DOI: 10.1590/1413-812320232812.06152023EN

Fund transfers for combating COVID-19 from the perspective of municipal managers in São Paulo state, Brazil

Ligia Schiavon Duarte (https://orcid.org/0000-0001-5822-9033) [1]
Mônica Martins de Oliveira Viana (https://orcid.org/0000-0003-3049-4518) [1]
Mariana Tarricone Garcia (https://orcid.org/0000-0001-5124-8936) [1]
Tereza Etsuko Costa Rosa (https://orcid.org/0000-0001-9285-0472) [1]
Claudia Malinverni (https://orcid.org/0000-0003-2218-283X) [1]
Miriam Vaz Ferreira Neves (https://orcid.org/0009-0001-4519-7033) [1]
Luzia Aparecida de Albuquerque Dantas (https://orcid.org/0009-0008-9148-9177) [1]

Abstract *The study examined municipal managers' perceptions of extraordinary funding and its use to address COVID-19. In this multiple-case, quantitative and qualitative study, using embedded mixed methods, semi-structured interviews were conducted in six case-municipalities in São Paulo state. Secondary data for 2020 to 2022, drawn from information systems, were analysed. The municipalities differed by population, health expenditures and access to federal funding, making it possible to observe different financial management strategies and resource allocation. In addition to the extraordinary funding, considerable budget transfers were found to have been made by Parliamentary Amendments during the study period. In a context where the national Unified Health System is underfunded, extraordinary funding and budget transfers by Parliamentary Amendments often enabled managers to organise municipal health systems to meet their understanding of health needs and possible responses to those needs. Funding to address COVID-19 was allocated mainly to medium- and high-complexity services and to engaging private companies.*

Key words *Unified Health System, COVID-19, Local Health Systems, Healthcare Financing, Health Management*

[1] Instituto de Saúde, Secretaria de Estado de Saúde de São Paulo. R. Santo Antônio 590, Bela Vista. 01314-000 São Paulo SP Brasil. ligiaduarte@isaude.sp.gov.br

Introduction

In Brazil, a context of fiscal austerity, in place since implementation of the national health service (SUS) began, strains federative relations and impacts health management in municipalities of all sizes. Funding is recognised to be one of the factors that directly influence the decisions of local SUS managers, due to the availability of both local funds and those transferred by the federal government[1-3]. The fiscal regime[4] introduced by Constitutional Amendment No. 95, of 2016, intensified the austerity, bringing chronic underfunding of the SUS, now regarded by several authors as "defunding", to new levels[5-7]. This reduction in federal spending on health, allied to the seriousness of the situation precipitated by the pandemic, erratic action by the federal government and the ongoing economic and social crisis, meant that for municipal management to address COVID-19 posed enormous challenges, especially in primary health care (PHC), given that, at the start of the pandemic in Brazil, health policies prioritised hospital care[8].

Decentralisation has given states and municipalities more substantial roles in the management and funding of public health actions and services (*Ações e Serviços Públicos de Saúde*, ASPS). This reorientation became particularly significant during the pandemic, as municipal and state managers were instrumental in building broader and more diversified responses to COVID-19[9]. The federal government maintains its privileged position in the coordination of actions, both in proposing the model of care and in responses to health emergencies, by modulating fund allocation to subnational entities through federal transfers[5].

A number of authors have pointed to this excessive fragmentation as a constraint on the autonomy of subnational managers and as inducing segmentation of care and hindering the promotion of objectives specified in municipal health plans[10,11]. In the new model of federal fund allocation to PHC, *Previne Brasil*, instituted by Ministry of Health Order No. 2,979/2019[12], not only is this tendency to fragment and to restrict autonomy present, but seems to be more severe.

In February 2020, a state of public calamity was declared as a result of the pandemic crisis. From that moment on, measures not contemplated in ASPS funding were carried out, setting up new dynamics in the management and funding of the national health system (*Sistema Único de Saúde*, SUS) in the municipalities, which were forced to reorient the health system at all levels of complexity.

PHC has taken on a prominent role in community care and health surveillance in other countries[13] and, even though the impacts of the pandemic affected the health system as a whole, the effects that *Previne Brasil* on local management of the SUS may have impaired the performance of PHC in the COVID-19 pandemic. Threats to the principles of universality and comprehensiveness underlying the SUS had already been identified in the new model of funding, which places little emphasis on the territorial perspective or comprehensive, multidisciplinary care, as well as entailing loss of funding and encouraging privatisation[7,14-16].

Accordingly, given the difficult context of underfunding of the public system prior to the pandemic, as well as the complex normative framework of inter-federative relations that frame ASPS spending, which was maintained in the period of public calamity, associated with the growing importance of including PHC as strategic to combating the pandemic, this study examined municipal managers' perceptions of the transfers received and their uses in the fight against COVID-19.

Methodology

This article derives from the research "Primary Health Care Policy in the context of the pandemic in the municipalities of São Paulo", conducted by the Instituto de Saúde with funding from the Special Health Fund for Mass Immunisation and Disease Control (*Fundo Especial de Saúde para Imunização em Massa e Controle de Doenças*, Fesima), both of the São Paulo State Health Department (*Secretaria Estadual de Saúde de São Paulo*, SES/SP). It was approved by the research ethics committee (Opinion 4.842.154 and identification No. CAAE 48513721.80000.5469).

This multiple case study took the form of what Creswell and Plano Clark call an "embedded mixed methods case study"[17,18]. The strategy of studying multiple cases at a single level of analysis was chosen for its applicability to exploring in depth and investigating phenomena characterised by their inseparability from context[19]. Within the embedded mixed methods design, a quantitative dataset (supplementary method) was embedded after qualitative dataset, which is the guiding the research. This modality was used to meet the need to characterise in depth the in-

terviewees' social context and complement the explanations of the phenomenon found. Accordingly, the quantitative data constitute a method supplementary to the guiding approach, which in this study is qualitative. The analysis, in line with the tenets of the embedded mixed methods case study, applied the constructivist paradigm, in which secondary data are deployed to help explain the primary, phenomenological element.

With a view to understanding municipal managers' perceptions with regard to the fund transfers they received, qualitative data were produced from semi-structured interviews in six case-municipalities[20] selected from the database of participants gathered during the first stage of the study (telephone and/or video conference interviews of managers in 253 municipalities, between February and June 2022). Selection of case municipalities sought first to contemplate different population sizes. Thus, municipalities were split into two groups: with populations of less than 50,000 and 50,000 or more (which will be treated from here on as "small" and "large"). Second, it sought to include case municipalities applying different models of PHC care, including those with or without characteristic components of Brazil's family health strategy (*Estrategia de Saúde da Família*, ESF), such as the types of PHC services provided, the process of territorialisation, health system access for users, counter-referral and engagement of medical specialists in family health care. Lastly, the analysis considered the survey questions that indicated whether or not the municipalities had mentioned anything suggestive of their taking territorially-based action to address the pandemic and how successful they had been in continuing PHC during the crisis. This last perspective contemplated their promotion of expanded PHC in response to the pandemic situation in 2021 and 2022[21-23], from here on referred to as "expanded PHC for COVID".

All three perspectives were taken into consideration in forming the groups of municipalities, which were then ranked as "well-structured ESF" or "no ESF structure" and as displaying "elements that favoured expanded PHC for COVID" or not. The selection also sought to capture the regional diversity of São Paulo state, which is organised into 17 regional health departments and 63 health regions. The selection criteria and selected municipalities are shown in Chart 1.

In each of the six municipalities, health department managers were interviewed, as they are staff closest to decisions on the use of funding. The interview script was designed to investigate their perceptions of transfers received from the federal government. The qualitative corpus thus consisted of twelve interviews, which were examined, with the help of MAXQDA software[24], within a thematic analysis framework[20]. Interviewees' accounts were aggregated by municipality and named randomly as M1, M2, M3, M4, M5 and M6. Recommended ethics for research involving human subjects was observed at all stages.

Quantitative data were produced using secondary data extracted from public domain databases. Selection reflected the findings of interviews with managers, with a view to illustrating, complementing and/or identifying divergences from what emerged from the interviews. Also, from basic information regarding the municipality's ability to fund health measures and services and its dependence on transfers, it was possible to establish the more general context of the managers' work, which helped guide the qualitative analyses. Thus, data were collected on public budgets and fund transfers for the three study years (2020, 2021 and 2022). Municipal indicators for each of the six towns, available in the Information System on Public Health Budgets (SIOPS), were obtained from the Ministry of Health (MoH)[24] in order to understand the expenses actually incurred at the local level, the management's dependence on fund transfers and its commitment of local revenue to the SUS. The following indicators were selected: (i) total health expenditure for which the municipal government was responsible, in R$ *per capita*; (ii) ratio of health-related fund transfers to the municipality's total health expenditures; and (iii) proportion of municipal revenue applied to health under complementary law LC 141/2012.

Data on federal transfers to the 645 municipalities in São Paulo in the three study years were drawn from the National Health Fund[25]. The amounts were entered onto a Microsoft Excel® spreadsheet and organised to identify the six selected municipalities and the state total. In addition to total transfers, transfers for combating COVID-19 were identified and aggregated (referred to from here on as COVID-19 funding), as were transfers under parliamentary amendments[26] (PA funding) (Chart 2).

The transfers identified as (i) Totals, (ii) COVID-19 and (iii) PA, were calculated on a *per capita* basis from population projections for 2021 by the Seade Foundation[27]. Amounts were updated by the Broad National Consumer Price Index (*Índice Nacional de Preços ao Consumidor Amplo*, IPCA), produced by the official statistics bureau

(*Instituto Brasileiro de Geografia e Estatística*, IBGE). Average annual indices were used to correct amounts to 2022 prices.

Results

There was significant diversity among the selected municipalities. The largest, by 2021 population size, was Paulínia (106,781) and the smallest, Fernão (1,656), followed by Piracaia (26,379), Juquitiba (30,579), Fernandópolis (66,131) and Peruíbe (66,747). The considerable heterogeneity among them was also reflected in public spending on health. Paulínia and Fernão, although at opposite extremes in terms of population size, showed the highest *per capita* expenditures in 2022: the former spent R$ 4,180.81 *per capita* and the latter, R$ 3,264.03 (Table 1). These values are much higher than in other municipalities.

As can also be seen from Table 1, *per capita* spending is not directly related to transfers to Municipal Health Funds by other entities. Once again taking 2002 as the reference year, in Paulínia, despite the high level of *per capita* spending, transfers for health purposes accounted for only 4.2% of the municipality's total health expenditures. Note also the proportionately large transfers to Fernandópolis: 48.8% in 2020. Note also the variations over the study period in

Chart 1. Case municipalities and selection criteria.

Population size	Family Health Strategy structure	Elements favouring expanded care in addressing the pandemic situation through the SUS	Case municipalities selected	Health districts and regions	Managers interviewed
<50,000	Yes	Yes	Fernão	DRS IX/Marília	1
≥50,000	Yes	Yes	Fernandópolis	DRS XV/Fernandópolis	3
<50,000	Yes	No	Juquitiba	DRS I/Mananciais	2
≥50,000	Yes	No	Peruíbe	DRS IV/Baixada Santista	2
<50,000	No	Yes	Piracaia	DRS VII/Bragança	2
≥50,000	No	Yes	Paulínia	DRS VII/RM Campinas	2

Source: Authors, based on the research "*A política de Atenção Primária à Saúde no contexto da pandemia nos municípios paulistas*".

Chart 2. Selection of budget actions to identify Covid-19-related and Parliamentary Amendment funding.

Source	Fundo Nacional de Saúde
Access	https://consultafns.saude.gov.br/#/consolidada
Year	2020, 2021 and 2022
State	São Paulo
Municipalities	All
Transfer type	Municipal
Detailed actions for COVID-19 transfers	Coronavírus (COVID-19)
	Coronavírus (COVID-19) - SAES
	Coronavírus (COVID-19) - SAPS
	COVID-19 - Medida Provisória nº 1.043 - SAES
	COVID-19 - Medida Provisória nº 1.062, de 09/08/2021 - SAES
	CV19 - Coronavírus (COVID-19)
	CVF0 - COVID-19 - Medida Provisória nº 1.062, de 09/08/2021 - SAPS
Detailed actions for PA transfers	Temporary Increase in Hospital and Outpatient Service Expenses
	Temporary Increase in Primary Health Care Service Expenses

Source: Authors.

Fernão, Peruíbe and Piracaia: in the latter municipality, the proportion fell from 34.4% in 2020 to 14.6% in 2022.

All the six municipalities applied a proportion of municipal revenues to the health sector above the constitutional minimum; particularly Peruíbe, which in 2022 committed 39.7% of municipal revenues to public health.

Analysis of *per capita* transfers from the national fund to municipal health funds revealed important differences between the case municipalities (Figure 1). Considering *per capita* transfers to the municipal health funds of the 645 municipalities in São Paulo, Fernão was found to receive well above the state average, followed by Fernandópolis. At the other extreme, Piracaia and Paulínia received the lowest amounts in *per capita* federal transfers. There was also a real decrease in the amounts transferred to municipal health funds from 2020 to 2022, a trend that excluded only Fernandópolis and Juquitiba, which showed the largest amounts in federal transfers in 2022.

By totalling *per capita* transfers to municipal funds in the three study years and disaggregating COVID-19 and PA funding, it is possible to determine their relative average proportions in São Paulo municipalities as compared with the case municipalities (Figure 2).

COVID-19 funding amounts transferred to Fernão, Paulínia and Fernandópolis were found to be above the state average (R$ 160.34), particularly as regards the former, which received R$ 219.23 *per capita*. Peruíbe, Juquitiba and Piracaia received below-average transfers.

The greatest discrepancies among the case municipalities were found in PA fund transfers. While the state average was R$ 62.73 *per capita*, Fernão received R$ 400.05 *per capita* in this form. Note also the amounts transferred to Fernandópolis (R$ 192.24) and Juquitiba (R$ 185.81). While state average PA funding was less than COVID-19 funding, PA funding in the study municipalities surpassed funding to combat the pandemic.

Also in Figure 2, it can be seen that the group of municipalities applying the Family Health Strategy received most in *per capita* transfers from the FNS, including PA funding. Fernão and Fernandópolis, where elements favouring expanded PHC during the pandemic were detected, received more in *per capita* transfers from the FNS, including COVID-19 funding. Juquitiba and Peruíbe, where these elements were absent, received less funding, even when compared to municipalities not applying the Family Health Strategy.

On the other hand, Piracaia and Paulínia, selected for not applying the Family Health Strategy model and for displaying elements favouring expanded PHC for COVID, received less in *per capita* transfers from the National Health Fund, including PA funding, when compared to the other selected municipalities. Their situation as regards COVID-19 funding was intermediate: they received less than Fernão or Fernandópolis, but more than Peruíbe or Juquitiba.

In the qualitative survey, all respondents, when asked about the external support they received, referred explicitly, with greater or lesser emphasis, to exceptional funding in addressing the pandemic. Half the municipalities, even though not directly stimulated by the interview script, referred explicitly to PA funding. That this theme should have emerged spontaneously in the interviews suggests that transfers of this type figured prominently for the participants.

Table 1. Per capita amounts (R$) of health spending and proportion of transfers to municipalities and of municipal revenues applied to health care from 2020 to 2022, by case municipality.

Case municipalities	Total health spending (R$/pop.), under municipal responsibility			Proportion (%) of health transfers in total municipal health spending			Proportion (%) of municipal revenues applied to health care under LC141/2012		
	2020	2021	2022	2020	2021	2022	2020	2021	2022
Fernão	2,498.81	2,195.61	3,264.03	40.5	26.3	25.0	25.6	30.7	27.8
Fernandópolis	839.68	870.50	1,055.82	48.8	35.5	43.4	22.5	23.0	21.8
Juquitiba	745.73	819.87	860.42	39.5	35.5	46.3	28.5	21.5	23.8
Peruíbe	1,198.17	1,369.96	1,513.52	30.1	24.0	19.2	31.3	34.8	39.7
Piracaia	755.34	820.67	951.21	34.4	17.2	14.6	23.0	23.6	28.1
Paulínia	3,543.97	4,150.82	4,180.81	5.8	4.8	4.2	23.1	21.2	20.4

Source: *Sistema de Informações sobre Orçamentos Públicos em Saúde (SIOPS).*

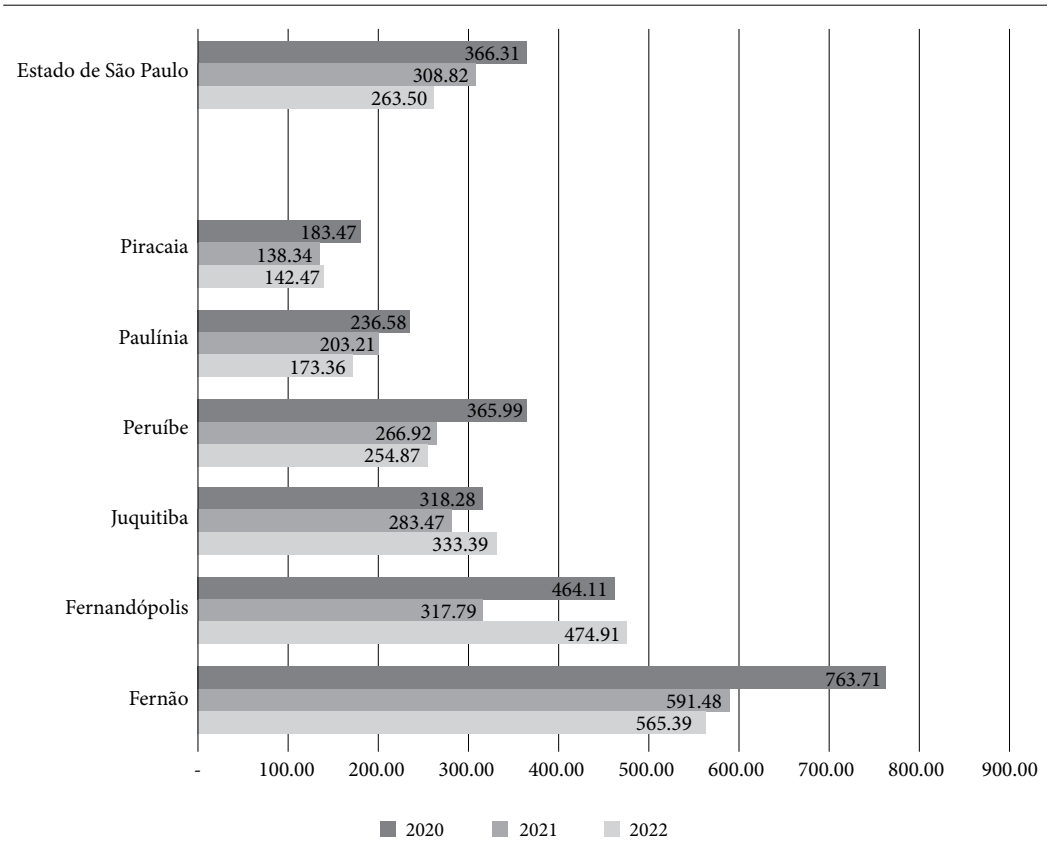
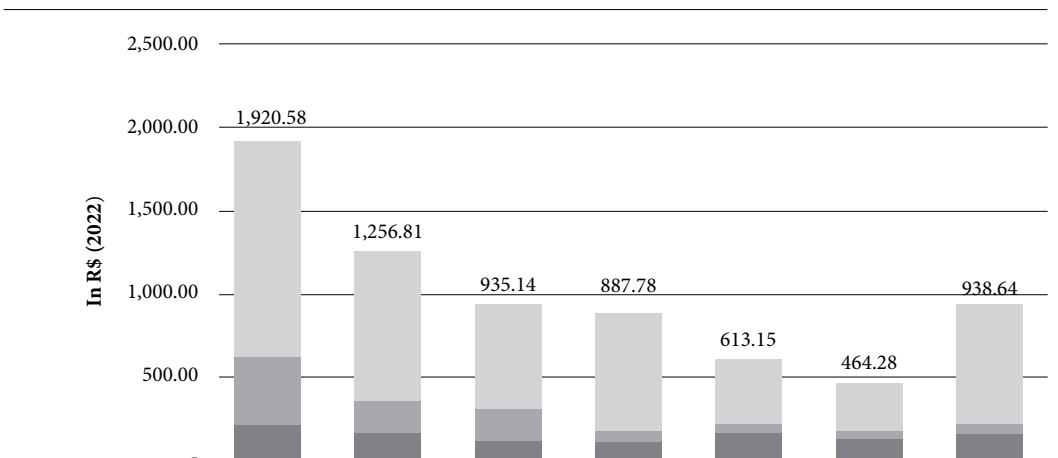


Figure 1. Per capita amounts in R$ (2022), of funding transfers from the National Health Fund to Municipal Health Funds from 2020 to 2022, by case municipality.

Source: *Fundo Nacional de Saúde (FNS).*



	Fernão	Fernandópolis	Juquitiba	Peruíbe	Paulínia	Piracaia	São Paulo state
Other transfers	1,301.31	895.99	627.86	710.89	390.85	289.20	715.57
Parliamentary amendments	400.05	192.24	185.81	67.65	51.66	41.74	62.73
COVID	219.23	168.57	121.47	109.24	170.64	133.34	160.34

Figure 2. Sum of per capita transfers in R$ (2022) to Municipal Health Funds from 2020 to 2022 according to the breakdown of resources.

Source: *Fundo Nacional de Saúde (FNS).*

All respondents mentioned receiving COVID-19 funding, which three (M1, M4 and M5) considered "*a lot of funding*". Two were quite enthusiastic about the amount transferred, which enabled them "*to pay for almost the whole pandemic*" (M4) and "*the money came and came and came, from all sides*" (M5). Note that this perception did not come from managers in municipalities with higher *per capita* funding.

The perception of scant funding was voiced by the interviewee from one of the municipalities that received relatively less COVID-19 funding and did not display elements that favoured expanded PHC in the pandemic. The interviewee declared that: "*it wasn't much funding, but it did help!*" (M2).

All respondents mentioned how these funds were used and pointed to different types of expenditure. They generally cited services contracts unrelated to PHC, such as for setting up care centres for symptomatic cases, expanding intensive care beds, mobile ICUs and investments in local testing laboratories and others. Procurement of material, including oxygen, COVID tests and personal protective equipment (PPE), was also reported.

At various times, the accounts went into considerations about the ease of contracting "*private companies*", which would ensure services functioned, or of procuring materials, even with the higher prices characteristic of the period. One reported engaging a private company to provide human resources for two COVID centres:

[...] it sent me the doctor, the nurse and the technician to help me, understand? So I used that money to make the COVID centres work. I did, I did, see? I hired private companies, doctors so they could do that work for me, and I just did the management [...] it flowed really well [...] we required what we wanted from the doctors, that they come to work. It wasn't just coming in, you had to go there and stay from 8 to 5 to provide care (M5).

One of the interviewees emphasised that COVID-19 funding was not used to meet PHC needs. The few examples described involved procurement of PPE and engaging a company to clean the centres. That same interviewee stated that most of the funding spent on PHC during the pandemic came from "municipal funds".

PA funding was mentioned in three municipalities. Importantly, that mention was made in municipalities with different *per capita* PA transfer amounts. One of the accounts expressed positions very critical of this form of transfer and indicated that these funds were often directed to expenses that did not reflect local needs. One of the interviewees referred to "*equipment[-related] amendments*" and that often "*the equipment is not even needed*" (M6). In that interviewee's opinion, the funding should come in "*more comprehensive form*" and be "*more freely*" usable.

In another municipality, even though the interviewee was enthusiastic about the spending possibilities afforded by PA funding, the related thinking was found to demonstrate disagreement with this arrangement. The account told how management drew up a two-year work plan designed to maintain a family health team working in primary care, which was considered important. However, criticism was expressed in the statement: "*every municipality that puts a family health strategy in place should already have that support from the Ministry of Health*" (M5), that is, should not depend on funding transferred by PA.

The third municipality that mentioned receiving PA funding did not criticise the transfers explicitly, rather valuing the flexibility and autonomy in execution of this funding. On this view, it enabled them to meet demands for members of the health team:

Now we also have a lot of amendments for expenses. So, it's like... we get everything the girls ask for... sometimes even things that were missed... for example, a bandage for someone with an ulcer, one-off... we're able to buy one [...] materials aren't much of a trouble issue for us (M3).

In that same municipality, PA funding made it possible to purchase a generator to keep vaccines under refrigeration, which he said was a major concern for team personnel, because of the possibility of losses from lack of electricity:

There were days, the driver calls me at midnight and we go out after a petrol station, because the fuel's run out [...] that is a very major concern, because we know how important these vaccines are, right? Especially during COVID (M3).

Note also that some interviewees were rather imprecise about the origin and amount of funding allocated to combating the pandemic. In one larger municipality, the health secretary and the PHC coordinator stated explicitly that they were unaware of the financial management of funding, both referring to the same staff member recognised by both as the person actually responsible for the task. A certain fragmentation of responsibilities could be perceived, is explicit in the PHC coordinator's remark that:

I'm more involved with the basic care part than with funding, because I am on my own. [...] so here we sort of share things. Just that, well, there were a

lot of difficulties, so I really can't tell you how much we received. We received a good deal of funding [...] but we had to keep putting in requests, all the time... (M4).

To some extent, the manager's interview also revealed a lack of knowledge about the regulations governing the rationale and uses of funds transferred by the federal government: "*I don't know much about Previne Brasil, because it's [name of the professional] who really manages it*" (M4).

Certainly, the fragmentation of responsibility or lack of knowledge about the rationale and use of funds transferred by the federal or state governments is not a characteristic of all municipal health management.

Discussion

By using case studies with embedded mixed methods, it was possible to produce denser, concrete information to complement the subjective phenomenon that emerged from the interviews and in-depth specification of the financial context in which municipal managers formed their perceptions. The embedded supplementary (quantitative data) method enabled the considerable heterogeneity of the local realities studied to be identified.

Health expenditure indicators for the selected cases displayed specific features reflecting major differences between them in annual *per capita* spending, confirming the great diversity in health spending variables in Brazilian municipalities[28]. In common, they all showed that they commit much more to health than the 15% of municipal revenue stipulated by Law 141, of 2012[29], pointing to a possible local-level economic resilience, as described by Costa[2].

With the exception of Paulínia, the towns were found to receive a large ratio of health funding transfers to total municipal health expenditure. There was also a notable tendency for this proportion to vary over the three study years. These variations posed considerable challenges for municipal management, especially in lower-income towns, which depended more on transfers[1]. In *per capita* terms, however, the least populous municipalities did not always benefit the most[30]. Federal transfers to municipal health funds generally reinforced important differences between the selected municipalities and reflected Brazil's great heterogeneity, as in Fernandes and Pereira[28]. Homogeneity was found, though, in that the highest total *per capita* transfers were accompanied by higher *per capita* PA transfers.

As regards specifically COVID-19-related transfers, Peruíbe and Juquitiba, which were selected due because they lacked elements favouring expanded PHC in the pandemic, received lower *per capita* amounts. Funding to combat the pandemic was distributed on the general logic of unequal fund distribution within the federation[28]. This does not mean, however, that the differences in amounts was what caused their difficulties in coping with COVID-19, given the political, economic and social context that framed the pandemic period at the national level[31-33].

The analysis of the selected cases did not give grounds for asserting that *per capita* health expenditures were to increase the ability of PHC to organise expanded care. Peruíbe, which showed an intermediate level of *per capita* spending, was selected becase, according to the chosen criteria, it did not display elements favouring expanded PHC. Piracaia, with the second-lowest *per capita* expenditure, was selected because PHC actions taken in the territory and the continuance of PHC there would have tended to promote expanded COVID care.

Given that the study period was characterised by a series of transitional measures in the implementation of the new PHC funding model, which sought to mitigate any losses of funding[7], the managers' interviews conveyed no clear perception of the effects of the *Previne Brasil* programme on the municipal budget and, consequently, on management of the pandemic.

Funding to address the health crisis was found to have been allocated mainly to medium- and high-complexity care, partly in response to the strongly targeted ministerial orders guiding the allocation of extraordinary resources to these levels of care, as shown by Faleiros and Pereira[34]. In São Paulo state, transfers followed the national trend of funding being directed to opening up COVID beds (ICU and ventilatory support, temporary services referred to as COVID-19 centres and so on)[33]. Regardless of the volume of funds transferred and the care complexity level they were allocated to, managers of all selected municipalities acknowledged that funding transferred to address the pandemic was an important form of federal government support. In some cases, the perception was of exceptional access to funding not previously experienced by the interviewees. This suggests that, in many cases, in the context of defunding, the extraordinary funds made it possible for managers to organise

municipal health systems according to their understanding of local health needs and the possible responses to them, even though in this case, too, there were constraints on the uses to which funding was put[34].

As regards PHC, besides one of the interviewees' remarking that this level of care depended primarily on municipal funding, other accounts of how funds were used seem to corroborate the argument that different entities diverged over the role of PHC[8]. Municipalities sometimes accompanied the federal tendency to prioritise hospital care to the detriment of territory-based care[8].

The fragmentation of responsibilities and managers' lack of knowledge of funding transferred by the federal or state governments was not characteristic of all municipal health management. However, given the great diversity of Brazilian municipalities, it must be borne in mind that managers are not always able to offer thoughts on the financial planning of local health policy.

The quantitative data showed that all municipalities studied received parliamentary amendment (PA) transfers. However, managers from only three different municipalities mentioned PA funding without being encouraged to talk about this incentive. That this topic should emerge spontaneously in their interviews suggests that this form of funding occupied a prominent place to these participants. Recent analyses of SUS funding also point to the importance of PA transfers. Batista *et al.*[35] consider them instruments for the Legislative to participate in the budget process and that health care is one of the main sectors where this mechanism operates. Constitutional Amendments 86, of 2015, and 100, of 2019, made implementation of PAs compulsory, leading to rapid growth in this type of expenditure in the health sector, as a result of not only individual and state bench amendments, but also rapporteur's amendments[30,36,37]. It can thus be assumed, in view of the influence of federal transfers on municipal health budgets, that PAs have recently impacted much of local SUS management.

Carnut *et al.*[38] report that few studies address the relationship between parliamentary amendments and health funding allocations. Although PAs can be beneficial in meeting demands identified in the local region, studies point to their having possibly unwanted effects[30,35,38]. These include an unstable pattern of execution, which can adversely affect medium- and long-term planning; a lack criteria in fund distribution to foster equity, which may benefit municipalities and states unevenly; and a lack of transparency in budget execution of these funds, which hinders proper social oversight of fund use.

Some interviewees voiced important criticisms regarding the inappropriateness of this type of funding, regarding investment in unnecessary equipment and application to policies that need regular funding, confirming concerns about the effects of this system of transfers on local region planning. Nonetheless, one report showed that management planned to use PA funding over two years to maintain a family health team (eSF), which reveals the municipality's endeavour to do whatever planning was possible. The suggestion was that, to some extent, management may be applying PA funding partly to measures and services for which incentives were suppressed by the most recent primary care policy, such as those directed to eSFs[14]. It is thus inferred that the interviews expressing management satisfaction with access to PA funding related more to autonomy in deciding spending on measures and services informed by recognition of local needs[11].

Lastly, note that the interviews suggested that a considerable part of transferred funds was used to engage private companies to meet health service management needs during the pandemic, as identified in another study on the role of managers in the pandemic[9], to some extent indicating an established trend. The exceptional nature of COVID funding and the irregular nature of PA funding, together with the constraints on municipal management as regards engaging personnel, which led to outsourcing[39,40], heighten the commercialisation of the SUS by promoting the participation of private agents in providing ASPS.

Conclusion

The study revealed managers' differing perceptions of extraordinary funding to combat COVID-19. It also identified perceptions of transfers originating from parliamentary amendments. Municipal managers were found to play a prominent role in influencing the directions of the model of care in the SUS, given their significant involvement and engagement in the planning and application of health funding and in finding pragmatic solutions to meet local demands. Local specificities – population, health expenditures and access to federal funding – were reflected in different financial management strategies and fund allocation. As regards how funds were used,

however, there was a marked tendency to favour allocation to no-PHC points of COVID-19 care and to engaging private companies.

Despite the inherent complexity of the flows and regulations regarding funding transfers and the heterogeneity that compounds the inequality between municipalities, some managers expressed a commanding knowledge of how transfers are used, voicing criticisms or recognising advantages, while others delegated financial management to other health department personnel. Nonetheless, in several interviews, it was possible to perceive the value given to autonomy in the use of funding.

With a view to strengthening the SUS, it is worth stressing the need to seek strategies to support the different levels of management, to guide managers' work process and enable funding to afford more than tutelage of managers through incentives.

Collaborations

LS Duarte contributed to the overall design of the article, development of the methodology and research, data analysis, discussion of the article and approval of the version for publication. MMO Viana contributed to the overall design of the article, development of the methodology and research, data analysis, discussion of the article and approval of the version for publication. MT Garcia contributed to the research and methodology, preparation of the figures and final review and abstract. C Malinverni contributed to the research and methodology and to final review of the article. TEC Rosa contributed to the research and methodology. MVF Neves contributed to the research, formatting, organising references and final review of the article. LAA Dantas contributed to the research, formatting, organising references and final review of the article.

References

1. Cruz WGN, Barros RD, Souza LEPF. Financiamento da saúde e dependência fiscal dos municípios brasileiros entre 2004 e 2019. *Cien Saude Colet* 2022; 27(6):2459-2469.
2. Costa NR. A resiliência das grandes cidades brasileiras e a pandemia da Covid-19. *Saude Debate* 2021; 45(n. esp. 2):10-20.
3. Duarte LS, Viana MMO, Scalco N, Garcia MT, Felipe LV. Incentivos financeiros para mudança de modelo na atenção básica dos municípios paulistas. *Saude Soc* 2023; 32(1):e210401pt.
4. Vieira FS, Benevides RPS. *Os impactos do Novo Regime Fiscal para o financiamento do Sistema Único de Saúde e para a efetivação do direito à saúde no Brasil*. Brasília: Ipea; 2016.
5. Servo LMS, Santos MAB, Vieira FS, Benevides RPS. Financiamento do SUS e Covid-19: histórico, participações federativas e respostas à pandemia. *Saude Debate* 2020; 44(n. esp. 4):114-129.
6. Funcia F, Bresciani LP, Benevides R, Ocké-Reis CO. Análise do financiamento federal do Sistema Único de Saúde para o enfrentamento da Covid-19. *Saude Debate* 2022; 46(133):263-276.
7. Mendes Á, Melo MA, Carnut L. Análise crítica sobre a implantação do novo modelo de alocação dos recursos federais para atenção primária à saúde: operacionalismo e improvisos. *Cad Saude Publica* 2022; 38(2):e00164621.
8. Souza CDF, Gois-Santos VT, Correia DS, Martins Filho PR, Santos VS. The need to strengthen Primary Health Care in Brazil in the context of the Covid-19 pandemic. *Braz Oral Res* 2020; 34:e047.
9. Tasca R, Carrera MBM, Malik AM, Schiesari LMC, Bigoni A, Costa CF, Massuda A. Gerenciando o SUS no nível municipal ante a Covid-19: uma análise preliminar. *Saude Debate* 2022; 46(n. esp. 1):15-32.
10. Santos RJM, Luiz VR. Transferências federais no financiamento da descentralização. In: Marques RM, Piola SF, Carrillo AR, organizadores. *Sistema de Saúde no Brasil: organização e financiamento*. Rio de Janeiro: Associação Brasileira de Economia da Saúde (ABrES); 2016. p.169-204.
11. Duarte LS, Mendes ÁN, Louvison MCP. O processo de regionalização do SUS e a autonomia municipal no uso dos recursos financeiros: uma análise do estado de São Paulo (2009-2014). *Saude Debate* 2018; 42(116):25-37.
12. Brasil. Ministério da Saúde (MS). Portaria nº 2.979, de 12 de novembro de 2019. Institui o Programa Previne Brasil. *Diário Oficial da União* 2019; 13 nov.
13. Aguilar-Guerra TL, Reed G. Mobilizing Primary Health Care: Cuba's Powerful Weapon against Covid-19. *MEDICC Rev* 2020; 22(2):53-57.
14. Morosini MVGC, Fonseca AF, Baptista TWF. Previne Brasil, Agência de Desenvolvimento da Atenção Primária e Carteira de Serviços: radicalização da política de privatização da atenção básica? *Cad Saude Publica* 2020; 36(9):e00040220.
15. Melo EA, Almeida PF, Lima LD, Giovanella L. Reflexões sobre as mudanças no modelo de financiamento federal da Atenção Básica à Saúde no Brasil. *Saude Debate* 2019; 43(n. esp. 5):137-144.

16. Giovanella L, Franco CM, Almeida PF. Política Nacional de Atenção Básica: para onde vamos? *Cien Saude Colet* 2020; 25:1475-1482.
17. Yin RK. *Estudo de caso: planejamento e métodos*. 2ª ed. Porto Alegre: Bookman; 2001.
18. Creswell JW, Plano Clark VL. *Pesquisa de Métodos Mistos*. 2ª ed. Porto Alegre: Penso; 2013.
19. Champagne FA. Análise da implantação. In: Brousselle A, Champagne F, Contandriopoulos A-P, Hartz Z, organizadores. *Avaliação: conceitos e métodos*. Rio de Janeiro: Editora Fiocruz; 2011. p. 217-238.
20. Minayo MCS. *O desafio do conhecimento*. 12ª ed. São Paulo: Hucitec; 2010.
21. Daumas RP, Silva GA, Tasca R, Leite IC, Brasil P, Greco DB, Grabois V, Campos GWS. O papel da Atenção Primária na rede de atenção à saúde no Brasil: limites e possibilidades no enfrentamento da Covid-19. *Cad Saude Publica* 2020; 36(6):e00104120.
22. Engstrom E, Melo E, Giovanella L, Mendes A, Grabois V, Mendonça MHM. *Recomendações para a organização da atenção primária à saúde no SUS no enfrentamento da Covid-19. Observatório Covid-19: Série Linha de cuidado Covid-19 na Rede de Atenção à Saúde* [Internet]. Rio de Janeiro: Fiocruz; 2020 [acessado 2023 mar 13]. Disponível em: https://portal.fiocruz.br/documento/recomendacoes-para-organizacao-da-aps-no-sus-no-enfrentamento-da-covid-19.
23. World Health Organization (WHO). United Nations Children's Fund (UNICEF). *Community-based health care, including outreach and campaigns, in the context of the Covid-19 pandemic. Interim guidance* [Internet]. Genebra; 2020 [cited 2023 mar 13]. Disponível em: https://www.who.int/publications/i/item/WHO-2019-nCoV-Comm_health_care-2020.1.
24. Brasil. Ministério da Saúde (MS). *SIOPS: Indicadores Municipais* [Internet]. 2019 [acessado 2023 mar 6]. Disponível em: http://siops.datasus.gov.br/consdetalhereenvio2.php.
25. Brasil. Ministério da Saúde (MS). *Fundo Nacional de Saúde (FNS)* [Internet] Brasília: MS; 2020 [acessado 2023 fev 28]. Disponível em: https://portalfns.saude.gov.br/.
26. Souza MLG, Figueiredo Júnior WP, Bosio AL. *Aplicação de recursos decorrentes de emenda parlamentar para incremento do PAB e do MAC. Nota Técnica n. 6*. Brasília: Câmara dos Deputados; 2019.
27. Informações dos Municípios Paulistas (IMP). *Projeções populacionais - Seade* [Internet]. [acessado 2023 fev 28]. Disponível em: http://www.imp.seade.gov.br/frontend/#/.
28. Fernandes GAAL, Pereira BLS. Os desafios do financiamento do enfrentamento à COVID-19 no SUS dentro do pacto federativo. *Rev Adminis Publica* 2020; 54(4):595-613.
29. Brasil. Lei Complementar nº 141, de 13 de janeiro 2012. Dispõe sobre os valores mínimos a serem aplicados anualmente pela União, Estados, Distrito Federal e Municípios em ações e serviços públicos de saúde; e dá outras providências. *Diário Oficial da União* 2012; 13 jan.
30. Vieira FS. *Emendas parlamentares ao orçamento federal do SUS: método para estimação dos repasses a cada município favorecido, segundo áreas de alocação dos recursos (2015-2020). Texto para Discussão 2732*. Rio de Janeiro: Ipea; 2022.
31. Ouverney ALM, Fernandes FMB. Legislativo e Executivo na pandemia de Covid-19: a emergência de uma conjuntura crítica federativa? *Saude Debate* 2022; 46(n. esp. 1):33-47.
32. Braga JCS, Oliveira GC. Dinâmica do capitalismo financeirizado e o sistema de saúde no Brasil: reflexões sob as sombras da pandemia de COVID-19. *Cad Saude Publica* 2022; 38:e00325020.
33. Chioro A, Moretti B, Harada J, Bragagnolo LM, Furtado LAC, Melo MA, Sóter APM, Bigal AL, Giannotti EM, Tofani L, Passos DV, Feliciano DGCF, Camargo FSL, Silva GR, Bernardino JVC. *Financiamento do SUS e garantia de direitos: orientação técnica e produção de dados na garantia de direitos no contexto da pandemia Covid-19* [Internet]. São Paulo: Universidade Federal de São Paulo; 2021.
34. Faleiros DR, Pereira BLS. Saldos dos repasses federais no SUS: o que temos e o que esperar do incremento para a COVID-19. *Cien Saude Colet* 2021; 26(11):5639-5651.
35. Baptista TWF, Machado CV, Lima LD, Garcia M, Andrade CLT, Gerassi CD. As emendas parlamentares no orçamento federal da saúde. *Cad Saude Publica* 2012; 28(12):2267-2279.
36. Vieira FS. O financiamento da saúde no Brasil e as metas da Agenda 2030: alto risco de insucesso. *Rev Saude Publica* 2020; 54:127.
37. Piola SF, Vieira FS. *As emendas parlamentares e a alocação de recursos federais no Sistema Único de Saúde Texto para Discussão 2497*. Rio de Janeiro: Ipea; 2019.
38. Carnut L, Andre ECG, Mendes Á, Meira ALP. Emendas parlamentares em saúde no contexto do orçamento federal: entre o 'é' e o 'dever ser' da alocação de recursos. *Saude Debate* 2021; 45(129):467-480.
39. Santos JA, Mendes ÁN, Pereira AC, Paranhos, LR. Análise do financiamento e gasto do Sistema Único de Saúde dos municípios da região de saúde Rota dos Bandeirantes do estado de São Paulo, Brasil. *Cien Saude Colet* 2017; 22(4):1269-1280.
40. Brasil. Lei Complementar nº 173, de 27 de maio de 2020. Estabelece o Programa Federativo de Enfrentamento ao Coronavírus SARS-CoV-2 (Covid-19). *Diário Oficial da União* 2020; 27 maio.

Article submitted 28/04/2023
Approved 14/08/2023
Final version submitted 16/08/2023

Chief editors: Romeu Gomes, Antônio Augusto Moura da Silva