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PROPOSAL OF FINANCIAL INDICATORS ON HEALTH JUDICIALIZATION IN THE MUNICIPALITY OF CHAPECÓ (SC)

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ABSTRACT

This research aimed to propose financial indicators that allow the analysis and comparability of expenses with medicines from the judicialization of health in the municipality of Chapecó. Methodology was used as quantitative description, where the data collection covered 4,145 drug dispensations per judicial determination in the period between 2008 and 2015. The monetary amounts spent on this supply of drugs in the period and obtained the amounts of factors related to three perspectives: municipal revenues, municipal expenses and "Health Function" expenses. These figures were corrected by the IPCA and used to calculate fifteen suggested indicators to evaluate the evolution of health judicialization. The indices found allowed us to conclude that between 2008 and 2011 there were gradual increases in each period, while in 2012 there was a high growth (more than doubling in practically all indices in relation to the previous year). In the last three years, there were significant increases, since three of the indicators in the income group rose by more than 2,000% in 2015 compared to 2008. In the case of the parameters of the "Health Function", the three main variables changed by around 1,800 % Over the initial year of the series, while in the context of the expense metrics the evolution over the initial year was also significant (from 1,474.8% to 2,165.5% according to the indicator). The analysis of these indexes showed, then, a worrying reality from the point of view of the finances of the municipality by the tendency of worsening of the situation seen in the last years of the covered series.

Keywords: Judicialization of health. Indicators. Town hall.

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1 INTRODUCTION

Right to public health care has been guaranteed in Brazil by the 1988 Federal Constitution. However, since the creation of public health care services offered to Brazilian society, there has been difficulties related to their quantity and quality, which means that citizens use legal means to make them effective. In this sense, Freitas (2015) observes that the number of lawsuits aimed at obtaining medication and medical treatments and procedures has been increasing in recent years. It is also mentioned that this evolution allows us to design a worrying scenario for expenses related to public entities' obligation to meet society's demands regarding hospital care and pharmacological supply for the population.

Ventura, Simas, Pepe and Schramm (2010) assert that individual medical prescription along with absence of financial resources and the claimants' urgency for access to medication are the main arguments justifying the judicial decisions that determine the supply of medication as required by the authors. They argue that impacts on public finances are becoming more evident and deserve managers' attention to the proposal of a new model of service that can reduce operational and financial impacts for the next years.

In this sense, Tabosa (2010) discusses the need to think about the Brazilian judiciary branch's role in responding to demands from health care services and asserts that a solution to this type of shortage should also involve the legislative and executive branches. This opinion is corroborated by Mocelin (2013) when he says that ensuring the right to health care does not depend only on restricted or individual actions, as in the case of lawsuits, but on a set of articulated governmental policies guaranteeing the effectiveness of this right. Thus, it is up to public entities to study pertinent initiatives to be in line with new social needs, especially regarding health care judiciality.

However, while these policies are not developed to change this reality, it is necessary to follow the evolution of this problem. This monitoring and respective control tend to be facilitated by creation and adoption of operational and/or economic-financial indicators that allow managers to have the minimum conditions for understanding the reality (*Fundação Getulio Vargas* [FGV], 2004).

In this context, the issue of research prioritized in this article emerges: What financial indicators can be used to manage the supply of medication in cases of health care judiciality to the population? Therefore, in order to resolve this issue, the objective is to propose financial indicators that allow analysis and comparability of expenses with medication originating from health care judiciality in the Brazilian municipality of Chapecó, SC.

Studies with this approach can be justified by three aspects. The first is that there is a need, according to Pepe, Figueiredo, Simas, Castro and Ventura (2010), of research aimed at deepening the understanding of certain variables, especially when comparing the common and divergent characteristics of these lawsuits in Brazilian municipalities and states. The aforementioned authors state that, in general, procedures and factors that lead to courts in the whole country lawsuits seeking supply of medication that is not obtained at public services are generally unknown.

The second point is related to the fact that the percentages spent on health care by municipalities widely vary from one city to another, according to the General Accounting Office in the Brazilian state of Santa Catarina (2017). This survey shows that the main municipalities in the Brazilian state of Santa Catarina spend 18.30% (São José) and 38.70% (Rio do Sul) from their "Current Expenses" with "Own Municipal Health Care Expenses," but do not allow the factors most closely linked to the judiciality to be evidenced.

The third factor to justify this focus is that there is a gap in studies published in Brazilian accounting journals related to public accounting on the judiciality of medication supply, according to a survey conducted in January 2017 on online research platforms "EBSCO (Business Source Complete)," "SPELL (Scientific Periodicals Electronic Library)" and Brazilian "Portal de Periódicos CAPES" [CAPES Journals Web Portal; Brazilian Coordination of Improvement of Higher Education Personnel) (CAPES, in the Portuguese abbreviation)]. That is, in the national scientific literature there are few studies on the subject and the existing ones have prioritized legal analyses (Freitas & Dalla Vecchia, 2010; Silva, Silva, Vaccaro & Barbosa, 2012; Campos et al., 2012; Medeiros, Diniz & Schwartz, 2013; De Carli, 2014; Macêdo, Rocha,

Costa, Souza & Santa Rita, 2015) or precepts inherent in public health care (Pepe et al., 2010; Diniz, Machado & Penalva, 2014; Trevisan et al., 2015; Caron, Lefèvre & Lefèvre, 2015; Monsores, Lopes, Bezerra & Silva, 2016). Thus, there is a gap in terms of studies aimed at proposing indicators in the scope of public accounting allowing municipal managers to deepen knowledge about this type of expense.

2 THEORETICAL FRAMEWORK

The right to health care judiciality has its foundations in the Brazilian Federal Constitution of 1988 since it makes up the chapter of fundamental rights, also known as social law. According to Dresch (2015), from the constitutional text of the right to health care arises the conclusion that it is a fundamental human right and proposes to the State positive provisions for society, which must be included in public policies. In this way, social law has characteristics of public and subjective natures, since at the same time it is an individual right it can also be classified as a social right.

In this sense, Rosa, Saes and Abuleac (2012) mention that the Federal Constitution of 1988 represents an advance in health care practices and, from its promulgation, social protection activities began with the purpose of improving the public health care scenario in Brazil. In addition, the consolidation of the Brazilian government Unified health care System (SUS, in the Portuguese abbreviation) is one of the main objectives of public policies in force, as well as the expansion and formulation of health care actions, according to needs imposed by the Federal Constitution.

In the role of managing funds and defining public policies to be carried out within the scope of public health care, it is the responsibility of the Brazilian government Unified health care System (SUS, in the Portuguese abbreviation) to achieve social objectives with its effectiveness linked to the joint responsibility of the federation's entities with regard to the matter of health care and the proposal of public policies (Lucchese, 2009).

For Primor and Souza Filho (2014), obviously the judiciary branch should not exercise executive and legislative functions. However, in order to meet the collective goals set forth in the Constitution, every political activity must reconcile the performance/omission under the point of view of serving the State's goals, which provides legitimacy to the judiciary branch's activities and, ultimately, its constitutionality.

Lack of standardization and adequate parameters entail, according to Travassos *et al.* (2013), different decisions taken by the country's courts, since they still lack understanding of certain regional aspects, such as access to public services, efficiency in the provision of government services, the attitude by health care professionals and local managers with knowledge about the rights guaranteed by law to the population, as well as the values and conceptions used by judges at courts, which may influence the dimension of the judiciality, the distribution of values and society's moral behavior.

Supply of medication, according to Ventura *et al.* (2010), requires that, in order for the right to health care to take place, it demand broad governmental actions and policies, not only formal ones restricted to fulfilling judicial orders. These authors also mention the concern that judicial instruments should not be considered pharmaceutical management instruments but rather as important elements for decision making and for improving access to medication from SUS.

In this direction, health care judiciality represents, by means of judicial demands, society's main claims regarding pharmaceutical assistance and those that are latent in public health care. Thus, public managers are challenged to proposed strategies in public policies that improve and allow the effectiveness of the right to health care in Brazil (Veloso, 2015).

2.1 Accounting in public administration

Lima Júnior (2007) states that accounting information enables users to view entities' status from different angles and also allows administrators to analyze the organizations' management. It provides projections of results and information on investments of funds and assist in the planning of activities.

In public management in Brazil, according to Rosa (2011), the normative framework is represented by Federal Law No. 4,320 (1964), which has established the financial law general rules for preparation and control of budgets and balance sheets of the federal, state and municipal governments and the federal district and is in force and in full application until nowadays.

Thus, in the scope of public management, the main instrument of planning and control is the public budget, defined by the Federal Constitution of 1988 (articles 165 to 169) as a preventive and authorizing act of expenses that the State must carry out in a year of the modern public administration (Silva, 2011).

In this direction, governments should use planned and transparent actions in the management of public funds by means of adopting planning criteria and detailed classification of public revenues and expenses in their management control instruments in order to characterize revenue and the items of expense used to identify accounting facts. The provision of public service entails expense (public expense) and is linked to the capacity of tax collection by the State. In this context, government revenue is equivalent to any inflow of funds made in public coffers, whether effected in cash or other assets representing securities. On the other hand, public expense is the set of outputs performed by public entities for the provision and maintenance of services provided to society (*Secretaria do Tesouro Nacional* [STN], 2017).

In addition, the budget classification structure of expense comprises the following categories: *(i) the institutional classification, divided into "body" and "budgetary unit"; (ii) the functional classification, divided into "function" and "sub-function"; (iii) the programmatic classification, divided into "program" and "action" (equivalent to projects, activities and special operations) and (iv) the classification by economic nature, divided into economic category, expense nature group, application modality and expense element, as recommended by the Brazilian Department of National Treasury (2017).*

Accounting based on these criteria allows the elaboration of indicators regarding this, as discussed in the next section.

2.2 Financial and operational health care indicators

Indicators are necessary management tools in entities' monitoring and evaluation activities and it is by means of these that it is possible to evaluate projects, programs, actions and public policies in order to measure the achievement of goals, identify advances and propose improvements and correction of problems. In turn, financial indicators are often used to enable the demonstration of data obtained by means of a formula, which makes the information visualization clearer. With this, they point out, indicate, approximate and translate into operational terms the social dimensions of interest, defined based on theoretical or political choices made (Jannuzzi, 2009).

It should be noted, then, that the indicators can be of different natures: financial, accounting, economic, social etc. In the context of public management, there are also accountability indicators that show data on compliance with constitutional limits and limits established in Brazilian Complementary Law No. 101 (2000), which establishes public finance standards for accountability in fiscal management, called Fiscal Responsibility Act (FRA), accompanied in all spheres according to their results and notes by the General Accounting Offices. In the case of public expense, there are several ways to present them. One of the reports used is called "Expense by Function" and represents expense groups from the various areas that are in the public sector, such as health care, assistance, security, judicial, legislative, among others (*Tribunal de Contas de Santa Catarina* [TCE/SC], 2016).

On the other hand, the Department of Management of the Brazilian Ministry of Planning (2009) argues that the construction of indicators must follow specific definitions of performance, from which the performance measurement models can be defined on a case by case basis. However, it is necessary to follow some "rules" and methodological considerations, such as: avoid reductionist and one-dimensional definitions, include significant aspects and dimensions in the model and leave behind factors of little significance. It is also mentioned that a performance system must go beyond the measurement of indicators and allow the generation of measures in different dimensions of efforts and results, as well as the generation of a score for

each indicator that present a relative measure (such as in comparing the current goal with an "ideal" goal).

To this end, Brazilian Ministry of Health's Public Health Care Budget Information System (SIOPS, in the Portuguese abbreviation) presents several indicators in its database. Of these, it is pertinent to point out some parameters that seek to demonstrate where (or how) public funds are applied in health care, such as the metrics "total per capita health care expense," "per capita own funds expense," "SUS transfers per capita," "percentage (%) of personnel expense on total expense," "percentage (%) of investment expense on total expense," "percentage (%) of own funds applied in health care" and "percentage (%) of expense on third party (legal entities) services on total expense." However, no indicators related to health care judiciality were found in the database mentioned.

2.3 Similar research

In order to know the current scenario about preparation or use of indicators for monitoring and control of health care judiciality, online search was carried out on research platforms "EBSCO (*Business Source Complete*)," "SPELL (*Scientific Periodicals Electronic Library*)" and "Portal de Periódicos CAPES". *In these searches, carried out in January 2017. keywords "health care judiciality" or "judiciality in medication" and "indicators" plus the symbol "*" (asterisk) were used to allow derivations in the sentences used*. It should also be clarified that search for these keywords was done in search options "Summary" and "Title." No results were found that approached the focus prioritized in this article.

However, by broadening the search to other sources, studies that most resembled the topic highlighted were those by Wang, Vasconcelos, Oliveira and Terrazas (2014) and Vaz, Bonacim and Gomes (2016).

In the case of Wang *et al.* (2014), the research estimated that expenses of the Brazilian municipality of São Paulo (SP) with health care judiciality in 2011 was equivalent to 6% of what the municipality spent on its pharmaceutical assistance policy and 10% of the total spent on medication and hospital supplies and outpatient and dental care. They also comment that about 55% of these expenses are destined to the supply of medication that is the responsibility of the state or federal governments, whereas about 45% are related to treatments not included in the Brazilian government Unified Health Care System (SUS, in the Portuguese abbreviation).

In the study by Vaz *et al.* (2016) evidence has emerged that the municipalities with the best health care indexes (IDSUS, Portuguese abbreviation for the Performance Index for the Brazilian government Unified Health Care System) are the ones that suffer most from the number of lawsuits, which increases the importance of public managers in understanding the problem and working on the causes, thus avoiding unpredictability for the government budget and improving public policies in the area of health care.

This small number of studies on the financial aspects of health care judiciality in Brazil reveals the existence of a research gap, especially regarding the proposal of indicators for measurement and comparability of the amounts provided to the beneficiaries. Therefore, this article proposes to contribute to reducing, even minimally, such a deficiency.

3 METHODOLOGICAL PROCEDURES

As for the methodological design, this can be characterized as a quantitative research of description. *Rauen (2015. p.157) mentions that this type of study is better known as "data collection, investigation or survey and consists of requesting information to a statistically significant group of people for subsequent quantitative analysis, using field research techniques*." In this sense, Andrade (2002) argues that descriptive studies are concerned with observing facts and recording, analyzing, classifying and interpreting them without a direct interference from the researcher in the context. The survey aspect was characterized by the fact that all data considered in the survey were directly collected from each judicial process (specifically in the control of providing medication maintained by the Brazilian city of Chapecó for each demand) and manually entered in a Microsoft Excel® spreadsheet used to tabulate them.

Regarding the quantitative approach modality, Richardson (1999) adds that it involves research that uses quantification, both in the modalities of collecting information and in the processing of these modalities by means of statistical techniques, from the simplest ones (such as percentage, means, standard deviation etc.) to more complex ones (such as correlation coefficients, regression analyses etc.). In addition, the research carried out is of an *ex post facto* type, since it comprises analyses based on facts that had already occurred. There is no interference from the researcher (Bezerra & Corrar, 2006).

3.1 Population and sample

All legal proceedings against the Brazilian municipality of Chapecó, SC, the object of which was related to the supply of medication, were analyzed. This focus was chosen because of the apparent increase in the volume of lawsuits in which the municipality has been involved over the last few years, as well as the possibility of access to data provided by municipal health care managers.

As for the time span covered, the period between 2008 and 2015 was prioritized, given the availability of data. However, it is pertinent to point out that data referring to 2005, 2006 and 2007 were also investigated, the inconsistency of records of which impaired standardization/comparison of data collected in subsequent years and implied their exclusion from the list of information used.

Regarding the execution of the data collection procedures, it was manually performed in the third bimester of 2016, process by process, in the offices of the Department of Health Care of the city of Chapecó. The data were compiled in a Microsoft Excel® spreadsheet, due to the unavailability of this information with the detail required in the municipality's computer system. In this sense, the variables collected in the judicial processes are listed in Table 1.

Table 1
Summary of judicial processes variables

Variable	Abbreviation	Role/Methodology
Age group	FE	Classification of the beneficiary by age group
Sex	GE	Male or female
Defendants of the Lawsuit	RP	Defendants in the Lawsuit, city and State, or Union
Group of Medication	GM	Classification by risk users group
Date of discharge	DT	Chronological order of delivery of drugs
Medication	MA	List of medication dispensed
Quantity dispensed	QD	Quantification of the medication dispensed by year
Value dispensed	VD	Value (BRL) spent per medication
Total amount dispensed	VTD	Total value (BRL) spent on medication under judiciality

Note. Source: Prepared by the authors.

It is important to point out that the data collected were circumscribed to those mentioned in Table 1 and are focused on the design and analysis of the current scenario regarding the phenomenon of judiciality of medication supply in the municipality. In this sense, Martins (2010) argues that one of the outstanding features of the quantitative approach is the clear definition of research variables by researchers based on the theoretical framework adopted and the use of statistical instruments for analytical treatment.

It should also be mentioned that ethical precautions have been taken regarding the names of the persons benefiting from these processes, in order to safeguard their right to privacy. Then, from the determination of the data prioritized, 104 lawsuits were filed against the Brazilian municipality of Chapecó (or having this municipality also as claimee). Each beneficiary was classified according to gender and age group. There was an attempt to distinguish the processes linked only to the municipal sphere and those in which the municipality responded together with the state and/or federal governments.

Finally, with the support of pharmacists responsible for distribution of the medication, this one was classified according to its pharmacological group. This has led to surveying provisions of medication involving data such as dates, medication supplied, quantities and respective monetary values. It was found, therefore, that 3,843 items were provided in the period covered and that these were all computed in this study.

3.2 Procedures for data collection and analysis

In this stage, information was collected on all provisions of medication in the period in question, the data of which were recorded in a Microsoft Excel® spreadsheet arranged according to variables listed in Table 1 (previously mentioned).

Also, with the purpose of knowing the scenario of the judiciality for the purposes of this research, the frequency (or presence) of aspects that portray the main characteristics prioritized in the sample investigated were presented. In addition, in order to obtain the amount (in BRL) spent on the judiciality of the supply of medication by the municipality of Chapecó, the amounts spent on providing medication to users were estimated. For this purpose, the average value (in BRL) of the cost of purchasing the medication in bidding processes in each year covered was measured.

Finally, in order to use them for a comparative analysis of the results of values spent with the judiciality, values related to revenues and expenses had by the municipality in the years under study were collected. *In this case, the path used was the search in publications made available on the municipality's official website and in the SIOPS about the factors outlined in Table 2*.

Table 2
Description of the accounting data collected

Description	Acronyms (according to the original in Portuguese)	Concepts and their sources
Net Current Revenue	RCL	These funds are available during the fiscal year and constitute a new element for public assets, as recommended in art. 2 of the Fiscal Responsibility Act (FRA) (Lima, 2007; Zuccolotto, Ribeiro & Abrantes, 2008; STN, 2017).
Total revenues related to health care	RTVS	It represents own revenues related to health care, including those of health care services and total funds transferred to the municipality or the Brazilian Federal District (SIOPS, 2017).
Revenue from federal government transfers (SUS)	RTU	It is equivalent to the share of health care-related revenue from federal government transfers to the municipality or the Brazilian Federal District (SIOPS, 2017).
Revenue from state government transfers (SUS)	RTE	It expresses the share of health care-related revenue from state government transfers to the municipality or the Brazilian Federal District (SIOPS, 2017).
Function	FUNS	It basically seeks to answer the question about "in what area" of government action shall the expense be performed (SIOPS, 2017; STN, 2017).
Sub-function	SFAT SFPT SFVS SFSO	It represents a level of aggregation immediately below the function and must show each area of governmental action and also identify the basic nature of the actions that are agglutinated around the functions (SIOPS, 2017; STN, 2017).
Current Expenses	DCOR	This category includes all expense which does not directly contribute to formation or acquisition of capital goods (SIOPS, 2017; STN, 2017).
Total health care expenses	DTSA	It includes the total expenses applied in the health care area in all its fields of action by the federal, state and municipal governments (SIOPS, 2017).

To be continued

Table 2 (continued)

Description	Acronyms (according to the original in Portuguese)	Concepts and their sources
Own municipal health care expenses	DPMS	It covers the total expenses applied in the health care area in all its fields restricted to the municipalities' funds (SIOPS, 2017).
Expenses on pharmaceutical assistance with transfers from the federal government (SUS)	DFTU	It regards the recording of entries, outflow and provisions of medication from the basic, strategic and specialized components of pharmaceutical assistance contained in the Brazilian government National List of Essential Medication and of the states (SIOPS, 2017).
Expenses with medication expenses element	DEDM	It indicates the objects of expenses that the public administration uses to achieve its purposes (SIOPS, 2017; TCE/SC, 2016).

Note. Source: Prepared by the authors.

However, since the monetary values used refer to the period between 2008 and 2015, they were inflated by the Brazilian National Index of Broad Consumer Prices (IPCA, in the Portuguese abbreviation) for the last year of this historical series in order to allow comparability of the values in currency of similar purchasing power. The choice of this index was due to IPCA being the official parameter of Brazilian inflation.

Thus, historical data were inflated to the reference date of December 31, 2015, based on the annual IPCA indexes calculated by the Brazilian Institute of Geography and Statistics (IBGE, in the Portuguese abbreviation) (2017), according to the formula recommended by Merchede (2001). For example: BRL 100 in 2008 was inflated by index "1.5531438" (obtained by equation: [1 x (1+0.0431) x (1+0.0591) x (1+0.0650) x (1+0.0584) x (1+0.0591) x (1+0.0641) x (1+0.1067)]) to determine the value updated for 2015 (R$ 155.31). This amount corresponds to the IPCA accumulated in 2009 (4.31%), 2010 (5.91%), 2011 (6.50%), 2012 (5.84%), 2013 (5.91%), 2014 (6.41%) and 2015 (10.67%).

Then, from the methodological procedures mentioned, the results presented in the following sections have been observed.

4 PRESENTATION AND ANALYSIS OF RESULTS

In this section, the main aspects related to the data collected are presented and the indicators that were developed to evaluate the evolution of the economic-financial impacts generated by the allocation of public funds in health care judiciality in the municipality in question are presented. These indicators can be split into three categories that take into account municipal revenue and expenses, as well as health care-related functions and sub-functions. In addition, they can be evaluated by the angles of participation in the total and the evolution over the years, as described below.

4.1 Indicators on municipal revenue

In order to portray the share of health care judiciality in the amount of municipal revenues, some metrics were prepared that involve the concepts of Net Current Revenue (RCL), Total Revenues Related to Health Care (RTVS), Revenue from Federal Government Transfers-SUS (RTU), Revenue from State Government Transfers related to SUS (RTE) and Total Amount of Health Care Judiciality (VTJS), the main characteristics of which are set out in Table 3.

Table 3
Suggested indicators on municipal revenue

Indicator	Formula	Resulting information
Quotient of Net Current Revenue	QRCL = VTJS / RCL	Percentage (%) of health care judiciality in medication in relation to the net current revenue.
Quotient of Total Revenues Related to Health Care	QRTVS = VTJS / RTVS	Percentage (%) of health care judiciality in medication in relation to total revenues related to health care.
Quotient of Revenue from the Federal Government Transfers/SUS	QRTU = VTJS / RTU	Percentage (%) of health care judiciality in medication in relation to transfers from the federal government to health care (SUS).
Quotient of Revenue from State Government Transfers/SUS	QRTE = VTJS / RTE	Percentage (%) of health care judiciality in medication in relation to transfers from state government to health care (SUS).

Note. Source: Prepared by the authors.

In order to use the indicators mentioned in Table 3, monetary values related to variables of the respective formulas have been surveyed. Thus, Table 4 shows the amounts of revenue modalities prioritized in the study and the amounts spent with judiciality in the period studied (duly inflated).

Table 4
Municipal revenues and expensess with health care judiciality (amounts in Brazilian Reais (BRL) restated by IPCA up to December 31, 2015)

Year	NET current revenue (RCL)	Total revenues linked to health (RTVS)	Revenue from Union /SUS transfers (RTU)	Revenue from State/SUS transfers (RTE)	Total expenses with judicialization of health (VTJS)
2008	366,501.62	208,624.31	74,051.63	4,647.38	22.71
2009	394,610.95	219,621.43	72,880.34	4,524.59	30.28
2010	435,715.56	229,603.98	76,423.27	6,895.01	57.62
2011	497,093.14	261,140.38	91,353.44	6,351.58	63.28
2012	508,200.28	264,421.78	87,521.78	15,400.34	125.09
2013	500,282.99	285,312.27	89,932.33	14,251.49	393.35
2014	532,529.76	296,154.16	100,107.67	17,191.95	620.39
2015	550,557.59	283,967.41	103,747.13	14,303.02	690.39

Note. Source: Prepared by the authors.

As for the scenario shown in Table 4, it was concluded that there was a positive evolution of revenues throughout the period covered by the analysis. This shows that the contribution of funds to health care has increased in those years and shows entities' concern with improvement and maintenance of these public services. However, values on health care judiciality (last column) have significantly grown, as best seen based on the analysis metrics proposed in the sequence.

Thus, as the data needed to consider in the indicator formulas suggested were available, the results were ascertained as shown in Table 5.

Table 5
Results of indicators on municipal revenue

Year	Quotient of Net Current Revenue (QRCL)		Quotient of Total Health Care-Related Revenue (QRTVS)		Quotient of Revenue from Federal Government Transfers SUS (QRTU)		Quotient of Revenue from State Government Transfers SUS (QRTE)	
	Index	Variation	Index	Variation	Index	Variation	Index	Variation
2008	0.0062%	100.0%	0.0109%	100.0%	0.0307%	100.0%	0.4887%	100.0%
2009	0.0077%	123.8%	0.0138%	126.7%	0.0416%	135.5%	0.6693%	137.0%

To be continued

Table 5 (continued)

Year	Quotient of Net Current Revenue (QRCL)		Quotient of Total Health Care-Related Revenue (QRTVS)		Quotient of Revenue from Federal Government Transfers SUS (QRTU)		Quotient of Revenue from State Government Transfers SUS (QRTE)	
	Index	Variation	Index	Variation	Index	Variation	Index	Variation
2010	0.0132%	213.4%	0.0251%	230.5%	0.0754%	245.8%	0.8357%	171.0%
2011	0.0127%	205.5%	0.0242%	222.6%	0.0693%	225.9%	0.9964%	203.9%
2012	0.0246%	397.2%	0.0473%	434.6%	0.1429%	466.0%	0.8122%	166.2%
2013	0.0786%	1,268.9%	0.1379%	1,266.5%	0.4374%	1,426.2%	2.7601%	564.8%
2014	0.1165%	1,880.1%	0.2095%	1,924.4%	0.6197%	2,020.7%	3.6086%	738.5%
2015	0.1254%	2,023.7%	0.2431%	2,233.4%	0.6655%	2,169.8%	4.8269%	987.8%

Note. Source: Prepared by the authors.

Since the monetary values used in the calculations have the same purchasing power, comparison of indexes can be done in two ways: by the value of the quotient calculated (column “Index”) and by percentage evolution in relation to 2008 (column “Variation”).

In the case of the QRCL, in the initial year of the series the index was 0.0062% and increased to 0.1244% in 2015. That is, in that last year, for each BRL 100 of Net Current Revenues about BRL 0.1244 were spent with the processes inherent to health care judiciality. The percentage variation between these two years reached 2,023.7%, showing that increase in expenses with health care judiciality started to have a much higher percentage share in the total Net Current Revenue in relation to 2008. This evolution can be split into three “phases”: between 2008 and 2011 it doubled in proportion, in 2012 it almost doubled its percentage compared to the previous year and between 2013 and 2015 growth was much more significant (1,268.9% in 2013, 1,880.1% in 2014 and 2,023.7% in 2015, compared to the reference year).

These growth stages were also seen in the other quotients calculated in relation to municipal revenues. Regarding the QRTVS, variation of these indexes between the initial (0.0109%) and final (0.2431%) years was the most significant, since it reached 2,233.4% in 2015 over the 2008 value. Regarding the QRTU indicator, it went from 0.0307% in 2008 to 0.6655% in 2015 (with a variation of 2.169.8% between the two periods), while in the QRTE the parameter measured was of 0.4887% in 2008 to 4.8269% in 2015, with 987.8% oscillation between these two years. The scenario revealed by the four indicators linked to municipal revenues, displayed in Table 5, shows that expenses with health care judiciality have substantially increased during the period evaluated, especially in the last three years.

4.2 Indicators on health care function and sub-functions

The second perspective of proposed indicators is related to expenses related to the “Health Care Function.” In this case, a division of expenses by function and sub-functions was observed, according to Administrative Rule no. 42/1999, which has updated item I of paragraph 1 of article 2 and paragraph 2 of article 8 of Brazilian Federal Law No. 4,320 (1964). It is interesting to note that the word “function” has the purpose of basically answering the question “in what area” of governmental action shall the expenses take place. In turn, the related sub-functions regard the level of aggregation immediately below the function and must show each area of governmental action and also identify the basic nature of the actions that are agglutinated around the functions (STN, 2017).

Based on this rationale, the “Health Care Function” (FUNS) has been split into sub-functions “Basic Care” (SFAT), “Hospital and Outpatient Health Care” (SFHA), “Prophylactic and Therapeutic Support” (SFPT), “Sanitary Surveillance” (SFVS), “Epidemiology and Food Surveillance” (SFVEA) and “Nutrition” (SFN). However, in this study the values obtained in the last two sub-functions mentioned (SFVEA and SFN) have been consolidated as “Others” (SFO).

Based on these peculiarities, indicators that consider the total value of health care expenses in terms of their proportion to the amounts spent with the “Health Care Function” and respective sub-functions, as summarized in Table 6, were prepared.

Table 6
Suggested indicators on health care function and sub-functions

Indicator	Formula	Resulting information
Quotient of the Health Care Function	QFUNS = VTJS / FUNS	Percentage (%) of health care judiciality in medication in relation to the Health Care Function.
Quotient of Basic Health Care Sub-function	QSFAT = VTJS / SFAT	Percentage (%) of health care judiciality in medication in relation to the Basic Care Sub-function.
Quotient of Sub-function Health Care, Hospital and Outpatient Care	QSFHA = VTJS / SFHA	Percentage (%) of health care judiciality in medication in relation to the sub-function health care, hospital and outpatient care.
Quotient of Sub-function Health Care and Prophylactic and Therapeutic Support	QSFPT = VTJS / SFPT	Percentage (%) of health care judiciality in medication in relation to the sub-function health care and prophylactic and therapeutic support
Quotient of Sub-function Health Care and Sanitary Surveillance	QSFVS = VTJS / SFVS	Percentage (%) of health care judiciality in medication in relation to the sub-function health care and sanitary surveillance.
Quotient of Sub-function Others	QSFSO = VTJS / SFSO	Percentage (%) of health care judiciality in medication in relation to the sub-function health care and others.

Note. Source: Prepared by the authors.

Therefore, in order to measure the indicators mentioned in Table 6, the data to be used in the equations proposed have been surveyed, whose monetary values of expenses with the “Health Care Function” and respective subdivisions are shown in Table 7 (corrected by IPCA and listed in thousands of Brazilian reais).

Table 7
Expenses by function and health care sub-functions (amounts in Brazilian Reais (BRL) restated by IPCA up to December 31, 2015)

Year	Function Health (FUNS)	Sub-function Basic Care (SFAT)	Sub-function Health Care and Hospital and Outpatient Health Care (SFHA)	Sub-function Health Care and Prophylactic and Therapeutic Support (SFPT)	Sub-function Health Care and Sanitary Surveillance (SFVS)	Sub-function Other (SFSO)
2008	117,769.22	55,835.79	58,292.18	1,330.80	1,235.61	1,074.84
2009	126,311.59	61,585.87	61,168.78	1,084.02	1,214.45	1,258.47
2010	131,844.92	56,396.35	70,230.79	2,956.44	1,476.64	784.71
2011	149,047.28	70,304.86	73,358.08	3,083.21	1,434.20	866.93
2012	161,893.73	81,143.46	75,891.38	3,136.96	1,292.98	428.94
2013	171,397.72	88,221.04	77,233.08	2,628.71	2,687.90	626.98
2014	194,790.13	96,572.63	93,206.88	2,439.26	2,571.36	*
2015	196,525.39	94,631.57	97,567.91	2,563.19	1,762.72	*

Note. *There were no values recorded for this sub-function in the period.
Source: Prepared by the authors.

The growth in values (already monetarily restated) applied in the “Health Care Function” reveals an increase in these figures in the period from 2008 to 2015 but with lower increase in the last two years of the series. In addition, the values in Table 8 highlight the relevance of the amounts spent with sub-functions “Basic Care” and “Hospital and Outpatient Health Care” when

compared to the other three functions (which still had their values reduced in recent years in relation to the initial ones).

As judiciality expenses had already been mentioned in the Table of the previous section, expenses values to be considered in the formulas of this group of indicators were used to determine the quotients presented in Table 8.

Table 8
Result of indicators on health care function and sub-functions

Year	Quotient of the Health Care Function (QFUNS)		Quotient of the Basic Health Care Sub-function (QSFAT)		Quotient of Sub-function Health Care, Hospital and Outpatient Care (SFHA)		Quotient of Sub-function Health Care and Prophylactic and Therapeutic Support (SFPT)		Quotient of Sub-function Health Care and Sanitary Surveillance (SFVS)		Quotient of Sub-function Others (QSFSO)	
	Index	Var.	Index	Var.	Index	Var.	Index	Var.	Index	Var.	Index	Var.
2008	0.02%	100.00%	0.04%	100.00%	0.04%	100.00%	1,71%	100,00%	1,84%	100,00%	2,11%	100,00%
2009	0.02%	124.30%	0.05%	120.90%	0.05%	127.10%	2,79%	163,70%	2,49%	135,70%	2,41%	113,90%
2010	0.04%	226.60%	0.10%	251.20%	0.08%	210.60%	1,95%	114,20%	3,90%	212,30%	7,34%	347,50%
2011	0.04%	220.20%	0.09%	221.30%	0.09%	221.40%	2,05%	120,30%	4,41%	240,10%	7,30%	345,50%
2012	0.08%	400.70%	0.15%	379.00%	0.17%	423.10%	3,99%	233,70%	9,67%	526,40%	29,16%	1380,20%
2013	0.23%	1190.10%	0.45%	1096.20%	0.51%	1307.30%	14,96%	876,90%	14,63%	796,20%	62,74%	2969,30%
2014	0.32%	1651.60%	0.64%	1579.40%	0.67%	1708.50%	25,43%	1490,40%	24,13%	1312,70%	*	0%
2015	0.35%	1821.70%	0.73%	1793.70%	0.71%	1816.20%	26,93%	1578,30%	39,17%	2130,90%	*	0%

*There are no received values recorded for this sub-function in the period.

Source: Prepared by the authors.

The first index related to health care expenses relates to the “Health Care Function” (QFUNS). The value calculated for 2008 was 0.019% and increased to 0.351% in 2015. Therefore, in the year 2015, for each BRL 100 spent on this function, approximately BRL 0.351 were allocated to meet the lawsuits. As a result, from the base year of 2008, growth was 1,821.7% until the final year of the historical series in this study. However, the increase in this type of spending was higher in the final triennium, since it went from the 0.077% level in 2012 to 0.229% in 2013 and went to 0.318% in 2014 and finished with 0.351%.

Similar evolutionary behavior was also observed in the other indicators:

a) Quotient of the Basic Health Care Sub-function (QSFAT): it went from 0.041% in 2008 to 0.730% in 2015 (ranging around 1,793.7% between these two periods);
b) Quotient of Sub-function Hospital and Outpatient Health Care (QSFHA): increased from 0.039% in 2008 to 0.708% in 2015 (variation of 1,816.2%);
c) Quotient of Sub-function Health Care and Prophylactic and Therapeutic Support (QSFPT): in 2008 this indicator was 1.71% and increased to 26.93% in 2015, with an evolution equivalent to 1,578.3% over the base year;
d) Quotient of Sub-function Sanitary Surveillance (QSFVS): in this index, the result went from 1.84% in 2008 to 39.17% in 2015 (evolution of 2,130.9%);
e) Quotient of Sub-function Others (QSFO): as there was no record of values for 2014 and 2015, performance of this metric was measured only between 2008 (it reached 2.11%) and 2013 (when it stood at the level of 62.74%), when it grew by 2,969.3% over this period of years.

4.3 Indicators on municipal expenses

The third perspective of indicators covered in this research highlights the weight of health care judiciality in relation to certain municipal expenses. In this case, it was considered more relevant for the purpose of the study to measure this representativeness in relation to the values “Current Expenses” (DCOR), “Total Health Care Expenses” (DTSA), “Own Municipal

Health Care Expenses" (DPMS), "Expenses on Pharmaceutical Assistance with Transfers from the Federal Government/SUS" (DFTU) and "Expenses with Medication Expenses Element" (DEDM).

Then, based in these five categories of expenses, the equations described in Table 9 were formulated.

Table 9
Suggested indicators on municipal expenses

Indicator	Formula	Resulting information
Quotient of the Current Expenses	QDCOR = VTJS / DCOR	Percentage (%) of health care judiciality in medication in relation to current expenses.
Quotient of Expenses Total Spent on Health Care	QDTSA = VTJS / DTSA	Percentage (%) of health care judiciality in medication in relation to the total health care expenses.
Quotient of Own Municipal Health Care Expenses	QDPMS = VTJS / DPMS	Percentage (%) of health care judiciality in medication in relation to own municipal health care expenses.
Quotient of Expenses on Pharmaceutical Assistance with Transfers from the Federal Government/SUS	QDFTU = VTJS / DFTU	Percentage (%) of health care judiciality in medication in relation to expenses with pharmaceutical assistance with transfers from the federal government/SUS.
Quotient of Expenses with Medication Expenses Element	QDEDM = VTJS / DEDM	Percentage (%) of health care judiciality in medication in relation to expenses with medication expenses element.

Note. Source: Prepared by the authors.

As the concepts of these expenses modalities have already been commented on (Table 2), it is pertinent to point out only that the expenses that has the greatest possible detailing on the expenses with medication supply judiciality is "DEDM," since it refers to registration of provisions of medication of the basic, strategic and specialized components of pharmaceutical assistance, contained in the Brazilian government National List of Essential Medication and of the states, federal district and municipalities (SIOPS, 2017). Next, data on amounts spent on the expenses mentioned were obtained, as outlined in Table 10.

Table 10
Expenses by type of municipal expenses (amounts in Brazilian Reais (BRL) restated by IPCA up to December 31, 2015)

Year	Current Expenses (DCOR)	Total health care expenses (DTSA)	Own municipal health care expenses (DPMS)	Expenses on pharmaceutical assistance with transfers from the union (DFTU)	Expenses with medication expenses element (DEDM)
2008	316,131.35	111,195.19	39,677.96	*	3,049.29
2009	344,755.77	119,924.84	45,127.61	1,006.09	3,586.02
2010	371,466.27	130,878.37	46,790.66	1,119.93	4,473.63
2011	416,842.76	146,503.07	53,073.04	1,415.63	4,398.19
2012	436,341.74	162,011.80	60,561.40	1,245.18	5,025.49
2013	467,237.57	171,410.75	55,692.28	1,254.36	4,957.41
2014	457,630.01	194,790.13	74,244.29	1,184.53	4,663.44
2015	521,602.22	196,525.39	75,486.06	1,059.16	6,285.39

Note. *There are no values recorded for this sub-function in the period.
Source: Prepared by the authors.

There is a similar growth between the total amounts of the item "Current Expenses" in the municipality of Chapecó and the growth of the "Total Health Care Expenses" and "Own Municipal Health Care Expenses." However, there has been a stagnation of funds stemming from transfers linked to the "Expenses on Pharmaceutical Assistance with Transfers from the Federal Government," which corresponds to one of the main sources of funds for the supply of medication in the public health care system. It has also been verified that the growth of amounts spent on medication was higher than increases in total health care expenses in the period evaluated.

In this sense, analysis of results from suggested indicators on municipal expenses can be better carried out from the provisions in Table 11.

Table 11
Result of indicators on municipal expenses

Year	Quotient of the Current Expenses . (QDCOR)		Quotient of the Total Health Care Expenses . (QDTSA)		Quotient of the Own Municipal Health Care Expenses . (QDPMS)		Quotient of the Pharmaceutical Assistance with Transfers from the Federal Government . Transf. . (QDFTU)		Quotient of the Expenses with Medication Expenses Element . . (QDEDM)	
	Index	Variation	Index	Variation	Index	Variation	Index	Variation	Index	Variation
2008	0.007%	100.0%	0.020%	100.0%	0.057%	100.0%	*	*	0.745%	100.0%
2009	0.009%	122.3%	0.025%	123.6%	0.067%	117.2%	3.010%	100.0%	0.844%	113.4%
2010	0.016%	215.9%	0.044%	215.6%	0.123%	215.2%	5.145%	170.9%	1.288%	172.9%
2011	0.015%	211.3%	0.043%	211.5%	0.119%	208.3%	4.470%	148.5%	1.439%	193.2%
2012	0.029%	399.1%	0.077%	378.0%	0.207%	360.9%	10.046%	333.7%	2.489%	334.2%
2013	0.084%	1,171.9%	0.229%	1,123.6%	0.706%	1,234.0%	31.359%	1,041.8%	7.935%	1,065.4%
2014	0.136%	1,887.1%	0.318%	1,559.4%	0.836%	1,459.9%	52.374%	1,740.0%	13.303%	1,786.2%
2015	0.132%	1,842.5%	0.351%	1,720.0%	0.915%	1,597.9%	65.182%	2,165.5%	10.984%	1,474.8%

Note. *There are no received values recorded for this sub-function in the period.
Source: Prepared by the authors.

From the indexes found in Table 11, it was also observed that the amounts spent on health care judiciality have taken larger proportions over the eight years covered by the study. However, unlike the other two groups of indicators, there was a reduction from the penultimate to the last year of the historical series under consideration in two of the parameters measured.

In this sense, when evaluating the evolution of QDCOR, it was found that health care judiciality expenses have equaled only 0.007% of Current Expenses in 2008 but this ratio has strongly increased in the following periods, reaching 0.136% in 2014 and falling a little in 2015, when it was equivalent to 0.132%. Therefore, considering only the initial and final years evaluated, the variation was of 1,842.5%.

Regarding the QDTSA, the performance measured had an identical year-on-year increase, with acceleration in the last three years. In 2008, the values inherent to health care judiciality equaled only 0.020% of Total Health Care Expenses, increasing to 0.025% in 2009.

They fell to 0.044% in 2010, remained practically stable in 2011 (0.043%) and rose to 0.077% in 2012. However, in the final years, growth was much higher, since the index rose to 0.229% in 2013 (with a variation of 1,123.6% over 2008), increased to 0.318% in the following year (1,559.4% over the base year) and ended the series with 0.351% in 2015 (1,720.0% variation over 2008).

Regarding the Quotient of Own Municipal Health Care Expenses (QDPMS), in this parameter there were increases in all years surveyed: it started with 0.057% in 2008 and reached 0.915% in 2015, which corresponds to the variation of 1,597.9% between these two years.

On the other hand, in the Quotient of Expenses on Pharmaceutical Assistance with Transfers from the Federal Government (QDFTU), the scenario evaluated does not involve 2008, since there was no value record regarding this type of expense in the accounts of the Municipal Government of Chapecó. According to the municipal accountant, this happened because of the fact that up to 2008 this expense would be classified in the other groups of health care accounts. Thus, from this indicator it was only possible to make an evaluation from 2009 onwards. In that first year, the index was 3.010% and gradually increased to reach 65.182% in 2015 (2,165.5% variation compared to the reference year).

The last parameter of this group is the Quotient of Expense with Medication Expense Element (QDEDM), where a result of 0.745% was seen in 2008 and 10.984% in 2015, representing an evolution of 1,474.8% over this time period. However, in 2014 this index was higher, when it reached 13.303% (growth of 1,786.2% over 2008).

5 CONCLUSIONS

This study has aimed to answer a research question linked to the use of financial indicators to manage the supply of medication related to health care judiciality. The objective was to propose financial indicators on judiciality expenses in the supply of medication in the Brazilian municipality of Chapecó, SC.

In order to meet this objective, data collection was carried out on judicial processes involving the municipality under this study, which culminated in 3,843 provisions of medication to beneficiaries/claimants. Monetary values related to three perspectives were as follows: municipal revenues, municipal expenses and “Health Care Function” expenses (and their main sub-functions). From these values, performance indicators presented in Tables 3, 6 and 9 were developed, the results of which were evidenced in Tables 5, 8 and 11. As a result, the authors understand that the goal has been achieved because it was possible to know the annual evolution of these expenses from the three angles mentioned by means of the fifteen quotients proposed as evaluation metrics.

As for the most relevant “findings” of the research, it is interesting to highlight at least two aspects. The first one refers to the percentages measured in all indicators, which showed similar evolutionary behavior. Between 2008 and 2011 there were gradual increases in each period, while in 2012 there was a high growth (more than doubling in practically all indexes in relation to the previous year). However, in the last three years there were significantly more significant increases, culminating in increases of over 2,000% in relation to 2008 in three of the four indicators in the revenue-linked quotient group. This behavior was similarly repeated with respect to the parameters associated with the “Health Care Function” expenses and their sub-functions, where the three main metrics (QFUNS, QSFAT and QSFHA) varied by about 1,800% over the initial year from the series. Within the scope of the quotients of expense categories, the evolution over the initial year was also large in the final years of the series: QDCOR (1,842.5%), QDTSA (1,720.0%), QDPMS (1,597.9%), QDFTU (2,165.5%) and QDEDM (1,474.8%).

The second aspect concerns the increase observed in monetary values, the representativeness of which can be better expressed from the indicators proposed. For example, in the year 2008, for each BRL 100 of Net Current Revenue, around BRL 0.0062 were spent on health care judiciality, while in 2015 this amount increased to BRL 0.1254. The same for the case of comparison with expenses with the Health Care Function (from BRL 0.019 in 2008 to BRL 0.351 in 2015) and Current Expenses (which ranged from BRL 0.007 to BRL 0.132).

Regarding the contributions of the study, the authors consider that they reside mainly in the proposal of indicators that allow to measure the proportion of expenses related to judicial demands for provision of medication in the municipality under study. In addition, the same indexes can be used in other municipalities, since monetary values can be obtained from municipal public accounts (revenues and expenses) and internal controls of municipalities (regarding judicial expenses).

However, perhaps the main limitation of the study is the fact that it was not possible to compare the results with others, since no similar approaches were found, especially with regard to monetary values of medication provided by judicial orders in municipalities. Even if the absence of comparison with other studies can be qualified as a restriction, the authors consider that this reality only praises the importance of more research in this area that is still little explored in Brazilian accounting literature. Thus, the small contribution of the study now presented may serve to draw the attention of other researchers in order to better assess this field of research. In addition, it is pertinent to point out that because it is a case study in the Brazilian municipality of Chapecó, SC, the conclusions are limited to this context. Therefore, it is considered that the reality found is probably unique to the city under study and, a priori, does not allow extrapolating the results obtained to other municipalities of the state of Santa Catarina or Brazil.

Finally, as recommendations for future work, it is suggested to use the indicators proposed in other municipalities, geographic regions or Brazilian states, in order to allow comparisons among these realities. Also, it is possible to verify possible limitations of the indexes suggested here in order to improve these management instruments applicable to the sphere of Brazilian public administration.

REFERENCES

Andrade, M. M. (2002). *Como preparar trabalhos para cursos de pós-graduação: noções práticas* (5a ed.). São Paulo: Atlas.

Bezerra, F. A., & Corrar, L. J. (2006). Utilização da análise fatorial na identificação dos principais indicadores financeiros para a avaliação do desempenho financeiro: uma aplicação nas empresas de seguros. *Revista Contabilidade & Finanças, 42*, 50–62.

Constituição da República Federativa do Brasil de 1988 (1988). Brasília: Senado Federal.

Campos, O. H., Neto, Acurcio, F. de A., Machado, M. A. de Á., Ferré, F., Barbosa, F. L. V., Cherchiglia, M. L. & Andrade, E. I. G. (2012). Médicos, advogados e indústria farmacêutica na judicialização da saúde em Minas Gerais, Brasil. *Revista de Saúde Pública, 46*(5), 784-790.

Caron, E., Lefèvre, F. & Lefèvre, A. M. C. (2015). In the final analysis, are we a consumer society or not? Implications for health. *Ciência & Saúde Coletiva, 20*(1), 145-153.

De Carli, P. (2014). A judicialização da política e o protagonismo dos juízes nas decisões que envolvem o direito constitucional à saúde: reflexões acerca da jurisdição constitucional. *Revista Eletrônica do Curso de Direito da UFSM, 9*(2), 284-304.

Diniz, D., Machado, T. R. C., & Penalva, J. (2014). A judicialização da saúde no Distrito Federal, Brasil. *Ciência & Saúde Coletiva, 19*(2), 591-598.

Dresch, R. L. (2015). A garantia de acesso à saúde e as regras de repartição da competência entre os gestores. *Revista de Administração Hospitalar e Inovação em Saúde, 12*(1), 19-44.

Fundação Getulio Vargas (2004). Escola Brasileira de Administração. *Técnicas de Administração Municipal*. Rio de Janeiro: FGV.

Freitas, R. S. de & Dalla Vecchia, F. (2010). Estado democrático de direito: aspectos constitucionais da judicialização da saúde e princípio da igualdade. *Revista Eletrônica do Curso de Direito da UFSM, 5*(1).

Freitas, S. R. de (2015). *Judicialização do direito à saúde: análise do impacto para a administração pública das demandas por medicamentos, tratamentos e procedimentos médicos*. Monografia, Universidade de Brasília – UnB, Brasília, Brasil.

Jannuzzi, P. de M. (2009). *Indicadores sociais na formulação e avaliação de políticas públicas*. UNESAV – Unidade de Ensino e Aprendizado de Viçosa.

Instituto Brasileiro de Geografia e Estatística (2017). *Séries históricas IPCA-INPC*. Recuperado em 19 janeiro, 2017 de ttp://www.ibge.gov.br/home/estatistica/indicadores/precos/inpc_ipca/defaultseriesHist.shtm

Lei Federal n° 4.320, de 17 de março de 1964 (1964). Estatui Normas Gerais de Direito Financeiro para Elaboração dos Orçamentos e Balanços da União, dos Estados, dos Municípios e do Distrito Federal.

Lei Complementar n° 101, de 4 de maio de 2000 (2000). Estabelece Normas de Finanças Públicas Voltadas para a Responsabilidade Fiscal e Dá Outras Providências.

Lima, R., Júnior (2007). *Análise das demonstrações contábeis dos municípios do Estado de Santa Catarina: uma aplicação da técnica estatística análise dos componentes principais*. Tese de Doutorado, Universidade Regional de Blumenau.

Lucchese, P. T. R. (2009). Descentralização do financiamento e gestão da assistência à saúde no Brasil: a implementação do Sistema Único de Saúde - retrospectiva 1990/1995. *Planejamento e políticas públicas, 14*.

Macêdo, D. F. de, Rocha, A. J. A., Costa, A. C. S., Souza, W. A. D. R. de, & Santa Rita, L. P. (2015). Análise da judicialização do direito à saúde, subfinanciamento do setor e políticas públicas: estudo de caso no estado de Alagoas. *Revista de Administração de Roraima, 5*(2), 300.

Martins, R. A. (2010). Princípios da pesquisa científica. In Miguel, P. A. C. (Org.). *Metodologia de pesquisa em engenharia de produção e gestão de operações*. Rio de Janeiro: Elsevier.

Medeiros, M., Diniz D., & Schwartz, I. V. D. (2013). A tese da judicialização da saúde pelas elites: os medicamentos para mucopolissacaridose. *Ciência & Saúde Coletiva, 18*(4), 1079-1088.

Merchede, A. (2001). *Matemática financeira: para usuários do Excel e da calculadora HP-12C*. São Paulo: Atlas.

Mocelin, C. E. (2013). Demandas judiciais na saúde pública: instrumentos para a efetivação do direito à saúde e/ou novos arranjos na gestão e organização do SUS. *Revista Gestão e Desenvolvimento em Contexto (GEDECON), 1*(1).

Monsores, N., Lopes, C., Bezerra, E. M. B., & Silva, N. L. (2016). Netnography and the bioethical analysis of therapeutic tourism blogs for stem cells. *Ciência & Saúde Coletiva, 21*(10), 3049-3059.

Pepe, V. L. E., Figueiredo, T. de A., Simas, L., Castro, C. G. S. O., & Ventura, M. (2010). A judicialização da saúde e os novos desafios da gestão da assistência farmacêutica. *Revista Ciência & Saúde Coletiva, 5*(15), 2405-2414.

Primor, G. P. R., & Souza Filho, C. F. M. (2014). A Judicialização das políticas públicas e o Supremo Tribunal Federal. *Direito, Estado e Sociedade, 44*(1), 36-59.

Rauen, F. J. (2015). *Roteiros de iniciação científica: os primeiros passos da pesquisa científica desde a concepção até a produção e a apresentação*. Palhoça: Ed. Unisul.

Richardson, R. J. (1999). *Pesquisa social: métodos e técnicas*. São Paulo: Atlas.

Rosa, M. B. (2011). *Contabilidade do setor público*. São Paulo: Atlas.

Rosa, T. C. S., Saes, S. G., & Abuleac, F. L. (2012). A Constituição de 1988 e as políticas públicas em saúde no Brasil. *Revista de Gestão em Sistemas de Saúde, 1*(1), 35-49.

Sistema de Informações sobre Orçamentos Públicos em Saúde (2017). *Os indicadores são medidas que expressam ou quantificam um insumo. Sistema de Informações sobre Orçamentos Públicos em Saúde*. Recuperado de: http://portalsaude.saude.gov.br/index.php/o-ministerio/principal/siops

Silva, L. M. da. (2011). *Contabilidade Governamental* (9a ed.). São Paulo: Atlas.

Silva, A. F. da, Silva, K. A. da, Vaccaro, S. B., & Barbosa, F. M. (2012). Análise da judicialização da saúde pública no Espírito Santo. *Rev. SJRJ, 9*(35), 75-90.

Secretaria de Gestão do Ministério do Planejamento (2009). *Melhoria da gestão pública por meio da definição de um guia referencial para medição do desempenho da gestão, e controle para o gerenciamento dos indicadores de eficiência, eficácia e de resultados do programa nacional de gestão pública e desburocratização*. Ministério do Planejamento. Brasília.

Secretaria do Tesouro Nacional (2017). *Manual de Contabilidade Aplicado ao Setor Público.* (7a ed.). Brasília-DF.

Tabosa, T. M. S. (2010). *A judicialização da saúde no estado de Pernambuco: análise do impacto das decisões judiciais sobre o orçamento público*. Dissertação Mestrado, PPGE da Universidade Federal de Pernambuco.

Tribunal de Contas de Santa Catarina. (2017). *Portal do Cidadão*. Recuperado de http://www.tce.sc.gov.br

Travassos, D. V., Ferreira, R. C., Vargas, A. M. D., Moura, R. N. V. de, Conceição, E. M. A., & Marques, D. de F. (2013). Judicialização da saúde: um estudo de caso de três tribunais brasileiros. *Ciência & Saúde Coletiva, 18*(11), 3419-3429.

Trevisan, L. M., Nalin, T., Tonon, T., Veiga, L. M., Vargas, P., Krug, B. C., Leivas, P. G., & Schwartz, I. V. (2015). Access to treatment for phenylketonuria by judicial means in Rio Grande do Sul, Brazil. *Ciência & Saúde Coletiva, 20*(5), 1607-1616.

Vaz, R. L. de C., Bonacim, C. A. G., & Gomes, M. da C. (2016). Impactos da judicialização da saúde nos municípios do estado de São Paulo. *Anais Congresso ANPCONT*, Ribeirão Preto, SP, 10.

Veloso, M. D. D. P. (2015). *Judicialização da política pública: o diálogo como forma de concretização da saúde preventiva*. Dissertação de Mestrado, Universidade Federal do Pará.

Ventura, M., Simas, L., Pepe, V. L. E., & Schramm, F. R. (2010). Judicialização da saúde, acesso à justiça e a efetividade do direito à saúde. *Physis: Revista de Saúde Coletiva, 20*(1).

Wang, D. W., Vasconcelos, N. P., Oliveira, E. V., & Terrazas, F. V. (2014). Os impactos da judicialização da saúde no município de São Paulo: gasto público e organização federativa. *Revista Administração Pública, 48*(5).

Zuccolotto, R., Ribeiro, C. P. P., & Abrantes, L. A. (2008). O comportamento das finanças públicas municipais nas capitais dos estados brasileiros. *Anais do Congresso Brasileiro de Custos*, Curitiba, PR, Brasil, 15.