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Punt Politics as Failure of Health System Stewardship: Evidence from the COVID-19 Pandemic Response in Brazil and Mexico



Felicia Marie Knaul^{1,2,3,4}, Michael Touchton^{1,5,*}, Héctor Arreola-Ornelas^{1,3,4}, Rifat Atun⁶, Renzo JC Calderon Anyosa^{1,7,8}, Julio Frenk⁹, Adolfo Martínez-Valle^{1,10}, Tim McDonald^{1,11}, Thalia Porteny¹², Mariano Sánchez-Talanquer¹³, Cesar Victora¹⁴

¹ Institute for Advanced Study of the Americas, University of Miami, Coral Gables, FL, USA

² Department of Public Health Sciences, University of Miami Miller School of Medicine, Miami, FL, USA

³ Fundación Mexicana para la Salud, Mexico City, Mexico

⁴ Tomatelo a Pecho, Mexico City, Mexico

⁵ Department of Political Science, Institute for Advanced Studies of the Americas, University of Miami, Coral Gables, FL, USA

⁶ Department of Global Health and Population, Harvard T H Chan School of Public Health, Boston, MA, USA

⁷ School of Public Health, Universidad Peruana Cayetano Heredia, Lima, Peru

⁸ Department of Epidemiology, Biostatistics and Occupational Health, McGill University, Montreal, Canada

⁹ University of Miami, Coral Gables, FL, USA

¹⁰ Centro de Investigación en Políticas, Población y Salud, Universidad Nacional Autónoma de México, Mexico City, Mexico

¹¹ RAND Corporation, Santa Monica, CA, USA

¹² Departments of Community Health and Occupational Therapy, Tufts University, Medford, MA, USA

¹³ Division of Political Science, Colegio de Mexico, Mexico City, Mexico

¹⁴ Universidade Federal de Pelotas, Pelotas, Brazil

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ABSTRACT

We present a new concept, *Punt Politics*, and apply it to the COVID-19 non-pharmaceutical interventions (NPI) in two epicenters of the pandemic: Mexico and Brazil. *Punt Politics* refers to national leaders in federal systems deferring or deflecting responsibility for health systems decision-making to sub-national entities without evidence or coordination. The fragmentation of authority and overlapping functions in federal, decentralized political systems make them more susceptible to coordination problems than centralized, unitary systems. We apply the concept to pandemics, which require national health system stewardship, using sub-national NPI data that we developed and curated through the Observatory for the Containment of COVID-19 in the Americas to illustrate *Punt Politics* in Mexico and Brazil. Both countries suffer from protracted, high levels of COVID-19 mortality and inadequate pandemic responses, including little testing and disregard for scientific evidence. We illustrate how populist leadership drove *Punt Politics* and how partisan politics contributed to disabling an evidence-based response in Mexico and Brazil. These cases illustrate the combination of decentralization and populist leadership that is most conducive to *punting* responsibility. We discuss how *Punt Politics* reduces health system functionality, providing lessons for other countries and future pandemic responses, including vaccine rollout.

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1. Introduction

Latin America is an epicenter of the ongoing COVID-19 pandemic and Brazil and Mexico are epicenters of the epicenter. The evolution of cases and deaths in both countries suggest they will

remain among the hardest hit globally for the foreseeable future. The failure of national leadership and health system stewardship that accompanied the tally of hundreds of thousands of preventable deaths provide lessons on how not to manage future pandemics.

During global health emergencies, and especially a pandemic, combined top-down and bottom-up intersectoral approaches are needed. National governments' stewardship role is critical for achieving a coordinated, country-wide response. National pan-

* Corresponding author: Michael Touchton, University of Miami, Coral Gables, FL, USA.

E-mail address: miketouchton@miami.edu (M. Touchton).

democratic stewardship enables coordination across health and other systems and is also required to ensure effective cross-border coordination and participation in global evidence-building and decision-making. National leadership is particularly critical in federal systems, where public health and health service delivery are typically decentralized to sub-national levels (e.g. province, state, or municipal) [1-3]. Without effective national leadership, the national steward's essential functions, such as disease surveillance, effective public health messaging, and coherent guidelines, default to state and municipal governments. In turn, a dearth of stewardship weakens or eliminates the opportunities to harness a bottom-up approach where knowledge flows back and forth between the national and sub-national levels to optimize the ability to implement evidence-based action [4].

We conceptualize and examine one modality of national stewardship failure, which we term *Punt Politics*: the instances when national governments defer or deflect —*de jure* or *de facto*— responsibility to sub-national entities for essential decisions that require centralized stewardship. The resulting fragmented, uncoordinated responses are often at odds with health needs and lack an evidence base. Yet, *Punt Politics* has been the operating principle for COVID-19 in several countries around the world, particularly where federalism coincides with populism. Presidents Jair Bolsonaro and Andrés Manuel López-Obrador position themselves rhetorically on the ideological right and left, but this distinction is tangential to their COVID-19 response. The key element, for both presidents, is their populist orientation, which transcends traditional labels and drives their policy decisions.

In this paper we examine how *Punt Politics* produced a breakdown in the effective functioning of Mexico and Brazil's health systems and contributed to excess mortality. Both cases are federal, upper middle-income countries with high levels of poverty and inequality (see Appendix for basic statistics). The populist national leadership deferred responsibility for non-pharmaceutical interventions (NPIs) to subnational governments with potential consequences for the health of their populations and their economies [5,6]. We use data on ten sub-national NPIs developed and curated for this research to identify and characterize the variation. To our knowledge, these are unique as they are based on sub-national data on pandemic policymaking, unlike other comparative monitoring frameworks, which rely on aggregated national averages [7].

We define the *Punt Politics* concept, then analyze how it has played out since the onset of the COVID-19 pandemic in Brazil and Mexico. First, we describe the messages that each national leader shared and the policies they enacted. This, combined with the lack of access to testing, demonstrates the failure to incorporate relevant evidence into policy making. We then present our data on the variation in NPIs across states and between the two countries, as well as their association with state political alignment. The policy review and data analysis are the basis for theoretical propositions characterizing *Punt Politics* that we present in the next section, alongside a discussion of implications for vaccine rollout. We close with next steps for research and reflections on actions to mitigate *Punt Politics* and harness evidence to better manage federal, decentralized health systems through a pandemic.

1.1. *Punt Politics*

“To punt” as an idiom has come to mean “to give up, to defer action, or to pass responsibility to someone else.” As we apply it in this paper, punting refers to the deferment, either by omission (the result of a vacuum or ineptitude in national policy and leadership) or commission (deliberate obstruction of state and local responses based on partisan considerations), of national stewardship of health systems to sub-national governments.

Necessary conditions for *Punt Politics* include some degree of federalism, with devolved or decentralized health policy making and implementation. It can occur across the political spectrum from right to left. While populism is not a necessary precondition, the *Punt Politics* phenomenon is likeliest to be seen among leaders who launch partisan attacks on established institutions, question the value of expertise, and maximize political gain rather than health outcomes.

Punt Politics, in democratic settings, generates an adaptive response at the sub-national level and/or from different ‘branches’ of government. With an emergency, such as a pandemic, punting is problematic, and at best a sub-optimal solution, because national stewardship is required to build a common knowledge base to sustain collective action, guide the multiplicity of public and private sector actors that comprise the health system, motivate populations to accept duress and restrictions of freedoms, and ensure effective collaboration with global and regional actors. *Punt Politics* also hampers a coordinated response to deploy human and physical resources where they are most needed or to respond to the challenges of poverty and precarious work. It places additional burdens on sub-national governments by drawing scarce institutional resources that are otherwise needed to fulfill the functions of delivering services and implementing, enforcing, and monitoring. Sub-national governments may struggle to formulate coherent public health policies as they lack the capacity to interface with global health system actors who are creating evidence and producing and dispensing scientific developments (for example, tests or vaccines) in real-time (Box 1).

2. The national-level response to Covid-19 in Mexico and Brazil

Brazil and Mexico are federal systems currently governed by populist leaders. The countries had both been described as exemplary cases in progressing towards universal health coverage (UHC) [11-13], yet both health systems suffered periods of decline and upheaval prior to the COVID-19 pandemic.

Brazil experienced a steady erosion of its public health system during the presidencies of Michel Temer (2016-18) and Bolsonaro (2019-onwards) [14,15], with widening inequalities [15,16] and shortages of hospital beds, medication, and personnel [17]. These trends undermined the delivery of care even though the country had achieved UHC.

Although suffering from fragmentation, corruption, and financial constraints, Mexico had made huge strides toward UHC as early as 2012 [11,18,19]. Yet, the election of President López-Obrador in December 2018 led to budget cuts and extensive institutional reorganization in a disorderly restructuring process implemented just a month before the COVID-19 pandemic [20,21]. Both countries thus entered the pandemic with seriously weakened health systems and performed poorly on the Oxford NPI policy tracker relative to other countries in the region as well as globally [7]. Lockdowns were late and partial, and testing, contact tracing, quarantines, and isolation programs have been minimal, while vaccine roll out has been slow [2,3].

Presidents of both countries sent public health messages that were not based on evidence. President López Obrador promoted the benefits of a lucky four-leaf clover that “protected” him from the virus [22]. He also downplayed the COVID-19 threat in the initial stages of the emergency [23], encouraging the population to continue their daily activities and interactions, such as going out to eat in restaurants [24], traveling, and attending rallies into late March of 2020 [25]. President Bolsonaro claimed that COVID-19 would “disappear” and referred to the disease as “just a little flu,” “hysteria,” and something that Brazilians would not catch because Brazilians are resistant to infection even after they “dive in sewage” [26,27]. Both presidents opposed the use of facemasks and physical

Box 1

Mexico and Brazil: Epicenters of the Epicenter of COVID-19

Latin American countries account for just over 8% of the world's population, yet the region registered about 40% of global deaths from COVID-19 as of late July of 2021 [8]. The region also reported 24% of the world's cases, a figure that is likely to be an underestimate given the low testing levels in most Latin American countries.

Brazil has the world's sixth largest population yet is second in the cumulative number of COVID-19 deaths and third in cumulative cases – close to 550,000 deaths and twenty million cases as of July 30th, 2021 [8]. Brazil ranked first in the region in COVID-19 deaths per capita, with 2,566 deaths per million residents [8]. The Brazilian health system, already overstretched and in critical condition, has faced multiple pandemic waves [9]. In mid-April 2021, daily deaths reached a high of – 3,016–, and intensive care units were at 80% capacity or higher for COVID-19 patients in 24 of 27 states, and 90% in 15 states. Many of the new cases of COVID-19 were due to the then novel P.1(Gamma) variant that is both more contagious and deadlier than earlier variants [9]. By mid-year, the more pressing concerns were over the threat of the delta variant.

The tenth largest country in the world by population, Mexico is second to Brazil in deaths from COVID-19 in Latin America in absolute terms [10]. Mexico has also had the second highest excess deaths per thousand people in Latin America, after Peru [10]. On a per capita basis, Mexico ranks fourth in the region, after Brazil, Colombia, and Argentina, with 1,841 deaths per million, yet these are likely underestimates given that cause of death data is subject to updates [9]. Mexico's official statistics for July reports 2,810,097 cases (4th in the region), but case data are also unreliable due to the very low levels of testing per capita – worldwide rank of 166 in tests per million [9].

distancing measures, appearing regularly and repeatedly in public without face coverings.

Even as daily deaths were nearing their peak in April 2021, President Bolsonaro disparaged the use of masks saying they could cause headaches and decreased happiness [28]. He also promoted hydroxychloroquine, a drug with no proven impact on COVID-19, while undermining physical distancing and other NPIs [29–32]. Earlier in the pandemic, Bolsonaro threatened to cut federal funding to cities and states that imposed stricter lockdowns [33] and restricted access to data that could guide policy making. For example, on June 6th, 2020, he ordered the Ministry of Health to stop releasing the cumulative number of cases and deaths from COVID-19 [34]. Four health ministers have served Bolsonaro's administration during the pandemic. On April 17th, 2020, the sitting minister was fired for promoting and defending subnational governments' "stay-at-home" orders; his replacement resigned after one month when President Bolsonaro ordered gyms to reopen.

National responsibility for managing the pandemic in Mexico was concentrated not with the president, but in the office of the Undersecretary for Prevention and Health Promotion under the Secretary of Health, who, along with the President also downplayed the gravity of the threat [35], and made "not overreacting" a guiding principle, creating obstacles for a strong and coordinated national response [36]. The General Health Council, the country's top health governance institution and the body invested with authority to issue general guidelines during health emergencies, did not convene until three weeks after the first confirmed case in the country and has remained on the sidelines throughout the pandemic [20].

The Brazilian federal government's first punting away of stewardship was the result of a policy vacuum and Bolsonaro's attempts to overrule state-level decision making, leading states to litigate for their authority to control NPIs. Within the tripartite health system governance structure, state governments have few health system stewardship responsibilities as Brazil's national Ministry of Health funds, coordinates, and plans, while municipalities deliver services. Yet, the tripartite structure allowed state governments to petition the Supreme Court in June 2020 to gain formal authority for reducing disease spread [21,26]. The ruling found that, absent an approved vaccine, public policy measures implemented by state and municipal governments will be decisive in combating the pandemic and allowed them to impose NPIs over the objections of the Bolsonaro Administration [37].

The Mexican Federal Government declared a national health emergency on March 30, 2020, more than a month after the first confirmed case, but punted responsibility to the states to determine what constituted timely action. Federal measures for physical distancing began on March 23 with the "National Healthy Distance" campaign, more than three weeks after the first case, and the use of face masks for the general population was not re-

quired until late June 2020. The federal government's delayed action prompted several state and local governments to initiate policy responses to fill the void, albeit in an uncoordinated manner [23].

In Mexico, decentralization amplified opportunities for the federal government to engage in punting. Legally, Mexican states have broad responsibilities as health authorities, which include containing epidemics. Under the General Health Law, state governments are required to enact health security measures in proportion to the size of disease outbreaks,[38] and may create mechanisms to reduce population mobility within their borders. The federal government suspended non-essential health activities during April and May 2020 and used these legal provisions to transfer responsibility to states to enact and implement public health measures. On April 21, 2020, the Ministry of Health gave state governments the responsibility to implement necessary public policies to promote physical distancing and prevent transmission among the population [39]. By June 2020, with no clear signs that transmission had been brought under control, the federal government replaced the nationwide suspensions with a "traffic light" alert system of epidemiological risk for each state to guide state responses [40]. (Box 2).

3. State-level responses and the implementation of NPI

We complement our analysis of the evolution of national policy and stewardship from the previous section with data on ten NPI to demonstrate how *Punt Politics* played out by state in Brazil and Mexico. We find that the absence of national stewardship fostered a fragmented NPI response across state and municipal governments, lacking an evidence base. Given their legal powers, Mexican and Brazilian state governments became the first line of pandemic defense and decided when and how to enact NPI. Some states and municipalities implemented public policies to combat COVID-19 ahead of national governments. Others limited themselves to following federal guidelines, thus reacting slowly and incompletely. Ultimately, the mix of NPIs, their rigor and timing varied considerably within and across the two countries throughout the pandemic to date [54,55].

Our focus on *Punt Politics* in Mexico and Brazil does not simply result from the fragmentation of the pandemic response. A fragmented response that is evidence-based can be effective. But to be evidence-based a differentiated response must be grounded in real-time testing data that trace the spread of the infection and viral genomic sequencing for identifying the spread of new variants. A lack of testing weakens a country's ability to undertake nuanced, geographically focused, NPI planning around outbreaks or to undertake contact-tracing. Sub-national policy making must then rely on mortality data which lag by weeks at best. During a pandemic, policy making that is guided by mortality data is nec-

Box 2

Brazilian and Mexican Health Systems Pre-pandemic

Both Mexico and Brazil had been described as exemplary cases in a number of aspects of UHC early in the 21st century [12-14,20,21,41,42], yet both experienced declining investment and upheaval prior to the pandemic. In both cases, COVID-19 severely stretched precarious health systems.

Brazil is a federal country comprised of 27 states. In 1998, following the end of military rule and democratization Brazil established a unified health system, Sistema Único de Saúde (SUS). In Brazil, health is enshrined in the constitution as a citizen's right and state responsibility. The national health system, SUS, espouses a vision of "health for all." From the late 1980s through the early 2000s, Brazil made great strides toward achieving UHC [41-43].

Brazil's decentralized, universal public health system is funded with tax revenues and contributions from federal, state, and municipal governments. Municipalities and states administer and deliver healthcare. The Ministry of Health is responsible for national coordination of the SUS, including policy development, planning, financing, auditing, and control. State government duties include regional governance, coordination of strategic programs, and delivery of specialized services. The 5,570 municipalities manage the SUS at the local level, including co-financing, coordination of health programs, and delivery of health services.

Despite substantial improvements in access to primary, emergency, and prenatal care, cracks in Brazil's health system have been evident for over a decade. Austerity measures under both President Bolsonaro and his predecessor Michel Temer [15,16] exacerbated already-low investment, and generated shortages of hospital beds, medication, and personnel by 2018 [17]. In 2016, President Temer scaled back the SUS, with legislation freezing all health funding for 20 years. The government also decreased support for its key primary health care program, the *Programa Saúde da Família*, as well as for the *Bolsa Família*, a large conditional cash transfer programme for low-income families [44-46]. The number of new families receiving benefits from the program decreased from 275,000 per month to fewer than 2,500 in 2019 [43].

Mexico: The Mexican health system is decentralized across 32 states that have partial autonomy over many policy decisions. In 1983, the Constitution was amended to guarantee individuals' right to health. Decentralization occurred gradually, from 1984 to 1998. In 2003 the System for Social Protection in Health created Seguro Popular, which insured all citizens who lacked access to social security [47-49].

The Ministry of Health is the national steward and establishes rules that bind all health system actors. Yet, since its inception in 1943, the Mexican health system has been segmented across several national, public institutions and the private sector [50]. The Mexican Institute for Social Security (IMSS) covers salaried private-sector workers, while the Institute for Social Security of State Employees (ISSSTE) covers most public-sector workers. The federal Ministry of Health contracts with states to manage health facilities, deliver health services to the remaining population, and coordinates specialty and teaching hospitals [11].

Prior to the pandemic, the Mexican health system had demonstrable cracks requiring institutional reform. Many Mexicans sought care outside public institutions to circumvent issues of access and quality [51]. In the 2020 census, 26% of the population declared they were unaffiliated with any health subsystem, which represents a decline from the 2015 peak [52].

In December of 2018 President López Obrador began centralizing the health system, promising universal, free healthcare. Yet, the administration adopted austerity measures that decreased health expenditure. In 2019, health expenditures decreased by 3.3% in real terms relative to 2018, and roughly 10,000 medical professionals were laid off. Budget cuts and administrative reforms disrupted service provision and generated medicine shortages that continued into 2020 [22,25]. The government eliminated Seguro Popular in January 2020 and replaced it with the Institute of Health for Wellbeing (INSABI). INSABI was implemented haphazardly - lacking planning and operational structures - and initiated on the verge of the pandemic [20,53]. Nine governors from opposition parties refused to join because of the centralization of resources and reductions in the power of state health departments.

essarily slow, reactive, and ineffective, compared to policy making based on widescale, equitably distributed testing accompanied by accurate diagnosis.

In Mexico and Brazil access to testing has been low- 72 total tests per 1,000 inhabitants and 264 per 1,000, compared to Chile, for example, at 1,028 per 1,000 [56]. As of August 23, 2021, Mexico ranked 168th and Brazil 124th out of 209 countries with testing data, compared to Chile at 55 [8]. Positivity rates have been consistently high - between and during waves - in both Brazil and Mexico because available tests largely target symptomatic individuals. Further, there is evidence in Mexico of large inequities in access to testing, diagnosis, and proper health care, including hospitalization. Municipalities with lower marginality (an official index that includes income poverty, education, residential crowding, rurality, and access to basic services)[57] have much more testing per capita than those with higher marginality [3]. This suggests that any use of testing will be biased toward protecting - in terms of both health and wealth - the rich, leaving the poor to accept either overly restrictive or risky policies.

Both countries have done poorly in viral genomic sequencing. So far only 25,270 viral sequences have been posted by Brazil and 25,209 by Mexico in the GISAID database as of July 29, 2021 [58]. For benchmarking, the United Kingdom and the USA have sequenced over 600,000 genomes each. Lack of widespread sequencing leads to delays in identifying new variants - for example, the gamma variant that originated in the Amazon region was first identified in Japan in a patient who had recently arrived from Brazil, at a time when the variant had already caused a collapse of the health system in the city of Manaus [59].

4. Evidence to Assess "Punt Politics": data on NPI implementation

We collected daily data on 10 NPIs from the first officially declared case to the end of May 2021, spanning over a year. These data include nine of the NPIs in the Oxford Policy Tracker[7] -

school closures, suspension of work sector, cancellation of public events, suspension of public transport, implementation of awareness campaigns, in-state travel restrictions, international travel control, stay-at-home directives, and restrictions on size of gatherings - as well as mask mandates. The Oxford tracker, however, is based on national level definitions and data. We adapted these to the sub-national level as described in the Appendix to create a unique data set (Box 3).

The ten NPIs included in our analysis are presented in Figure 1 using time-weighted data. The upper bound maximum is the daily high across all states and represents the most restrictive NPIs, while the lower bound minimum is the daily low across all states. Further, for each NPI, we highlighted the state with the most restrictive and least restrictive approach across the entire period, as well as the national, population-weighted average across the states. The NPIs are listed in alphabetical order as there is no specific hierarchy. However, the mask mandate is last because the global recommendations for mask use came out later than the other NPIs. There is high variance in the use of stay-at-home orders both within and across the two countries from the first cases in each country to the end of May 2021. In Mexico, all states had a strict order in place at some point, although some started later than others. In a few states, orders were maintained throughout the period, but the majority relaxed their orders roughly 200 days into the pandemic and the state of Campeche eliminated its order. In Brazil, by contrast, only a few states required residents to stay at home and only for very limited periods of time.

Suspension of local transport, internal travel restrictions, and international travel restrictions were partial and variable across states in both countries. Mexico never restricted international air travel, though the land border with the United States was closed to non-essential travel since March 2020 by mutual agreement. Brazil requires a negative test for international travelers. In each country and for each of the three NPIs, a few states implemented no restrictions whatsoever, but these are not necessarily the same states across these three NPIs. There is much variation with no apparent

Box 3
Methods used to collect and analyze sub-national data on NPI

The information was collected by reviewing official government websites and examining the implementation of each of the public policy variables in Mexico's 32 states and Brazil's 26 states and the Federal District of Brasilia. In addition, we scanned and collected data from official newspapers, local newspapers, and social networks such as Twitter and Facebook. The specific coding of each variable is presented in the Appendix and website <http://observcovid.miami.edu/>. For each state, we assign a discrete value for each of the 10 NPIs, ranging from 0 to 1, for each day after the first officially registered case in each country, based on the strength of the policy implemented each day: not implemented (0), moderately implemented (0.5) (e.g., public transport reduced capacity by 60%), or fully implemented (1) (e.g., full school closure). For some NPI there is a more detailed coding scheme, with other possible daily values including 0.33 and 0.66 (A detailed list is described in the Appendix; See <http://observcovid.miami.edu/> for additional information). We summarized the daily data on each of the 10 NPIs separately and in two ways to visualize changes over time and across states in each country. We present a time-weighted approach using the square root of the ratio of the number of days since the policy was first implemented over the number of days since the first case was reported. Values range from 0% to 100%. This gives greater weight to policies that were implemented earlier relative to the first reported case, with relaxation of policies appearing as declines in the value of the NPI. Contrary to the time-weighted approach, the cumulative daily sum would not decrease or drop to 0 when the policy changes. Rather, the slope would decrease or become flat if the policy is abandoned or increase in slope when re-enacted. We use the time-weighted approach to illustrate the variance over time across states and between the two countries, with the cumulative sum in the Appendix. We use the cumulative sum to evaluate the differences by state political orientation (see the Appendix for the time-weighted data).

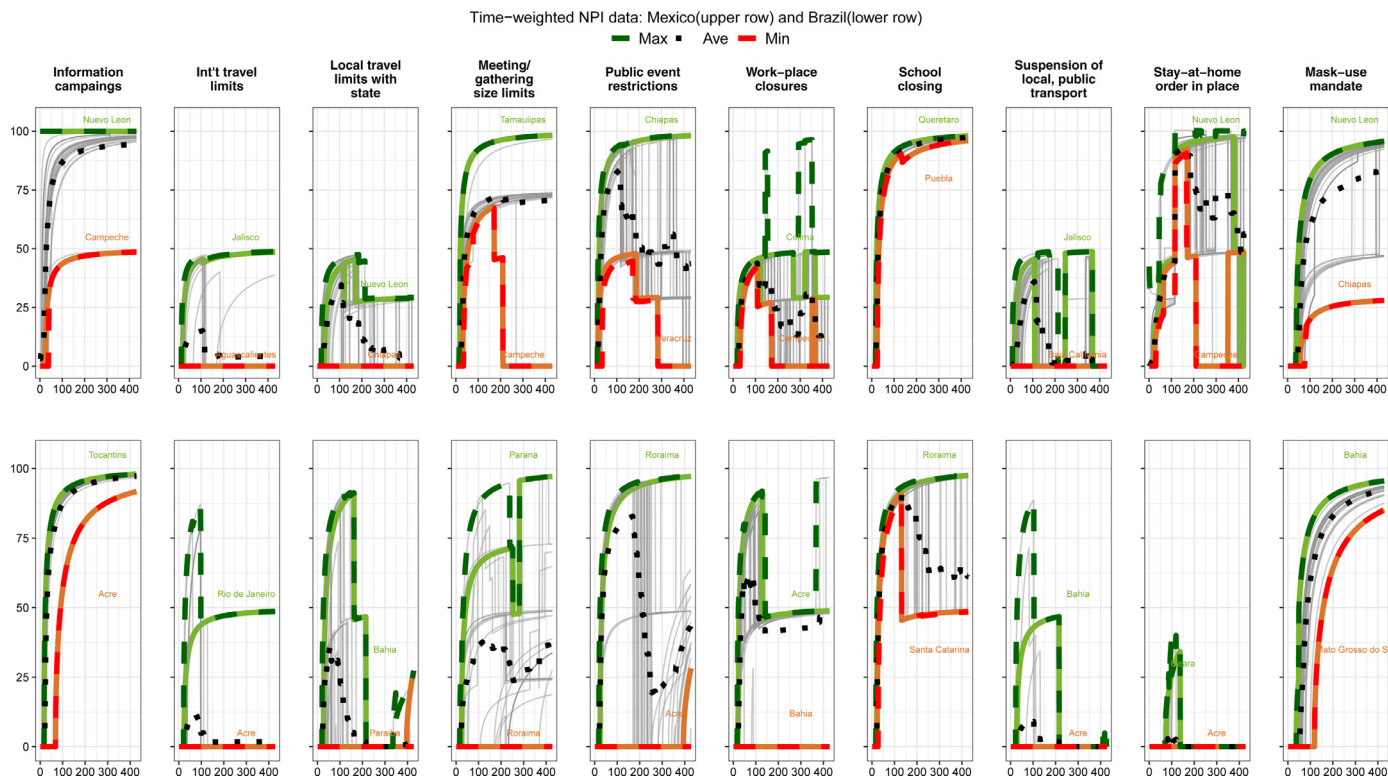


Fig. 1.

pattern both within and between the two countries on three NPIs: restrictions on the size of private gatherings, workplace closures, and limitations on the size of public events.

School closures stand out in Mexico as uniformly rigorous across states throughout the pandemic period prior to June 2021, a fact likely tied to education decision-making being federally controlled. In Brazil, school closing was initially rigorous and uniform, but was relaxed in most states by September 2020. Information campaigns were implemented by all Brazilian states, with the exception of Acre. In Mexico, campaigns were strong and consistent across most states, with a few notable exceptions, such as Chiapas.

Mask use mandates are consistent and relatively rigorous in many Mexican states, but several states implemented them late. Chiapas never went beyond recommending mask use. In Brazil, a few states mandated mask use late, but these were generally maintained throughout the evaluated period. That said, no Brazilian state issued universal, compulsory mask use.

The question we ask next is what might explain some of the variation across the states and the two countries. In Mexico, Chiapas stands out as having several low NPI scores throughout the

pandemic. While Chiapas is a poor state, other poor states, such as Oaxaca, have more rigorous NPI; thus we found no correlation between poverty and NPI implementation in Mexico.

In Brazil, some states such as Rondônia, the Federal District, Pernambuco, and Tocantins were the first to introduce policies to contain COVID-19. Other states such as Mato Grosso do Sul, Acre, Mato Grosso, and Paraíba acted later, although the differences in the timing of implementation are much smaller than the differences in the number of policies adopted and the intensity of implementation. Rondônia, Bahia, and Alagoas implemented public policy measures with the greatest rigidity. Mato Grosso do Sul, Acre, and Mato Grosso implemented the fewest policies with the least rigor.

While no correlation was seen between poverty and the implementation of NPI, the political leaning of state governors might explain some of the variation observed across the states, which provides evidence of a partisan pandemic (Figure 2). However, the key point, as discussed above, is governors' alignment with or opposition to the president, as populism can supersede the rhetorical spectrum of political left and right [60]. We grouped all gover-

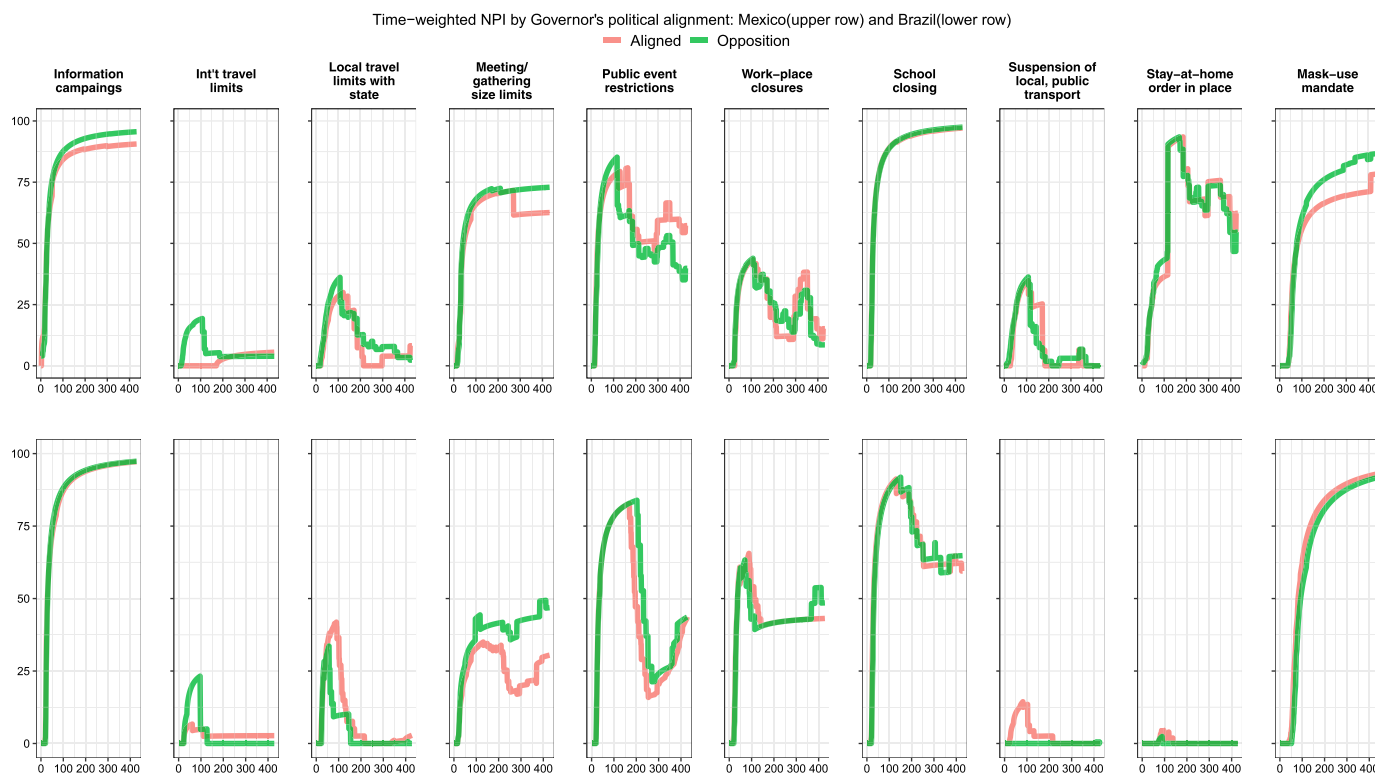


Fig. 2.

nors in each country as positioned on the rhetorical left, center, or right. For Mexico, governors on the rhetorical left tend to be López Obrador supporters, and in Brazil those on the rhetorical right tend to support Bolsonaro. Those in the center are largely independent or opposed to each president. The three groupings and the categorization of each state is presented in the Appendix.

In Brazil, allegiance with, or opposition to President Bolsonaro is strongly correlated with state policy decisions, especially at the beginning of the pandemic (Figure 2). Governors on the rhetorical left and center initially implemented more stringent NPIs. However, even governors politically opposed to President Bolsonaro and in favor of stringent NPI relaxed their restrictions in the face of public pressure as the pandemic progressed [61,62].

Political alignment with the president explains less of the variation across Mexican states relative to Brazil, suggesting a policy vacuum. More stringent responses did not come exclusively from opposition governors. Yet, opposition governors were among the first to act and contrast themselves with the national government, and none of the best performing states' governors are aligned with López Obrador. For example, centrist and right governors (opposition) were particularly stringent in mask mandates relative to those on the left.

4.1. Punt Politics Propositions

Drawing on the analysis above, we propose eight theoretical propositions or hypotheses that frame the concept of *Punt Politics* grouped under three main categories: The first three propositions are categorized under 'Leadership for evidence-based intersectoral action' and explain why a strong, coordinated national response is needed to improve health outcomes in a pandemic, or conversely, how *Punt politics* undermine such a response. The second category, which includes propositions four to six, relates to 'Accountability, capacity and coherent alignment' of the federal and other levels

of administration which is critical for a system-wide response but consistently undermined by *Punt Politics*, and the third category includes the last two propositions and relates to 'Populism, power, policy, and political gain' the conditions created by populist leaders to create an environment where *Punt Politics* thrives at the expense of public benefit.

Leadership for evidence-based intersectoral action

- 1) *An optimal response to a pandemic requires exemplary, evidence-based national leadership.* In a time of major health threats and crises, poor national leadership generates confusion and distrust among the population, weakening the implementation capacity of all health system actors and sub-national entities. Leadership by example – e.g., wearing masks or encouraging vaccination – is key. Without this, distrust seeds non-compliance and weakens the uptake of NPIs and acceptance of vaccination.
- 2) *A crisis such as a pandemic requires national stewardship to ensure inter-sectoral coordination.* The head of state is uniquely positioned to provide inter-sectoral leadership. Punting to state governments weakens the opportunity for a coordinated response. National strategies should be defined by the best evidence around how to balance a set of ultimate goals – exiting the pandemic, minimizing mortality and morbidity, maximizing short and longer-term economic well-being, and promoting education and gender equality. This requires coordination between multiple sectors and departments spanning, among others, the treasury, labor, transport, education, the military, and the police.
- 3) *Health emergencies require expanded stewardship by national governments through national ministries of health or similar authorities acting on behalf of the entire health sector.* Punting away this responsibility produces an uncoordinated response that undermines health system performance. It becomes impossible to coordinate across the many public and private entities that

form the health sector (e.g., social security agencies, regulators, healthcare providers, public health organizations, and for-profit and not-for-profit organizations), and other national systems that can play a critical role (e.g. education and transport). Further, the potential to incorporate international technical and large-scale financial support (i.e., with the development banks or the World Health Organization) is weakened. Similarly, opportunities to take advantage of economies of scale and quality assurance are foregone for example in purchasing tests, medicines, or vaccines with private sector entities and through innovative schemes such as the COVID-19 Vaccines Global Access program (COVAX).

Accountability, capacity and coherent alignment

- 1) *An effective response requires coordinated and complementary top-down, bottom-up, and intersectoral strategies.* The key functions of sub-national governments during a pandemic should focus on implementation of NPIs, testing, and vaccination protocols; managing treatment centers; and collecting and sharing data to monitor progress and enable rapid responses to outbreaks. State governments' capacity to undertake these key functions is weakened if they are forced to also assume the stewardship role that the national leader and their government

should have provided. The result can be an uncoordinated, fragmented, and sub-optimal response at least partly driven by partisan politics.

- 2) *Federal systems with populist leaders are especially susceptible to Punt Politics during health emergencies.* NPIs mean short- or medium-term restrictions on the freedom of movement and interaction of populations. Some populist leaders can make use of this situation to exert harsh and unnecessary control over all or particular parts of a population, while others will turn to *Punt Politics* to avoid the political cost of implementing these unpopular policies. Instead of using the pandemic to build cohesion and demonstrate national stewardship capacity, a populist leader finds political advantage in dividing the population and deflecting the blame for the difficult and costly constraints of an effective pandemic response, and the deterioration in health and economic outcomes.
- 3) *Punt Politics is characterized by the contradictions and inconsistencies in the application of science, limiting the options and opportunities for an evidence-based response.* A unified, evidence-based response to a health emergency restricts the capacity of the leader to exploit division for political gain and, thus, evidence is likely to be ignored, rejected, misused or inappropriately exploited. Deferring to experts and technical agencies also

Box 4

Vaccine Rollout: early signs of Punt Politics

Limited national stewardship in Brazil and Mexico, and the lack of evidence-based coordination with sub-national entities continues to impact vaccine access, as it did with NPIs. Yet, the punting pathways differ for vaccines because access depends on purchasing and distribution.

As of August 2021, procuring COVID-19 vaccines continues to be almost entirely restricted to centralized, country-level purchasing on the global market, or via the COVID-19 Vaccines Global Access Initiative (COVAX) [63]. So long as this continues, sub-national governments – even without regulatory or budgetary constraints – have little capacity to bypass their national governments and directly procure vaccines, even if that government is failing to purchase or distribute vaccines effectively.

In Mexico and Brazil, access to vaccines has been insufficient, deficient, and inequitable. Up to May 31, 2021, overall coverage was low, rollout slow, and distribution patchy in both countries. In June and July, distribution and overall vaccination rates improved and the average daily rate over the entire period reached approximately 7 vaccine doses per 1000 people in Brazil and nearly 6 in Mexico. As of August 22, 26% of Brazilians were fully vaccinated and 24% of Mexicans. Still, they continue to lag behind Chile and Uruguay, where approximately 70% are fully vaccinated [13].

Given the limited success of national governments in Mexico and Brazil to procure vaccines, some state governments have struggled to break into purchasing despite an array of barriers. Both countries seem to be ramping up their todote underutilized manufacturing capacity and state governments may use this to break into vaccine purchasing. Yet, in the meantime, lobbying without achieving access to vaccines places state governments in a difficult position, as they remain responsible for controlling transmission and minimizing the impact of the pandemic in their jurisdictions, yet lack the resources and ability to purchase from global markets or influence vaccine allocation decisions. Further, “punting” vaccine responsibility can generate inequities that allows variants to emerge and spread. Transparency and lack of data on vaccines are problems in Mexico and Brazil. Although both governments periodically make announcements, information has been contradictory and timelines repeatedly changed, the size of stocks remains unknown, and there is a sizable gap between vaccines purportedly received and evidence on vaccination.

Brazil: Throughout 2020, national stewardship was sparse and convoluted. President Bolsonaro stated publicly that vaccinated Brazilians might become “crocodiles” [64]. As with NPI, President Bolsonaro repeatedly questioned the need for vaccines, and set a poor example by pledging not to accept one himself and continuing to refuse to be vaccinated.

Purchasing was slow and disorganized in 2020 and the first half of 2021. Initially government failed to respond to the Pfizer offer of 100 million doses in mid 2020, and commissioned only a fraction of the COVAX offer [65]. Limited amounts were purchased from Oxford-AstraZeneca in late 2020 and, more recently in March of 2021 from Pfizer to supplement inadequate supply stemming from disruptions in vaccine production in China [66]. The government reversed course and in June began promoting vaccines extensively and accelerated purchasing to attempt to make up for slow entry into the market.

Given limited supplies, several states attempted to bypass the national government. Vaccine trials in São Paulo provided an edge on purchasing SINOVA and manufacturing CoronaVac. In a politicized move by the state governor who is planning to run in the 2022 presidential elections against Bolsonaro, São Paulo bypassed the Ministry of Health and purchased vaccines directly from China, and began to vaccinate ahead of the federal campaign [67,68].

Brazil's federal government centralized vaccine distribution but generated roll-out bottlenecks, supplies to the municipalities have been sporadic and national distribution began later than in several other Latin American countries.

Mexico: Mexico's president shed disdain and publicly embraced science as vaccines became available [69]. As per the official vaccination plan, 46.9 million citizens, almost half of the population, would have been fully vaccinated by the end of July. Yet, plans have not worked out and only 20% are fully, and 17% partly, vaccinated. Earlier, López Obrador had promised to vaccinate all 14 million Mexicans over 60 by end of March 2021 – a goal left unmet.

The federal government began negotiating vaccines early (late 2020). Yet, while vaccine deliveries were to reach 106 million doses by end of May, only 80 million were received by late July [69]. In the face of limited supply, the federal government announced that by the end of 2021 Mexico will manufacture its own vaccine “Patria” (Fatherland) [70].

Vaccine distribution and roll-out is centralized, inequitable, inefficient and not evidence-based [71]. Limited collaboration with subnational governments and civil society in the vaccination campaign, coupled with failure to rely on existing health infrastructure for implementation, have kept vaccine administration at low levels. Instead, the President formed special, itinerant vaccination brigades that administer vaccines in pre-selected localities [72]. Supply in any given area is temporary and restricted to residents, making vaccines inaccessible for those who miss the date or live in localities that have yet to be selected for the campaign. Thus, whereas almost 80% of the adult population had received at least one dose in the wealthier Baja California by mid-July, only 21% had done so in Chiapas. In addition, although the official vaccination plan prioritizes frontline health workers [63], those in the private sector were for a period excluded from the official plan. Finally, in the lead up to the June midterm elections, concerns emerged about vaccine politicization [73]. The number of administered vaccines peaked in the weeks before the elections and decreased afterwards, and the peak included groups not deemed high priority [71].

Similarly to Brazil, Mexican state governors have sought to bypass the federal government and lobbied for the right to purchase vaccines [74,75], however, in the face of scarcity and regulatory restrictions, they have been unable to move forward.

ties populists' hands. Populist leaders tend to prioritize political loyalty over expertise and work to undermine regulatory agencies and independent bureaucracies that limit their personal discretionary power. For example, the populist leader may embrace the science of vaccines and take credit for improving health and economic outcomes while manipulating access to the life-saving science for political gain. Sub-national actors have limited access to global markets, so their capacity and access is limited.

Populism, power, and policy for political gain

- 1) *Populist regimes are attracted to Punt Politics because their objective is political gain, not maximizing health outcomes.* A defining characteristic of populist regimes is valuing and prioritizing power as an end goal rather than a means, and, in the case of a pandemic, this implies that policy adoption (or lack thereof) will not be based on prioritizing health needs, promoting trust, or eliciting population compliance.
- 2) *Multiple actors can and will step in to fill the vacuum in national leadership during a health crisis, yet this is a second-best response.* *Punt Politics* is an adaptive response among the governance and health systems to a failure of leadership at the national level. State and local governments may act in the interest of their sub-population if they are enabled to do so through decentralization, devolution of authority, or emergency legislation. Further, other branches of government, civil society, or the private, for-profit sector can step in. While these actions can be motivated by altruism and the public interest, political or economic gain are also likely to be determinant. Adaptive responses at the sub-national level and from different branches of government can be enabled, passively ignored, or challenged by the populist leader for political gain (Box 4).

5. Conclusions and Recommendations

In Brazil and Mexico variation at the sub-national level and lack of evidence-based national stewardship of a splintered public health response across the states left populations vulnerable to the virus. Instead of harnessing and applying evidence and science in a coordinated manner, Mexico and Brazil's leaders employed *Punt Politics* to achieve political gain or avoid the political cost of implementing unpopular policies such as lockdowns. The result is a health system where some components are functioning, while others, like disease surveillance, are not; the lack of coordination leads to a whole that is far less than the sum of its parts.

We focused on NPIs in Brazil and Mexico to illustrate the new health system concept of *Punt Politics*. The two cases' similar federal structures, decentralized health care systems, and populist leadership with disdain for science created a propitious environment for punting responsibility to state governments. In turn, the implementation of public health measures to contain the pandemic varied across NPI, between the two countries and within each country, such that Brazilians and Mexicans experienced the pandemic differently depending on which state they lived.

The variation in state responses left a collage of public health policies – with holes, lack of coherence or coordination, and little linkage to an evidence-base. This splintered policy frame made it impossible to meet the challenge of fighting COVID-19 in populations already facing a heavy burden of non-communicable disease and a polarized and protracted epidemiological transition [76,77]. Absent travel restrictions between cities and states, or international travel, the patchwork of policy responses allowed the virus – and in Brazil deadly variants such as the Gamma variant – to spread and seed itself around the world. The outcomes have been especially severe in dense, low-income, urban communities, where poverty and informality drive people to work [2,78].

We propose a multi-pronged research agenda as a next step of the *Punt Politics* framework. First, future research should analyze the impact of *Punt Politics* on outcomes, including harnessing state-level variation to examine its impact on compliance with NPI as well as outcomes of the ongoing pandemic, such as COVID-19 cases and deaths and excess mortality. Other outcomes and collateral damage of the pandemic should be incorporated into the analysis including the impact on non-communicable and chronic diseases, as well as other facets of the pandemic response such as vaccine roll-out and the provision of economic and social supports.

We posit that the *Punt Politics* framework is applicable in other environments and scenarios, including some where populism is not the driving force. Hence, future research should include other geographic regions, levels of government (state-to-local punting), federal structures and systems, and other regime-types. Countries such as India, the United States, Turkey, Russia, the United Kingdom and Canada are among the most interesting cases for evaluating *Punt Politics* as they are all federal systems of government, yet they vary in the degree of populist leadership and the national response to the pandemic. In India, national responses were swift, severe, and uniform, but the country still became the pandemic focal point of the pandemic in May of 2021. Reopening was fragmented across subnational governments and rifts between national and state-level policy making will be a determinant of outcomes [79–82]. The U.S. under Trump and the UK are cases of high-income countries where populism led to disdain for public health science of NPI at the national level. The Biden presidency in the United States demonstrates an apparent shift away from *Punt Politics*, yet ongoing politics drives variation at the sub-national level that continues to splinter policy making across states in ways that may fuel the pandemic [82].

Another next step in the research agenda is to test the proposed propositions, which requires indicators to measure *Punt Politics* as well as to assess its impact on health outcomes. This research can be useful for monitoring and to guide policy making. First, cross-national research requires measuring the extent of *Punt Politics*. A measure of leading-by-example can be derived from the statements and behavior of national stewards that constitute visible aspects of *Punt Politics* including: the amount of time and the scenarios in which they choose to be in public with or without a mask and their public pronouncements relative to expert advice. Intersectoral coordination across the health system and within government can be measured through process indicators, such as the number of meetings or public acts that include multiple leaders from different sectors at the highest levels, and the number and type of coordinated actions in key pandemic activities that involve multiple sectors. The cross-sector stewardship process can be measured by tracking the establishment or activities of broad, inter-agency committees, including civil society and sub-national actors, and tracing key programmatic activities, such as vaccine distribution. Alignment between top-down and bottom-up policies can be operationalized as the similarities and differences in legislation, orders, or decrees vertically among different levels of governments and horizontally across different governments at the same level. The next step in cross-country research is to exploit existing data measuring populism and federalism covering the majority of countries of the world – such as Norris's Global Party Survey and the Database of Political Institutions to link these proposed indicators of *Punt Politics* in a time series covering this pandemic and other events, both global and more country or region specific [60]. Finally, merging this with other data on determinants such as wealth and education will allow for hypothesis tests both within and beyond our propositions [83].

What actions could be taken in advance to prevent or mitigate the effects of punting? Brazil and Mexico's responses to the COVID-19 pandemic demonstrate the traditional limits of political labels

that are limited to left and right. Combatting Punt Politics requires an understanding of populism, and, in some cases, populist authoritarianism. At the national level, mitigating Punt Politics in a populist context might include spreading decision-making capacity and establishing coordination processes, strengthening public sector institutions, giving voice to civil society, research centers, and ensuring that scientists and science are well-represented through multi-sectoral consultative processes and committees. Additionally, incorporating those who are impacted by policies into decision-making processes along the lines of gender, race, income, age, ethnicity, etc. is one way to combat *Punt Politics* [84,85].

Our findings can be used to improve the response to the COVID-19 pandemic, primarily by accounting for, integrating, and supporting sub-national actors. We demonstrate that disaggregating data to the sub-national level is essential because a simple national average will conceal variation across states and cripple efforts toward a targeting response to limiting a pandemic. Our analysis of Mexico and Brazil points to the importance of strengthening sub-national decision-making and public health knowledge and capacity. Increased access to data, science and evidence could better guide sub-national policy makers as countries around the world reopen and relax their NPIs. A calibrated and differentiated state and municipal policy response can then be used to identify and manage outbreaks without sacrificing livelihoods. This strategy is impossible without significantly expanding testing capacity which can be done through sub-national actors, with tests purchased and deployed by states, municipalities, and private entities. Further, testing is the key to developing the reservoir of samples that is essential for studying biological hypotheses and to more rapidly and effectively identify variants and risk factors. As vaccines become more widely available, it will be important to consider if and how to incorporate sub-national purchasing and access to the COVAX facility as well as other multi-national purchasing platforms.

During a pandemic or other national health emergency, punt-ing is a form of political shirking in which national leaders devolve their stewardship duties and responsibilities to states and municipalities in ways that are ineffective and detrimental. Sub-national governments and leaders play many important roles when combatting a health emergency, but they cannot substitute for national stewardship [2]. A pandemic-prepared, proactive approach is coordinated, evidence-based, science-driven, and simultaneously top-down, bottom-up, and inter-sectoral. Such an approach builds on the strengths, complementarities and comparative advantages of each and every actor in a health system.

Contributors

FMK, MT, HAO, RA, JF, TM, TP, MST, and CV contributed to the conceptualization of this article. FMK proposed the original idea of Punt Politics, and MT, RA, JF, TM and CV provided intellectual input that structured and defined the paper. FMK, MT, HAO, RA, TM, RCA, TP, and MST developed the quantitative methodology, and FMK, MT, RA, JF, TM, MST, CV and AMV contributed to the health systems analysis. MT and HAO conducted the data collection and curation, and RCA devised and undertook the data visualization. All authors participated in data analysis, interpretation and/or validation. Writing of the manuscript was led by FMK and MT, with intellectual inputs and substantive editing from RA, JF, CV, TP, MST and AMV as well as draft text from HAO, TM, TP, and MST. FMK, MT, TP, HAO, TM and AMV participated in project administration for the paper and the University of Miami COVID-19 Observatory.

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The authors declare no competing interest.

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