed when it comes to the transfer of resources from state and federal entities. The discussion in the spaces of social control and registration in the SUS management instruments may be a way of approaching the problem, not to exclude, but to solve the problem of access of border residents to the health care system.

In border regions, the mere right of citizenship is not enough. It is necessary to ensure basic human rights and effectively promote international cooperation, not restricting the access of border residents who share the same reality. Thus, diplomats should devote special attention to border municipalities that do not have the legal autonomy to establish diplomatic relations but are directly exposed to several problems, especially in the case of health care services, since Brazil, unlike the neighboring countries, has established a universal health care system. The results of the present study can contribute to a better understanding of the right to health in border regions, which constitutes a theoretical/practical challenge for the field of collective health and nursing itself.

## REFERENCES

1. Carvalho G. A saúde pública no Brasil. Estud. av. [Internet]. 2013 [access 17 abr 2018]; 27(78). Available at: http://dx.doi.org/10.1590/S0103-40142013000200002.

2. Brasil. Emenda Constitucional n. 29, de 13 de setembro de 2000. Altera os arts. 34, 35, 156, 160, 167 e 198 da Constituição Federal e acrescenta artigo ao Ato das Disposições Constitucionais Transitórias, para assegurar os recursos mínimos para o financiamento das ações e serviços públicos de saúde. Diário Oficial da República Federativa do Brasil, Brasília, 13 set. 2000.

3. Brasil. Emenda Constitucional n. 86, de 17 de março de 2015. Altera os arts. 165, 166 e 198 da Constituição Federal, para tornar obrigatória a execução da programação orçamentária que especifica. Diário Oficial da República Federativa do Brasil, Brasília, 17 mar. 2015.

4. Muller EV, Greco M. Avaliação da satisfação dos usuários com os serviços do consórcio intermunicipal de saúde do noroeste do Paraná. Ciênc. saude colet. [Internet]. 2010 [access 17 abr 2018]; 15(3). Available at: http://dx.doi.org/10.1590/S1413-81232010000300036.

5. Oliveira MM de. A mobilidade humana na tríplice fronteira: Peru, Brasil e Colômbia. Estud. av. [Internet]. 2006 [access 17 abr 2018]; 20(57). Available at: http://dx.doi.org/10.1590/S0103-40142006000200014.

6. Giovanella L, Guimarães L, Nogueira VMR, Lobato LVC, Damacena GN. Saúde nas fronteiras: acesso e demandas de estrangeiros e brasileiros não residentes ao SUS nas cidades de fronteira com países do Mercosul na perspectiva dos secretários municipais de saúde. Cad Saude Publica [Internet]. 2007 [access 17 abr 2018]; 23(Suppl 2). Available at: http://dx.doi.org/10.1590/S0102-311X2007001400014.

7. Levino A, Carvalho EF de. Análise comparativa dos sistemas de saúde da tríplice fronteira: Brasil/Colômbia/Peru. Rev Panam Salud Publica [Internet]. 2011 [access 10 jul 2015]; 30(5). Available at: https://scielosp.org/article/rpsp/2011.v30n5/490-500/pt/.

8. Lemões MAM. Sistema Integrado de Saúde em região de Fronteira: desafios do acesso da população aos serviços de atenção primária à saúde [dissertação]. Porto Alegre (RS): Universidade Federal do Rio Grande do Sul; 2012.

9. Albuquerque JLC. A dinâmica das fronteiras: deslocamento e circulação dos "brasiguaios" entre os limites nacionais. Horiz. antropol. [Internet]. 2009 [access 17 abr 2018]; 15(31). Available at: http://dx.doi.org/10.1590/S0104-71832009000100006.

10. Antunes EM. Considerações sobre integração regional e seus reflexos nas cidades de fronteira do Mercosul. In: Seminário Brasileiro de Estudos Estratégicos Internacionais (SEBREEI). Integração Regional e Cooperação Sul - Sul no Século XXI; 2012 p.156-175; Porto Alegre, Brasil. Porto Alegre: Instituto de Geociências/ UFRGS; 2012.

11. Marquezini ACT. Circuitos Espaciais de Fronteira: Cidades Gêmeas de Foz Do Iguaçu e Cidade Do Leste. Entre-Lugar [Internet]. 2010 [access 17 abr 2018]; 1(2). Available at: http://ojs.ufgd.edu.br/index.php/entre-lugar/article/view/756.

12. Atlas do desenvolvimento humano no Brasil. [Internet]. 2013 [access 30 nov 2018]. Available at: http://atlasbrasil.org.br/2013/pt/home/.

13. Instituto Paranaense de Desenvolvimento Econômico e Social (IPARDES). Dados gerais. [Internet]. 2017 [access 30 nov 2018] Available at: http://www.ipardes.pr.gov.br/.

14. Agência Nacional de Saúde Suplementar (ANS). Dados Gerais. [Internet]. 2018 [access 15 fev 2018] Available at: http://www.ans.gov.br/perfil-do-setor/dados-gerais.

15. Sistema de Informações sobre Orçamento Público em Saúde (SIOPS). Demonstrativos. [Internet]. 2017 [acesso em 30 nov 2018]. Available at: http://portalms.saude.gov.br/repasses-financeiros/siops/demonstrativos-dados-informados.

16. Bazzo-Romagnolli AP, Gimenez-Carvalho B, Almeida-Nunes EFP de. Gestão de unidade básica de saúde em municípios de pequeño porte: instrumentos utilizados, facilidades e dificuldades relacionadas. Rev. Gerenc. Polit. Salud. [Internet]. 2014 [access 17 abr 2018]; 13(27). Available at: http://dx.doi.org/10.11144/Javeriana.rgyps13-27.gubs.

17. Malta DC, Santos MAS, Stopa SR, Vieira JEB, Melo EA, Reis AAC dos. Family Health Strategy Coverage in Brazil, according to the National Health Survey, 2013. Ciênc. saude colet. [Internet]. 2016 [access 17 abr 2018]; 21(2). Available at: http://dx.doi.org/10.1590/1413-81232015212.23602015.

18. Pilotto LM, Celeste RK. Trends in the use of medical and dental services and associations with

educational level and private health plan coverage in Brazil, 1998-2013. Cad Saude Publica [Internet]. 2018 [access 20 fev 2019]; 34(4). Available at: http://dx.doi.org/10.1590/0102-311x00052017.

19. Medina MG. Atenção Primária à Saúde em 2016: avanços, desafios e resultados. Observatório de Análise Política em Saúde. [Internet]. 2016 [access 10 fev 2018]. Available at: http://analisepoliticaemsaude.org/oaps/noticias/?id=58f51333a319ff1adc256e5205e4e372&pg=1.

20. Instituto de Pesquisa Econômica Aplicada (IPEA). Panorama Ipea - financiamento da saúde. Produção de Andréia Ferreira. 30 jul. 2012. (27:48 min.). [Internet]. 2012 [access 23 jan 2018]. Available at: https://www.youtube.com/watch?v=dhQUX26FKNE&app=desktop.

21. Conselho Federal de Medicina (CFM). Levantamento do CFM avalia gasto per capita em saúde pública: indicadores mostram que valores aplicados pelos municípios sofreram queda de mais de R$ 10 bilhões. [Internet] Brasília: CFM; 2018 [access 10 fev 2018]. Available at: https://portal.cfm.org.br/index.php?option=com_content&view=article&id=25985:2016-02-18-12-31-38&catid=3.

22. Santos FAS, Gurgel Júnior GD, Pacheco HF, Martelli PJL. A regionalização e financiamento da saúde: um estudo de caso. Ciênc. saude colet. [Internet]. 2015 [access 17 abr 2018]; 23(4). Available at: http://dx.doi.org/10.1590/1414-462X201500040126.

23. Mendes A, Marques RM. O financiamento da atenção básica e da estratégia saúde da família no Sistema Único de Saúde. Saude Debate [Internet]. 2014 [access 17 abr 2018]; 38(103). Available at: http://dx.doi.org/10.5935/0103-1104.20140079.

24. Nogueira MR, Fagundes HS. A implementação do SIS-Fronteiras – perspectivas para a ampliação do direito à saúde na fronteira arco sul. Serv. Soc. Saúde. [Internet]. 2014 [access 15 fev 2018]; 13(2). Available at: http://dx.doi.org/10.20396/sss.v13i2.8634903.

25. Ministério da Saúde. Portaria n. 1.408, de 10 de julho de 2013. Incorpora os recursos financeiros destinados ao financiamento da estratégia Compensação de Especificidades Regionais CER à parte fixa do Piso de Atenção Básica (PAB Fixo) e revoga dispositivos da Portaria n° 204/GM/MS, de 29 de janeiro de 2007, e da Portaria n° 399/GM/MS, de 22 de fevereiro de 2006. Diário Oficial da República Federativa do Brasil, Brasília, 10 jul. 2013.

26. Secretaria de Estado da Saúde do Paraná (SESA). Programa estadual de saúde do viajante. [Internet]. Curitiba: SESA; 2015 [access 15 jan 2015]. Available at: http://www.saude.pr.gov.br/arquivos/File/00_-_NDS/Apresentacoes/2015/06_RO_CIB/04.pdf.

27. Instituto Humanitas Unisinos (IHU). Austeridade e retrocesso: impactos sociais da política fiscal no Brasil. São Paulo: Brasil Debate e Fundação Friedrich Ebert; 2018 [access 20 fev 2019]. Available at: http://www.ihu.unisinos.br/78-noticias/581632-estudo-escancara-retrocesso-social-com-a-emenda-do-teto-de-gastos.

**Received: 20/08/2018**
**Finalized: 02/05/2019**

**Corresponding author:**
**Manoela de Carvalho**
**Universidade Estadual do Oeste do Paraná**
**R. Universitária, 2069 –85819-110 – Cascavel, PR, Brasil**
**E-mail: manoelacarv@gmail.com**

**Role of Authors:**
**Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work - CTS, MLFR, MC**
**Drafting the work or revising it critically for important intellectual content - CTS, MLFR, MC**
**Final approval of the version to be published - CTS, MLFR, MC**
**Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved - CTS**