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# RELATIONSHIP BETWEEN THE JUDICIALIZATION AND SOCIOECONOMIC AND PERFORMANCE-RELATED FACTORS OF THE HEALTH SYSTEM

Relação entre judicialização e fatores socioeconômicos e de desempenho do sistema de saúde

Relación entre judicialización y factores socioeconómicos y de desempeño del sistema de salud

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#### **ABSTRACT**

Objective: To analyze the relationship between socioeconomic and performance-related factors of the health system and the incidence of lawsuits against the public health sector in Brazil. Methods: This is a cross-sectional study conducted between 2015 and 2016 with secondary data from 641 municipalities in the State of São Paulo, Brazil. The analysis was performed through the Gini Index and the Performance Index of the Unified Health System (Índice de Desempenho do Sistema Único de Saúde - IDSUS), in addition to the number of lawsuits against the public health sector, indicator of the judicialization of health. The variables used correspond to the year 2010 because of the breadth and quality of the indicators forming the IDSUS that year. Data was analyzed using descriptive statistics, Pearson's correlation matrix and multiple linear regression. Results: There was a higher incidence of lawsuits in large urban centers: DRS I - Metropolitan São Paulo obtained the highest number (35.5%, n=8,189), followed by DRS XV - São José do Rio Preto (15.9 %, n=3,679). Most of the municipalities in the State of São Paulo are concentrated in the Homogeneous Group 5 of IDSUS, lacking structure for specialized care (62.8%, n=405), and only 0.9% of the municipalities belong to Group 1 (n=6), with better conditions for health care delivery. As a main result, a positive linear relationship was found between IDSUS and the number of lawsuits (p<0.05). Conclusion: There was no significant linear relationship between the socioeconomic factors analyzed and the incidence of lawsuits against the public health sector; however, greater judicialization was observed in places with better performance of health services (IDSUS).

Descriptors: Judicialization of Health; Judiciary; Public Policy; Public Health.

# RESUMO

Objetivo: Analisar a relação de fatores socioeconômicos e de desempenho do sistema de saúde com a ocorrência de processos judiciais contra o setor público da saúde no Brasil. Métodos: Trata-se de um estudo transversal, realizado entre 2015 e 2016, com dados secundários de 641 municípios do estado de São Paulo, Brasil. A análise ocorreu por meio do Índice de Gini e do Índice de Desempenho do Sistema Único de Saúde (IDSUS), além do número de processos judiciais sobre saúde, indicador da judicialização. As variáveis utilizadas correspondem ao ano de 2010, devido à abrangência e à qualidade dos indicadores que compõem o IDSUS desse ano. Analisaram-se os dados mediante estatística descritiva, matriz de correlação de Pearson e regressão linear múltipla. Resultados: Verificou-se maior incidência de ações judiciais sobre grandes polos urbanos: o DRS I-Grande São Paulo obteve o maior número (35,5%; n=8.189), seguido pelo DRS XV - São José Do Rio Preto (15,9%; n=3.679). A maioria dos municípios do estado de São Paulo está concentrada no Grupo Homogêneo 5 do IDSUS, sem estrutura para atendimentos especializados (62,8%; n=405), sendo que somente 0,9% dos municípios pertencem ao grupo 1 (n=6), com melhores condições de atendimento. Como principal resultado, encontrou-se relação linear positiva entre o IDSUS e o número



de ações judiciais (p<0,05). **Conclusão:** Não houve relação linear significativa dos fatores socioeconômicos analisados com a ocorrência de ações judiciais contra o setor público da saúde, contudo verificou-se uma maior judicialização em localidades com melhor desempenho dos serviços de saúde (IDSUS).

Descritores: Judicialização da Saúde; Poder Judiciário; Política Pública; Saúde Pública.

#### RESUMEN

Objetivo: Analizar la relación entre los factores socioeconómicos y de desempeño del sistema de salud con la ocurrencia de procesos judiciales contra el sector público de la salud de Brasil. Métodos: Se trata de un estudio transversal realizado entre 2015 y 2016 con datos secundarios de 641 municipios del estado de São Paulo, Brasil. El análisis se dio a través del Índice de Gini y del Índice de Desempeño del Sistema Único de Salud (IDSUS) además del número de procesos judiciales sobre salud, el indicador de la judicialización. Las variables utilizadas corresponden al año 2010 por la amplitud y la calidad de los indicadores que componen el IDSUS de ese año. Se analizaron los datos con la estadística descriptiva, la matriz de correlación de Pearson y la regresión linear múltiple. Resultados: Se ha verificado mayor incidencia de acciones judiciales sobre los grandes polos urbanos: el DRS I - Grande São Paulo obtuvo mayor número (35,5%; n=8.189), seguido del DRS XV - São José de Rio Preto (15,9%; n=3.679). La mayoría de los municipios del estado de São Paulo está concentrada en el Grupo Homogéneo 5 del IDSUS, sin estructura para la atención especializada (62,8%; n=405) y solamente el 0,9% de los municipios pertenecen al grupo 1 (n=6), con mejores condiciones de asistencia. Se encontró relación linear positiva entre el IDSUS y el número de acciones judiciales (p<0,05) como resultado principal. Conclusión: No hubo relación linear significativa de los factores socioeconómicos analizados con la ocurrencia de acciones judiciales contra el sector público de la salud, sin embargo, se ha verificado mayor judicialización en los sitios con mejor desempeño de los servicios de salud (IDSUS).

Descriptores: Judicialización de la Salud; Poder Judicial; Política Pública; Salud Pública.

# INTRODUCTION

In the Brazilian context, ensuring quality health care for the population, despite the scarcity of financial resources, is one of the main challenges in public management<sup>(1-5)</sup>. In the meantime, the fundamental right to health has been accomplished through judicial decisions that impose on the public power the obligation to provide supplies, pieces of equipment and surgeries for citizens whose rights are not fully met by the Brazilian State. This phenomenon is called "judicialization of health", that is, the intervention of the judiciary for obtaining medicines or treatments not covered by the Unified Health System (SUS)<sup>(6,7)</sup>.

It is estimated that, in 2010, expenditures on lawsuits amounted to almost 2% of the total health budget<sup>(8)</sup>. According to an analysis carried out by the Federal Attorney General's Office, it was evidenced that, in 2012, the number of lawsuits requesting services or supplies of this nature grew by almost 25% in relation to 2009<sup>(9)</sup>. According to Ministry of Health data, judiciary-ordered spending on health increased by 500% within just five years, from R\$ 140 million in 2010 to R\$ 838 million in 2014. In 2014, São Paulo State Health Secretariat spent R\$ 430 million on such lawsuits<sup>(10)</sup>.

It should be emphasized that approximately 55% of the healthcare expenditures in São Paulo municipalities were allocated to the supply of medications, 45% of which did not belong to SUS pharmaceutical assistance programs<sup>(7)</sup>. In this conception, the right to health ends up being restricted to the supply of medicines, reduced to curative actions that put little value on the fundamental character of promotion and prevention in health<sup>(11-13)</sup>.

Although the judicialization represents the demands of citizens and institutions seeking to guarantee the promotion of health and citizenship rights, this mechanism plays a negative role on the guidelines directing SUS<sup>(11,14)</sup>. Studies addressing this issue draw attention mainly to: budgetary imbalances and difficulties in achieving the planned public policies<sup>(7)</sup>; disruption to the basic principles of SUS<sup>(3-5,15)</sup>; problems related to ensuring access to and obtaining medicines<sup>(16)</sup>, and the increase in inequalities<sup>(3,17)</sup>.

The need to understand and reduce this emerging phenomenon prompts researchers, managers and other actors responsible for national decision-making processes, in view of the universal right to health and the SUS guiding premise that advocates an optimization of resources. Thus, it is important to analyze the close relationship between social, economic and individual factors in the search for the judicial system<sup>(9)</sup>, as well as the characteristics of the health apparatus that coexist with these judicial orders, in order to demonstrate areas of the SUS that require more attention from managers and greater investment in view of individual and collective health needs<sup>(14)</sup>. Additionally, the present investigation is novel as it analyzes indicators that have been little explored in studies of this nature.

In this way, the present study is aimed at analyzing the relationship between socioeconomic and performance-related factors of the health system and the incidence of lawsuits against the public health sector in Brazil.

#### **METHODS**

This is a cross-sectional study, with a quantitative approach, carried out by means of secondary data on lawsuits against the public health sector and socioeconomic and health performance indicators of the municipalities of São Paulo State, Brazil.

The sample under analysis was composed of 641 municipalities of the State of São Paulo, grouped into 17 Regional Health Departments (*Departamentos Regionais de Saúde - DRS*), as suggested by the SUS Strategic Demands Coordination System (S-Codes). The secondary data investigated included the São Paulo Social Responsibility Index (*Índice Paulista de Responsabilidade Social - IPRS*), the Performance Index of the Unified Health System (*Índice de Desempenho do Sistema* Único *de Saúde - IDSUS*) and the Gini Index. The period of data collection occurred between July and November 2015. The data refers to the year 2010 and comes from the Ministry of Health<sup>(18)</sup> (IDSUS database), S-Codes<sup>(19)</sup> (data for the number of lawsuits by DRS), the State System for Data Analysis Foundation<sup>(20)</sup> (Seade Foundation: database for the IPRS) and the Atlas of Human Development<sup>(21)</sup> (database for the Gini Index).

The researchers chose the year 2010 due to the breadth and quality of the indicators that compose the IDSUS of that year, released in 2012 by the Ministry of Health. It should be noted that, according to the Ministry of Health, the IDSUS would, in principle, be released each three years; however, there was no update until December 2017<sup>(18)</sup>.

The municipalities of the State of São Paulo are analyzed due to the high volume of judicial orders against the SUS<sup>(10)</sup>, as well as the technical feasibility of accessing the data needed to conduct this research<sup>(19)</sup>. It should be emphasized that the state planning process is aimed at prioritizing the role of regional bodies in identifying health problems, investments and public policies, so the analysis is based on the DRS. It is also emphasized that the lawsuits considered are the active ones, with issued receipts, which are in the process of purchasing medication.

In order to compose the socioeconomic profile of the municipalities of São Paulo, this study adopted the São Paulo Social Responsibility Index (IPRS), an instrument that evaluates the economic and social development of São Paulo municipalities considering the dimensions of wealth, longevity and schooling. This index stratifies the municipalities into five groups, with Group 1 comprising those that are characterized by a high wealth level and good levels of social indicators, while in Group 5 are the most disadvantaged municipalities<sup>(20)</sup>. The Gini index was also used to measure income distribution inequality, which ranges from 0 to 1, where an index of 0 represents municipalities of extreme equality<sup>(21)</sup>.

For measuring the SUS performance, the study used the Performance Index of the Unified Health System (IDSUS). This indicator provides an overall assessment of the quality of the Brazilian public health system by means of the analysis of the potential access to health services and the effectiveness of the actions provided. The IDSUS considers the complexity of the country's demographic, social and health process, and it is weighted in Homogeneous Groups (HG), for a direct comparison between municipalities with similar characteristics. The formation of these groups takes into account the Socioeconomic Development Index (*Índice de Desenvolvimento Socioeconômico - IDSE*), the Health Conditions Index (*Índice de Condições de Saúde - ICS*) and the Municipality Health System Structure Index (*Índice de Estrutura do Sistema de Saúde dos Municípios - IESSM*). In terms of classification, HG 1 represents the group with the highest performance, while HG 6 clusters the municipalities with the worst relative performance<sup>(18)</sup>.

After establishing the sample set of this research, it was divided into two levels of analysis, in order to achieve more robust results by excluding possible outliers. A method based on the interquartile range (IQR), the difference between quartile 3 (Q3) and quartile 1 (Q1), was used. The criterion establishes a lower limit (LL = Mean - 1.5 x IQR) and an upper limit (UL = Mean + 1.5 x IQR), considering outliers the values that lie outside these limits ( $^{(22)}$ ).

For the empirical analysis, a database was created in the Stata software (version 14). Initially, the Pearson correlation matrix was used to select which indexes would compose the final analysis model. Then, a multiple linear regression analysis was performed by the Ordinary Least Squares (OLS) method, where the number of lawsuits is explained by a linear relationship with health performance (IDSUS) and socioeconomic factors (Gini index and IPRS), a relation represented by the coefficients  $\beta_1$ ,  $\beta_2$  and  $\beta_3$ , respectively. The regression model also considers the constant (c) and the random error term (u). The latter takes into account attributes and elements not considered in the proposed model, while constant (c) represents the intercept of the line with the vertical axis, that is, it is independent of the IDSUS, Gini and IPRS variables of the following model:

Lawsuits = 
$$c + \beta_1$$
 (IDSUS) +  $\beta_2$  (Gini) +  $\beta_3$  (IPRS) +  $u$ 

The regression analysis was performed by DRS, with the indicators being weighted by the population of the municipalities. The research hypotheses were statistically tested, with a 95% confidence level in the p-value, the same level adopted for the correlation coefficients.

The present study was exempt from the requirement for approval by the Research Ethics Committee, since this was a research with a secondary data source, not involving human subjects directly or indirectly.

# **RESULTS**

With regard to the socioeconomic and health situation of São Paulo municipalities, Table I shows the IDSUS distribution, stratified by homogeneous groups. It is observed that the majority of municipalities (62.8%, n=405) are allocated in the so-called Homogeneous Group 5 (HG 5), followed by Homogeneous Group 3 (HG 3, 27.8%, n=179). Only six municipalities make up the Homogeneous Group 1 (HG 1), that is, municipalities where the service to the population received the best evaluations, according to the Ministry of Health.

It should be noted that the municipalities are grouped by DRS due to their similar socioeconomic characteristics and the geographical proximity of the municipalities. In relative terms, DRS I, IV and VII presented the best IDSUS results in 2010, since most of their municipalities are allocated in the first three homogeneous groups, while DRS XII has 87% of municipalities in HG 5 and HG 6 (Table I).

In relation to the inequality of municipalities, according to data from the Atlas of Development in Brazil (2010), the Gini index for the State of São Paulo in 2010 was approximately 0.56. The municipality of Santana de Parnaíba (belonging to DRS I - Metropolitan São Paulo) had the highest index (Gini = 0.67), while the municipality of Elisiário (comprised in DRS XV - São José do Rio Preto) had the lowest one (Gini = 0.33). In order to define the Gini mean for each DRS, the index was weighted by the population of the municipalities belonging to each. Using this method, the Gini index did not evidence great difference in the inequality among the DRS (0.42  $\leq$  Gini  $\geq$  0.51), according to data described in Table I.

Table I - Distribution of the Performance Index of the Unified Health System (IDSUS) according to Homogeneous Groups, and Gini index mean and standard deviation by Regional Health Departments (DRS). São Paulo, Brazil, 2010.

	Number of municipalities by Homogeneous Groups (HG) of the Performance Index of the Unified Health System (IDSUS)					Gini index			
Regional Health Departments (DRS)	HG1	HG2	HG3	HG4	HG5	HG6	Total	Mean	Standard deviation
DRS I - METROPOLITAN SÃO PAULO	1	8	17	1	12	-	39	0.51	0.06
DRS II - ARAÇATUBA	-	1	9	-	30	-	40	0.42	0.05
DRS III - ARARAQUARA	-	2	8	-	14	-	24	0.44	0.04
DRS IV - BAIXADA SANTISTA	1	-	7	1	-	-	9	0.51	0.03
DRS V - BARRETOS	-	1	4	-	13	-	18	0.44	0.04
DRS VI - BAURU	-	3	15	-	46	4	68	0.45	0.05
DRS VII - CAMPINAS	1	1	23	-	17	-	42	0.47	0.05
DRS VIII - FRANCA	-	1	4	-	17	-	22	0.47	0.06
DRS IX - MARÍLIA	-	1	12	-	47	2	62	0.45	0.05
DRS X - PIRACICABA	-	2	6	-	18	-	26	0.48	0.07
DRS XI - PRESIDENTE PRUDENTE	-	1	10	-	31	3	45	0.44	0.06
DRS XII - REGISTRO	-	-	2	-	7	6	15	0.51	0.02
DRS XIII - RIBEIRÃO PRETO	1	-	10	-	15	-	26	0.46	0.05
DRS XIV - SÃO JOÃO DA BOA VISTA	-	-	11	-	9	-	20	0.47	0.05
DRS XV - SÃO JOSÉ DO RIO PRETO	1	1	11	-	89	-	102	0.42	0.05
DRS XVI - SOROCABA	1	-	17	1	22	7	48	0.48	0.05
DRS XVII - TAUBATÉ	-	2	13	1	18	5	39	0.50	0.05
Total of municipalities	6	24	179	4	405	27	645	0.46	0.06

Source: IDSUS, 2010, and Atlas of Development in Brazil, 2010

When applying the IQR-based method on the numbers of lawsuits by DRS, it was observed that the DRS I - Metropolitan São Paulo presented an atypical value when compared to the others, with 8,189 lawsuits, while the mean was 1,364 (Table II). Thus, all 17 DRS were defined as Level 2 sample, and the DRS I - Metropolitan São Paulo was defined as Level 1 sample.

Table II describes the number of lawsuits filed by DRS in 2010. The largest number of lawsuits is found in major urban centers, since DRS I has the highest number of lawsuits (35.5%), followed by DRS XV (15.9%). DRS XII presented the lowest number of lawsuits, amounting to seven cases in year 2010.

Table II - Number of lawsuits against the public health sector according to the Regional Health Departments (DRS). São Paulo, Brazil, 2010.

Regional Health Departments (DRS)	Number of Municipalities	Number of lawsuits
DRS I - METROPOLITAN (GRANDE) SÃO PAULO	39	8.189
DRS II - ARAÇATUBA	40	243
DRS III - ARARAQUARA	24	683
DRS IV - BAIXADA SANTISTA	9	689
DRS V - BARRETOS	18	540
DRS VI - BAURU	68	2.235
DRS VII - CAMPINAS	42	1.208
DRS VIII - FRANCA	22	764
DRS IX - MARÍLIA	62	297
DRS X - PIRACICABA	26	764
DRS XI - PRESIDENTE PRUDENTE	43	553
DRS XII - REGISTRO	15	7
DRS XIII - RIBEIRÃO PRETO	25	1.785
DRS XIV - SÃO JOÃO DA BOA VISTA	20	492
DRS XV - SÃO JOSÉ DO RIO PRETO	102	3.679
DRS XVI - SOROCABA	47	616
DRS XVII - TAUBATÉ	39	452
Grand total	641	23.003
Mean	38	1.364
Quartile 1	21	472
Quartile 3	45	1.497
Lower limit	-	-172
Upper limit	-	2.901

Source: S-Codes. Note: With regard to the number of lawsuits in 2010, the municipalities of Guaribá, Itaóca, Marabá Paulista and Martinópolis did not consider any DRS because there was no available data on these municipalities

Furthermore, a positive correlation was found between the IDSUS and the incidence of lawsuits against the SUS. At Level 1 there was a strong correlation (p < 0.05), whereas, at Level 2, there was a moderate correlation (p < 0.05), as can be observed in Table III.

The Gini index was moderately and positively correlated with lawsuits at Level 1 (p<0.05). At Level 2, the same index showed a weak and negative correlation (p<0.05) (Table III). The IPRS was not very representative (p>0.05), and there was an almost imperceptible correlation with the explained variable (22).

Because of this, the research hypotheses under investigation mainly address factors related to the performance of public health services (IDSUS) and socioeconomic inequality (Gini Index). Variable IPRS was therefore excluded from the regression model.

Table III - Correlation matrix between the socioeconomic variables and the number of lawsuits by level of Regional Health Departments (DRS). São Paulo, Brazil, 2010.

Lawsuits by level of Regional	Performance Index of the Unified Health System (IDSUS)	Gini Index	São Paulo Social Responsibility Index (IPRS)
Health Departments (DRS)	Correlation coefficient	Correlation coefficient	Correlation coefficient
Lawsuits at Level 1	0.78	0.58	0.10
(p-value)	(p < 0.05)	(p < 0.05)	(p > 0.05)
Lawsuits at Level 2	0.55	-0.35	0.15
(p-value)	(p < 0.05)	(p < 0.05)	(p > 0.05)

Level 1: all DRS; Level 2: all DRS except for DRS I - Metropolitan São Paulo

As for the results of the linear regression of the variables under study, it can be observed in Table IV that the performance index in the health area (IDSUS) obtained statistical significance with a 95% confidence level. It is interesting to note that the relationship between the IDSUS and the number of lawsuits was positive. With regard to the Gini Index,  $\beta_2$  coefficient presented a positive relation with lawsuits at Level 1 and a negative relation at Level 2, but with no significance according to the p-value in both samples, although significant to 10% at Level 2.

Table IV - Results of the linear regression model in which the number of lawsuits is explained by the Performance Index of the Unified Health System (IDSUS) and the Gini index (GINI). São Paulo, Brazil, 2010.

	Dependent Variable	Number of Lawsuits
	Level 1	Level 2
Constant (c)	-4.677	4.373
Standard deviation	4.452.00	2.954.52
p-value	0.3113	0.1626
IDSUS (β₁)	1.858	0.905
Standard deviation	464.199*	308.889*
p-value	0.0013	0.0116
GINI (β <sub>2</sub> )	2.984	-11.134
Standard deviation	-9.645.47	5.931.59
p-value	0.7600	0.0831
nº observations	17	16
F	11.00027	5.467773
p-value	0.001345	0.018910
R-Square	0.611111	0.456875

<sup>\*</sup>statistical significance at 5%. Level 1: all DRS; Level 2: all DRS except DRS I - Metropolitan São Paulo. n°: number

# DISCUSSION

Based on the analysis of the socioeconomic profile of the municipalities evaluated, it is possible to observe the complexity of the factors that may be related to the increase of litigations with the public health sector. Even though the socioeconomic and health indicators of the state of São Paulo prove above the average in terms of Brazil (Gini and IDSUS), a great difference is observed between the municipalities represented by DRS.

The main result of the present study evidenced a higher demand for litigation among the municipalities with better structure and health service provision, contrary to the first hypothesis formulated  $(H_1)$ . Moreover, this finding held true in the two sample groups under analysis (Level 1 and Level 2), demonstrating a positive relationship between the size of the municipality and the incidence of lawsuits.

A recent study, which explored the IDSUS sensitivity to socioeconomic variables, identified that municipalities with the highest IDSUS qualifications have more investments on health per capita<sup>(23)</sup>. These same elements had

already been pointed out in previous studies as possibly responsible for the increase in lawsuits filed against the Unified Health System<sup>(13,24)</sup>.

The relationship between the judicialization and the SUS performance evaluation, particularly the low demand for litigation in municipalities with poor performance, may indicate the need for public management actions that result in improved access to services, as identified in a study addressing the access to outpatient and hospital procedures in the State of Minas Gerais, between 1999 and 2009<sup>(24)</sup>.

In regard to health promotion, a study with professionals working in the health area has shown that they have a negative perception of the reality imposed by the judiciary, despite recognizing it as necessary in view of the public health crisis<sup>(11)</sup>. These results highlight that it is imperative to implement actions that establish equity and minimize the problems related to access to health in Brazil as a strategy for exercising citizenship, health promotion and greater effectiveness of health policies.

As for the financial incentive, municipalities equipped with medium-and high-complexity medical centers tend to attract people from other localities by means of spontaneous demand or referral managed by intermunicipal consortia<sup>(13, 24)</sup>. A study that evaluated the hypothesis that the judicialization in Brazil would be promoted by economic elites identified a very high migration concerning the applicant's city of origin in relation to their city of treatment<sup>(17)</sup>. However, along with this new population contingent, municipalities also receive an external legal demand, which poses a negative impact on public budgets and challenges municipal managers to control and optimize resources<sup>(11,25)</sup>.

It is noteworthy that the process of judicialization for achieving health procedures has been greater in the population over 50 years of age<sup>(24)</sup>, which, together with the aging of the population, puts pressure on public spending<sup>(26)</sup>. In this sense, the judicialization has not considered the overall public policies, especially those aimed at health promotion<sup>(27)</sup>, as the responses to the demand for new technologies and high-cost procedures have been faster than actions towards dehospitalization<sup>(28)</sup>.

Considering that, in the State of São Paulo, the average success rate of lawsuits against the public health sector exceeds 90%<sup>(19)</sup>, the suspicion of partnerships between the pharmaceutical industry, doctors and lawyers in the process of judicialization arises<sup>(17, 24,29)</sup>, mainly in large municipalities or capitals (Level 1), where the largest investments in health are concentrated. This greater receptivity of the judiciary in relation to demands for litigation in the health sector lies in the fact that this deliberative system regards the term "essential" in its decisions as an adjective equivalent to "indispensable" in guaranteeing the user's right to health<sup>(6,24)</sup>.

Although the results of the present study demonstrate that municipalities with worst IDSUS have a smaller number of lawsuits, a fact to be highlighted is that, in small municipalities, usually those with the worst IDSUS, the incidence of a sole action is enough to compromise its budget, undermining the basic health investments<sup>(7)</sup>. Such is the case of the municipality of Buritama, São Paulo, where, for the year 2012, more than half of the public health budget was committed to costs by court orders<sup>(30)</sup>.

Based on the results found in the present study, it is evident the importance of intersectoral work involving different areas of public management, as well as the involvement of all spheres of power for formulation and execution of public policies that fit the needs of the population. Undoubtedly, discussing the phenomenon of judicialization entails the framework of the relations between state, executive and judicial powers in the formulation and execution of the public health policy, especially when the latter acts, predominantly, from the individual, rather than collective, perspective of health needs.

A positive counterpoint of the phenomenon in question must be highlighted when the logic of the market is used in the management of services in favor of the health system efficiency. In such case, judicialization becomes an ally of public health, as it signals the deficiencies and stimulates reflection on new policies, thus reducing the distance between the SUS established in the normative framework and the SUS that implements health actions and services<sup>(11,13,31)</sup>.

The results identified should be analyzed with caution, since they explain the increased judicialization of health by means of a limited number of indicators. Considering the multifaceted nature of health and disease processes, it is believed that many other factors can contribute to the incidence of this outcome, such as health practices and habits, environmental conditions that lead to illness, access to judicial services and organs, among others. Therefore, the vulnerability of IDSUS in portraying demographic, social and health characteristics appears as a limitation of the present study, as well as the convenience of the research site selection, which implies not generalizing the results to other regions of the country.

It is recommended, in future surveys, a better qualification of the data, through studies that address the judicialization of health, especially by including indicators that explain the phenomenon directly and that certainly subsidize the

discussion, such as the sociodemographic profile of the individuals and the identification of the type of lawsuit and the place of origin of the plaintiff.

#### CONCLUSION

The results indicate that there was no statistically significant linear relationship between the socioeconomic factors analyzed (IPRS and Gini) and the incidence of lawsuits against the public health sector. However, a greater number of lawsuits was observed in localities with better performance of health services (IDSUS), that is, municipalities with better IDSUS have suffered more because of the judicialization of health.

#### CONFLICTS OF INTEREST

The authors declare that there are no conflicts of interest in this study.

#### CONTRIBUTIONS

Rafael Lutzoff de Camargo Vaz contributed to the study conception and design, data acquisition and analysis, and drafting of the manuscript; Matheus da Costa Gomes contributed to analyses, methodological procedures, interpretation of results, and final writing. Jessica Adrielle Teixeira Santos contributed to analyses, interpretation of results, writing and approval of the final version to be published; Carlos Alberto Grespan Bonacim supervised the research, contributed to analyses, interpretation of results and final revision of the version to be published.

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