Articles

The borders of the pandemic: lessons on governance and cooperation in United States-Mexico border cities

Las fronteras de la pandemia: lecciones para la gobernanza y la cooperación en las ciudades de la frontera México-Estados Unidos

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Abstract

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This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License. This article documents and analyzes the response of cities in the U.S.-Mexico border region to the health emergency and the rebordering process triggered by COVID-19. Like many other countries, the United States and Mexico's primary strategy to contain the spread of Coronavirus has been the adoption of social distancing measures and restrictions on mobility, including the closure of the common border. An immediate implication of this process is the strengthening of national governments' presence in border health management and, potentially, the contraction of governance spaces in which subnational actors traditionally participate. By analyzing secondary data for eight pairs of co-adjacent border cities, local actors' responses to the pandemic are examined in the context of a rapid rebordering process and post-pandemic cross-border governance, and cooperation scenarios are explored.

Keywords: COVID-19, governance, cross-border cooperation, local actors, rebordering, border.

Resumen

Este artículo documenta y analiza la respuesta de las ciudades de la región fronteriza México-Estados Unidos a la emergencia sanitaria y a un proceso sustancial de refronterización desencadenado por el COVID-19. Como muchos otros países, la estrategia principal de Estados Unidos y México para contener la propagación del coronavirus ha sido la adopción de medidas de distanciamiento social y restricciones a la movilidad, incluyendo el cierre de la frontera común. Una implicación inmediata de este proceso es el reforzamiento de la presencia de los gobiernos nacionales en la gestión

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de la salud fronteriza y, potencialmente, la contracción de los espacios de gobernanza en los que participan tradicionalmente actores subnacionales. Mediante el análisis de datos secundarios de ocho pares de ciudades fronterizas contiguas, se examinan las respuestas de actores locales a la pandemia en el marco de un proceso acelerado de refronterización y se perfilan escenarios de gobernanza y cooperación trasfronteriza pospandemia.

Palabras clave: COVID-19, gobernanza, cooperación transfronteriza, actores locales, refronterización, frontera.

Introduction

The rapidity of the spread of COVID-19 and the severity of the epidemic caused by the virus have generated a crisis on a global scale affecting all social systems, not just public health. Since the World Health Organization (WHO) declared an international emergency on March 11, 2020, national and subnational governments in almost all countries of the world have responded to the pandemic by implementing a variety of measures to stop the spread of the virus (World Health Organization [WHO], 2020). Given the lack of a vaccine to prevent the spread of this infectious disease, the common denominator of the measures taken was the adoption of actions to restrict mobility and social interaction. At the international level, national governments have used border closures as the main instrument to mitigate the exposure of their population and territory to an external infectious agent (Lara-Valencia et al., 2020). As a result, national borders have resurfaced in regions where they were no longer used as instruments of territorial control or reinforced in those where this function continues to be relevant (Lara-Valencia et al., 2020). In general, the COVID-19 pandemic has induced a global re-bordering process with unpredictable multiscale implications, about which we can only speculate at this time. To better understand its current significance and long-term repercussions, it is necessary to unravel the re-bordering process by identifying each of its components. Specifically, this process involves three interrelated subprocesses.

First, the pandemic could lead to a regression towards centralized decisionmaking regarding the management of borders and their hinterland. This shift is more evident in regions where borders were deactivated decades ago as instruments of territorial control and policies were established to facilitate and promote cross-border integration. Its most immediate effect could be the reshaping of the roles of local and national actors in the development of border agendas and their priorities. This aspect worries proponents of greater local participation in the management of border issues. In the case of the European Union, for example, the erection of internal borders in the context of the pandemic has generated tension and protests over the relegation of local authorities from the management of the transborder space and the adoption of unilateral measures restrictions on mobility (Klatt, 2020).

Second, the shift towards the center coincides with sovereignty and nationalist rhetoric in different parts of the world, with strong criticism of globalization in recent years. A commonality of these trends is the representation of the border as a protective shield against external threats and its necessary reinforcement as a condition for the preservation of national integrity. This process tends to transform the international boundary into a security perimeter and the adjacent area into a risk space, reinforcing the geopolitical border with a sociocultural re-bordering layer (Wille, 2020).

Third, the resurgence of national borders as tools to control a real or imagined external threat can contribute to undermining the narratives that represent the border as a resource and that have been the basis of cross-border cooperative actions not only in economic matters but also in political, cultural, environmental and public health issues. Both in Europe and North America, several border cities have been able to project themselves as spaces of innovation and competitiveness globally due to their ability to harness the economic, institutional and cultural differences and complementarities as a result of their border location (Sohn, 2014).

Against this background, this article explores the response of cities on the United States-Mexico border to federal governments' actions to counteract the pandemic and its effects on cross-border interaction. The analysis is based on the premise that border cities have established and consolidated decentralized forms for managing local problems for decades, especially in areas related to public health. When considering this capacity, it could be argued that decentralized action should be the first response of border cities to the pandemic, especially due to the impact of centralized actions on mobility and highly interdependent border societies. The degree and manner in which these expectations are met are examined through the analysis and evaluation of the actions of local actors—governmental and non-governmental—in eight pairs of contiguous border cities. The article begins with a review of the forms of cooperation, and public health management observed in the region. Subsequently, the research methodology is described, followed by the presentation and discussion of the results. In the conclusion, governance and cooperation scenarios are delineated based on the evidence gathered by this study.

Health governance on the United States-Mexico border

Nearly 16 000 000 people reside in the 24 U.S. counties and 40 Mexican municipalities adjacent to the international dividing line shared by both countries (Instituto Nacional de Estadística y Geografía [Inegi], 2020; United States Census Bureau, 2020). The majority of this population (85%) lives in 15 binational conurbations, which contrast with each other and occupy a unique position in the urban hierarchy of their respective countries. U.S. border cities are generally smaller and have higher levels of urban development than their Mexican counterparts. Compared to other cities in their own country, most U.S. border cities are characterized by high levels of unemployment and poverty and by a predominantly Mexican population. In contrast, Mexican border cities are more affluent than the national average and experience higher employment levels but are distinguished by their urban deprivation and lack of planning. One aspect shared by border cities is their recurring characterization in each country's media as fertile ground for illegality, violence, environmental degradation, and the transmission of infectious diseases (Arreola, 2010; Johnson & Niemeyer, 2008).

Due to the big economic and social differences between Mexico and the United States, this border region has been described as having the deepest structural inequalities in the contemporary world (Grimson, 2006; Varady & Mack, 1995). Although historically, the main function of the border between the two countries has been separation and distinction, the border is also a space of intense mobility and social interaction (Álvarez, 2012). Consequently, the border region is also a space where



the federal government has a constant presence due to its involvement in bilateral dialog and negotiations and the development and implementation of policies that seek to give order to the intense relationship between the two countries in economic matters, immigration, and environmental and national security (Ganster & Collins, 2017). The region is also characterized by an increasingly dense cross-border social fabric resulting from a transnational population that lives, works and recreates on both sides of the border. Although cross-border interaction and mobility are sensitive to economic cycles and changes in national priorities, long-term demographic trends, historical social ties, the integration of labor markets and the expansion of global trade feed a resilient and increasingly diverse cross-border fabric (Gerber et al., 2010). In fact, during the last three decades, cross-border integration has bloomed due to the growth of trade flows and social interaction (Anderson et al., 2008).

Cross-border cooperation and health

Although the Mexico-United States border is a space of contrast where economic, cultural and institutional differences between the two countries can be a source of tension and conflict, it is also true that these differences induce the development of complementarities and interdependencies that stimulate different forms of cooperation (Homedes & Ugalde, 2003). This is particularly true in the field of health, where there is a long history of exchange and collaboration that has resulted in expressions of cross-border governance with varying degrees of sophistication and formality. The following are the most significant milestones in this process.

During the first half of the twentieth century, the establishment of U.S. military bases near the border and the growth of international migration under the Bracero Program (1942-1964) created new patterns of interaction and mobility on the border that increased the incidence of sexually transmitted diseases and other contagious diseases such as tuberculosis (Arreola & Curtis, 1993; Garza-Almanza, 2018). As a result, and at the initiative of the United States, the Pan American Health Organization (PAHO) established a field office in El Paso, Texas in 1942, which operated prevention programs against syphilis, tuberculosis and other contagious diseases on both sides of the border (Garza-Almanza, 2018). As observed by Collins-Dogrul (2006), with the collaboration of Mexican authorities, the PAHO opened laboratories in Ciudad Juárez, Nuevo Laredo and Mexicali and trained health professionals in these cities in the promotion of health practices at the community level and in the detection and treatment of these diseases. In 1943, the United States-Mexico Border Health Association (USMBHA) was also established. This binational organization, that had the support of the PAHO, stimulated numerous initiatives of cross-border cooperation to control communicable diseases, contributed to the development of capacities and promoted a cross-border health agenda (García-Pérez, 2007). Although the PAHO field office and the USMBHA stopped operating in 2014, their activity resulted in the creation of conditions that have been identified in the field of border studies as fundamental for the development of cross-border cooperation and governance. These conditions include formal or informal arrangements between organizations and local civic groups, institutions that facilitate the sustained exchange of information and resources necessary for cooperation and the creation of a shared vision resulting from



spatial dynamics that reinforce closeness and not separation (Collins-Dogrul, 2006; Hataley & Leuprecht, 2018).

A long-lasting outcome of the activity of the PAHO field office and the USMBHA are the Binational Health Councils. The councils were established in 1963 during the annual meeting of the USMBHA in Nogales, Arizona, as a mechanism to foster collaboration between border cities and have been described as "a binational matrix of public health that collaborates to improve [health] conditions on the border" (azdhs-admin, 2011). Currently, approximately 16 councils are operating along the border. Local health authorities, non-governmental organizations, academic groups and professional associations participate and meet regularly to exchange information and coordinate prevention and local epidemiological surveillance activities on both sides of the border (García-Pérez, 2007, 2010).

In July 2000, the activities of the United States-Mexico Border Health Commission (USMBHC) officially began. The commission is mandated to improve the health indicators of the border region, which includes all municipalities within a 100-kilometer strip that extends to both sides of the border (Panamerican Health Organization [PAHO], 2012). Although criticized for the difficulties it has had in structuring a regional health agenda and the lack of continuous, scheduled activities, the commission is the official mechanism responsible for channeling binational cooperation related to the border (Collins-Dogrul, 2006; Homedes & Ugalde, 2003).

In sum, the institutional apparatus created by Mexico and the United States to address the health problems of the shared border region is unparalleled in any other sector of the bilateral relationship. The level of institutionalization achieved has allowed the continuity of collaboration in certain areas and regions. It has led to important achievements in training, information exchange, epidemiological research and surveillance of infectious diseases, such as tuberculosis, and vector diseases, such as dengue. A significant aspect of this institutionalization is the level of involvement of local actors, including municipal health departments, community organizations, professional groups and regional universities on both sides of the border. As indicated, the result has been the formation of a collaboration matrix that includes formal and informal collaboration mechanisms, which are often indistinguishable by their degree of overlap (García-Pérez, 2007).

Although the degree of institutionalization crystallized in this structure is insufficient for the integrated management of border health problems and priorities, its importance cannot be minimized in the context of the current public health emergency created by the spread of COVID-19 in the region.

Table 1 presents the number of confirmed cases of COVID-19 and deaths in municipalities and border counties in August 2020. When comparing these rates with the national data, the information shows that the border municipalities and counties have been affected disproportionately by the pandemic. Most of the selected municipalities show a higher incidence of COVID-19 than the national average, both in the number of confirmed cases and in the number of deaths. The same pattern is observed between adjacent border counties, without significant differences in size and location in border geography.



Municipality	Cases		Deaths		Country	Cas	es	Deaths	
	Number	Rate	Number	Rate	County	Number	Rate	Number	Rate
Mexicali, B. C.	7668	775.8	1 339	135.5	Imperial, CA	9 693	$5\ 348.9$	244	134.6
Ciudad Acuña, Coah.	1 391	941.1	129	87.3	Del Rio, TX	1 332	2 717.0	32	65.3
Ciudad Juárez, Chih.	3 644	261.9	692	49.7	El Paso, TX	16 308	1 943.2	282	33.6
Reynosa, Tam.	4 293	664.3	415	64.2	Hidalgo, TX	$19\ 534$	2 248.6	638	73.4
Nuevo. Lare- do, Tam.	1 663	416.3	201	50.3	Webb, TX	7 825	2 828.5	96	34.7
Nogales, Son.	1 957	836.5	235	100.4	Santa Cruz, AZ	2 662	5 725.0	53	114.0
Ojinaga, Chih.	98	349.5	1	3.6	Presidio, TX	46	686.2	2	29.8
San Luis Río Colorado, Son.	1 362	706.7	181	93.9	Yuma, AZ	11 510	5 383.9	288	134.7
Mexico	485 831	406.4	$53\ 001$	44.3	United States	$5\ 048\ 035$	$1\ 537.9$	161 491	49.2

Table 1. Confirmed cases of COVID-19 and deaths in selected border municipalities and counties (August 9, 2020)

*Rates per 100 000 residents

Source: Government of Mexico (https://coronavirus.gob.mx/datos/#COMNac) and Centers for Disease Control and Prevention (CDC), Coronavirus COVID-19 (https://www.cdc.gov/coronavirus/2019-ncov/ cases-updates/county-map.html)

Within the context of the level of institutionalization achieved by the border in the field of health and the impacts of COVID-19 on the region, the following sections analyze and discuss the responses of several border cities to the health emergency.

Methodology

The data used in this analysis result from a systematic review of secondary information sources related to eight pairs of contiguous cities on the border between Mexico and the United States. While in the western section of the border, data from Mexicali/Calexico, San Luis Río Colorado/Yuma and Nogales/Nogales were analyzed, on the Rio Grande area, data from Ciudad Juárez/El Paso, Ojinaga/Presidio, Ciudad Acuña/Del Río, Nuevo Laredo/Laredo and Reynosa/McAllen were examined. The purpose of the review was to identify and document the spectrum of concrete and commensurable actions taken by local actors to contain the spread of the Coronavirus (e.g., business closure) or to mitigate the effects of the measures implemented to control the incidence of COVID-19 (e.g., aid to vulnerable groups). The actors considered were both governmental and non-governmental entities whose space of action was primarily one of the cities in the study.

The first step in the review was browsing the official websites of the selected cities looking for press releases, public announcements and documents that would account for decisions made by municipal authorities concerning the pandemic. The second step was a review of the websites of local newspapers and news, both to document the official actions and expand the spectrum of actions with the incorporation of the activity of non-governmental actors. Finally, an open search was performed on the internet using the terms "COVID-19," "coronavirus," or "pandemic," in combination with the name of the selected city, which allowed us to expand the coverage of the review further. The actions identified through this procedure were compiled with the help of a standardized document created to systematically record the types of actions, the actors involved, the field of activity, and the level of cross-border cooperation involved. The review covered the period from March 11 to July 31, 2020, and was conducted by undergraduate students participating in a summer research program organized by the Arizona State University's Transborder Policy Lab.

Results

The counterfactual scenario available for the analysis of the responses of border cities to the COVID-19 pandemic is limited. However, as observed by Collins-Dogrul (2012), although cross-border cooperation on health is a difficult and imperfect process, the evidence indicates substantial and sustained participation of local actors in addressing border health problems, particularly in the exchange of epidemiological data on infectious diseases, the management of mobile patients and the transfer of knowledge and technology (Lobato & Cegielski, 2001; Rosales et al., 2016; Schneider et al., 2004; Weinberg et al., 2003).

As indicated above, the actions taken in the context of the COVID-19 pandemic can be grouped into two categories. Containment or epidemiological actions aim to stop the spread of the virus by reducing the rates of contagion. Mitigation or nonepidemiological actions, on the other hand, aim to mitigate the impact of confinement on employment, social interaction and the functioning of businesses and institutions and, in general, the disruption of the daily activities of individuals, families, businesses and social organizations.

Regarding containment actions, our results indicate that during the emergency created by COVID-19, local action focused on implementing federal and state emergency declarations. As shown in Figure 1, approximately half of the actions taken by cities on both sides of the border focused on prevention and "flattening the curve" as quickly as possible by reducing viral transmission rates. The most commonly used measures for flattening the curve were staying at home, closing businesses, banning mass gatherings and requiring face coverings. To ensure the effectiveness of these measures, their application was accompanied by surveillance and coercion on both sides of the border, especially in Mexican cities where law enforcement actions were three times more frequent. According to the sources consulted, the most common offenses were noncompliance with the protocol for the operation of nonessential businesses and nonobservance of confinement and restrictions on congregating in large groups; therefore, fines were imposed on violators. All these measures were outlined in emergency declarations adopted by most of the cities included in the sample.



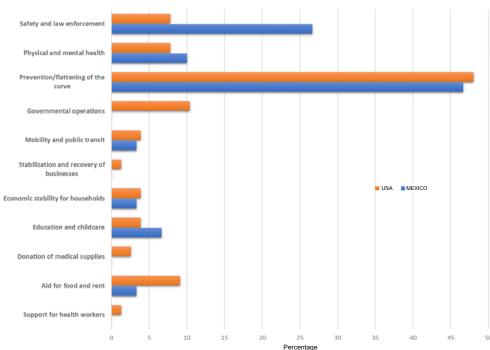


Figure 1. Local intervention measures to contain the pandemic and mitigate the impact of containment actions

In Mexican cities, it was also common to establish health stations at border crossings and within the city. At border crossings, health personnel check the temperature and applied sanitizers to pedestrians' hands, and required people to pass through sanitization tunnels before entering Mexico. In this area, it is necessary to highlight the preventive action targeting Mexican migrants deported at border ports of entry. In American cities, these activities were not reported, but massive screening events for detecting the Coronavirus were. On the American side, there were also actions of solidarity with health workers and donations of protective equipment.

Regarding actions to mitigate the effects of measures adopted to contain the spread of the pandemic, those carried out to meet the needs of socially or economically vulnerable populations stand out. The most significant actions include mobility programs and delivery of food and water to the elderly, free public transportation, exemption from public service payments and temporary eviction moratoria to protect families who have trouble paying rent for their house or apartment. Local actions in the area of protection against housing evictions and food assistance were more common on the U.S. side of the border, with food aid and advance payment of four months of pension to older adults and people with disabilities on the Mexican side.

Another line of non-epidemiological activity was actions seeking the stabilization and eventual recovery of local companies, especially micro and small businesses. Notable are campaigns to inform businesses of the Paycheck Protection Program (PPP)

Source: TransborderLab, 2020

implemented by the U.S. federal government and, to a lesser extent, about assistance actions supported by local resources.

Pairs of border cities

Table 2 presents an overview of the actions by pairs of border cities. All actions were ranked and standardized using a scale of 1-3, where 1 represents the lowest frequency, and 3 represents the highest frequency based on the sources analyzed in each city. The last column of Table 2 summarizes the relevance of each class of action for the set of cities analyzed.

Information campaigns and surveillance actions to keep the border population at home were the most common containment measures implemented in all pairs of cities. However, surveillance actions were more frequent on the Mexican side. The ban on large gatherings, including sporting events and parties, was also frequently reported. According to the sources consulted, monitoring compliance with this type of action was more direct and rigorous in Mexican cities, where police and fines were frequently used to punish those who continued to gather in large groups, particularly for celebrations and parties.

All cities also issued some type of declaration of emergency by proclaiming mandatory actions that limited mobility and gathering, along with other containment measures such as the closure of schools, parks and government offices. In addition, the use of face coverings, physical distancing and the suspension of nonessential economic activities were enforced.

In several Mexican cities, measures were taken to contain the risk associated with nonessential travel of people from the United States. In Mexicali and Ciudad Acuña, for example, checkpoints were established at the border, while in Nogales, sanitization stations were installed near the points of entry of passengers and pedestrians coming from the U.S. Very few cities implemented mass screening or contact tracing. This type of action was only recorded in U.S. cities, particularly El Paso, Laredo, Nogales, and Yuma.

Mitigation actions were less prevalent in general. Within this category, the distribution and delivery of food and water to older adults and low-income families and individuals stand out due to their greater frequency. Less frequent were actions to ban evictions from homes or the suspension of public services for lack of payment. These actions were more common in the cities of the Rio Grande, although mainly on the U.S. side.

The collapse of economic activity, mainly in trade and services, drove local efforts to recover and reopen the economy on both sides of the border. The most frequent actions were offering workshops and information campaigns regarding U.S. federal assistance programs and subsidies to small businesses, as occurred in Nogales, Arizona. Although, to a lesser extent, some cities also reported actions to increase their resilience and degree of preparedness for future emergencies.



Local actions	Mexicali/ Calexico	Cd. Acuña/ Del Rio	Cd. Juárez/ El Paso	Reynosa/ McAllen	N. Laredo/ Laredo	Nogales/ Nogales	Ojinaga/ Presidio	San Luis R.C./Yuma	Relevance			
Containment actions												
Confinement surveillance/ Stay-at-home orders	3	3	3	3	3	2	3	3	2.9			
Declaration of emergency	2	2	2	2	3	1	2	3	2.1			
Closure of schools	2	2	3	2	2	2	2	2	2.1			
Compliance with social distancing	1	3	1	1	3	2	1	3	1.9			
Closure of government offices	2	2	2	2	2	2	2	2	2.0			
Mandatory use of face covering/surveillance	3	1	2	1	1	3	2	3	2.0			
Ban on large group gatherings	3	3	3	2	3	3	1	3	2.6			
Mandatory closure of busi- nesses/surveillance	2	3	2	1	2	2	1	2	1.9			
Discouragement of nonessen- tial cross-border travel	2	3	1	1	1	3	2	1	1.8			
Contagion testing and contact tracing	1	1	2	1	2	2	1	3	1.6			
Mitigation actions												
Provision of food to vulnera- ble groups	1	2	2	3	3	3	1	1	2.0			
Economic recovery/reopen- ing	3	1	1	1	2	3	1	3	1.9			
Health education/primary care	1	3	3	1	1	1	1	3	1.8			
Preparedness/resilience	2	1	1	2	2	1	1	1	1.4			
Other nonepidemiological actions	2	1	1	2	1	1	1	3	1.5			

Table 2: Local actions to contain the epidemic and mitigate its impact by pairs of border cities

Source: TransborderLab, 2020

Cross-border cooperation

The epidemic made clear the risks and vulnerabilities that border cities face while stressing the need for cross-border cooperation. Three situations detected by this analysis are particularly illustrative.

The first of these situations arose from the partial closure of the border announced on March 21, 2020, by the United States government. Although the closure was announced



as a bilateral measure to contain the spread of the virus by restricting cross-border mobility to only essential travel, in practical terms, the measure excluded Mexican nationals residing at the border from crossing the border while maintaining the ability of citizens and legal residents of the United States to cross (Department of Homeland Security [DHS], 2020a). Although official statistics indicate a decrease in the number of crossings, the measure did not cancel the risk of coronavirus transmission across the border. In fact, after the abrupt decrease in crossings in April of 2020 (approximately 60%, compared to March), the level of mobility has consistently recovered. However, the closure has been extended consecutively on several occasions with no changes in operating criteria (Bureau of Transportation Services [BTS], 2020). The constant movement of U.S. citizens or transmigrant workers was a health risk factor reported in the sources analyzed. On the one hand, festivities and holidays on both sides of the border continued to generate massive flows of residents of the United States to Mexico, raising concerns about the impact on the spread of the virus. On the other hand, agricultural workers and other transmigrant workers employed in essential activities in the United States continued to cross daily to work and returned to Mexico without adequate control and health monitoring protocols. Although the impact of the mobility of visitors and cross-border workers on the number of infections and deaths on both sides of the border has not been evaluated, some reports identified the population that harvests and processes food as a group at high risk of infection by COVID-19, while others highlight the population of Mexican origin living in the United States as one of the groups most affected by COVID-19 in that country (CDC, 2020; California Department of Public Health [CDPH], 2020; Thomas, 2020). The mobility facilitated by an asymmetric closure of the border generated concern and unease, which materialized in protests and other expressions of frustration, without immediately leading to protocols and coordinated prevention actions at the local level (CDC, 2020; Embajada y Consulados de Estados Unidos en México, 2020).

The second situation resulted from a series of immigration measures announced by the U.S. government with potential implications for border health. One of these measures was the air repatriation program that agreed to provide COVID-19 screening tests and masks to deported migrants during their return trip to Mexico City (DHs, 2020c). Another is the expedited deportation of migrants under the provisions of Title 42, section 265 of the United States federal code ordered by the Department of Health for public health reasons and executed by CBP (U.S. Custom and Border Protection) at the border. The motivation of the air repatriation program was to discourage the return of Mexican migrants to the United States and reduce the risk of exposure "of immigration agents at border ports, border patrol agents and the American people" to COVID-19 (DHs, 2020c). However, various human rights organizations and academic institutions warned that CBP breached this agreement by directly repatriating migrants through border ports of entry. This, added to the deportations of undocumented migrants detained under the provisions of Title 42, amplified the risk of spreading the virus in border cities. From March to July 2020, the immigration authorities of the United States expelled 137 536 people through border crossings with Mexico, of which 106 000 were deported under the provisions of Title 42 (DHs, 2020b). Again, the lack of protocols for health control of the migrant population and the failure to comply with agreements caused alarm and led to accusations against the U.S. immigration



authorities of contributing to the spread of COVID-19 at the border (El Colegio de la Frontera Norte [El Colef], 2020b; Kassie & Marcolini, 2020; Washington Office on Latin America [WOLA], 2020).

The third situation involves humanitarian aid organizations for the migrant population that operate on the border. These organizations include soup kitchens, shelters, legal aid offices and others that suddenly faced the urgent need to develop resources and protocols to serve a high-risk population. Although some shelters established health protocols in coordination with local health authorities, including taking temperatures and providing sanitation resources to those seeking services, several organizations reported demand levels and overcrowded conditions that prevented the application of "healthy distancing" measures within their facilities. Some care centers were forced to close, reject aid applicants or reduce their services temporarily. In Nogales, Sonora, for example, the most important migrant soup kitchen in the city began to offer "take-out" food to minimize the contact of its staff with the migrant population. The analysis detected that several shelters in the border cities studied reported COVID-19 outbreaks among the resident population despite the measures adopted. Higher risk caused by the migrant population led Ciudad Juárez to establish in June the first "filter hotel" on the border, a central part of an operation that offered health services and kept migrants in confinement for 15 days before being channeled to one of the city's shelters (Organización Internacional para las Migraciones [OIM], 2020b; Paho, 2012). The implementation of this mechanism in Ciudad Juárez and later in Tijuana was an emergency measure catalyzed by the absence of effective protocols for protecting the health of the migrant population (оім, 2020а, 2020b).

Although border communities faced high levels of risk and vulnerability derived from their border status, the actions that involved some form of cross-border cooperation were few and limited. In general, the observed cases of coordination and collaboration between cities correspond to restricted and ephemeral actions forced by the worsening of the indicators of the pandemic and only after the local health systems reached critical points in their operation. In the case of Mexicali and the Imperial Valley on the border of Baja California, the catalyst was the increase in the number of positive cases and deaths on both sides of the border and the saturated hospitals in southern California at the end of May 2020. In Ciudad Acuña, Coahuila, and Rio Bravo, Texas, the mayors also agreed to collaborate to discourage the travel of people of dual nationality during the holidays of May and July. A similar negotiation was observed in the Sonora-Arizona border region, although this occurred between state authorities.

Discussion

The factors behind the reduced number of cross-border actions aimed at containing COVID-19 or mitigating secondary impacts are diverse and complex. Some of them were manifested in the data collected by this research.



At the functional level, some factors that limit the development of cooperation are the legal limitations and the financial and technological disparities between the two sides of the border. Local actions in health and other areas of concern for border cities are inserted in a policy and management ecosystem governed by principles of sovereignty and protection of the national interest. Both the United States and Mexico protect their sovereign right over the management of border issues and leave little space for decentralized actions involving cross-border cooperation. Even though historically public health issues have occupied one of these spaces, health policies for the Mexico-United States border are dictated by the respective federal governments, while state governments mainly manage sectoral agendas and programs. As a result, the preferences and voices of local border actors tend to occupy a marginal position within the space of decisions that have produced actions to contain the pandemic and mitigate its secondary impacts.

Additionally, at the functional level, the uncertainty surrounding the pandemic forced a precautionary and introspective mentality among local political and public health authorities. Given the magnitude of the risk and its consequences, the safest strategy to contain the pandemic locally was to work in coordination with federal and state authorities in each country, making cross-border cooperation a secondary concept within the priorities of each border municipality. In fact, some of the most significant cross-border epidemiological actions involved state health departments by activating existing binational coordination protocols. One of these protocols is the mechanism for reporting cases of infectious diseases, facilitating the exchange of information and activating a patient transfer system (El Colef, 2020a). The crisis that generated the nonstop arrival of ambulances to ports of entry in California was the catalyst for a system to order the transfer of patients through the BPOE connecting Mexicali and the Imperial Valley.

At the operational level, coordinated actions to contain the pandemic would have required a similar and synchronized understanding of the seriousness of the risk to public health on both sides of the border, a condition difficult to achieve even within the borders of each country. In addition, for border cities to have been able to diagnose and predict the severity of the pandemic in cross-border terms, the information on cases, contagions, lethality and mortality of COVID-19 would have to be methodologically and conceptually comparable across the border. Additionally, the data would have had to be available in real-time on both sides. The severe fragmentation of health systems in Mexico and the United States makes it extremely difficult to create a reliable and unified registry of infection and mortality rates at the national level, further complicating direct comparisons between countries and between scales within each country.

The role of structural factors, such as federal policies toward the border at the time of the COVID-19 outbreak, cannot be ignored. In the United States, the government of Donald Trump promoted a sovereignty and distancing policy reinforcing narratives of separation and represented Mexico as a risk to national security (Da Silva, 2020). Although it is possible that these narratives did not resonate in the cities along the U.S. border, their most significant implication from the point of view of managing border issues is that not aligning with the positions of Washington raised the political and economic costs of decentralized actions. In the case of Mexico, the austerity policies



imposed by the Andrés Manuel López Obrador administration weakened traditional structures for cross-border cooperation, such as the support activities carried out by Mexican consular offices near the border. It is likely that local action has also been affected by the politicization of the pandemic, especially in the United States (Shear & Dickerson, 2020). As a result, the responses of U.S. border states varied substantially and, at times, in the opposite direction. For example, one of the initial actions of the government of the state of Arizona was to issue an executive order that banned cities from acting on their own by restricting the operation of businesses or mandating face masks (Arizona Medical Association, 2020; KTAR-NEWS, 2020). These actions openly contrast with the stricter measures adopted by the states of California and New Mexico. They also led to the worsening of the pandemic in some border cities and, ultimately, triggered local actions that demanded a change in anti-pandemic policies (ABC15.com staff, 2020).

The impossibility of decentralized action in this scenario is illustrated by the response of border cities to the asymmetric closure of the border as the main tool to contain the spread of the Coronavirus between the two countries. By maintaining the cross-border mobility of citizens and residents of the United States, the closure of the border excluded part of the border population from the spread but left everyone equally exposed to the risk of infection. This motivated some protests by groups of citizens in Mexico who demanded restrictions on crossing from the United States to contain the spread of the virus (Shear & Dickerson, 2020). In Nogales, Sonora, a group of people temporarily obstructed the border crossing and demanded that Mexican customs authorities restricted nonessential travel from Arizona. In Sonoyta, Sonora, a group of residents prevented the transit of travelers to Puerto Peñasco, a regular tourist destination for many families in Arizona, some of whom own beach houses in that town. It also triggered actions by local authorities, such as the establishment of sanitation stations, information stands, and temperature checks by medical personnel at the BPOE of several Mexican cities included in the analysis (Prendergast, 2020). On the other hand, in Calexico and Laredo, information campaigns were initiated to discourage cross-border crossing, sometimes in consultation with Mexican authorities. The authorities of Mexicali and the Imperial Valley, for example, agreed to coordinate information campaigns to reduce border crossings during holidays and established checkpoints to enforce essential trips at the border.

All these actions are containment measures that reflect the complex and contradictory nature of life on the border. First, they are an expression of the local impossibility of influencing policies that regulate cross-border mobility. Second, they make evident the asymmetric approaches to public health between the two countries because, in Mexico, health is a matter of the public domain, while in the United States, it is fundamentally a private matter. Finally, they also reflect the politicization of the pandemic in American society, which is deeply divided on the legitimacy of the actions to control the pandemic, with some citizens justifying the rejection of protective measures, such as social distancing and staying at home, which are generally accepted in Mexico (National Public Radio [NPR], 2020).



Conclusions

The COVID-19 pandemic has rapidly altered urban life throughout the world, and cities on the Mexico-United States border have not been exempt from these transformations. When considering their condition as border spaces and the disproportionate impact of the pandemic on some of them, it is important to understand how border cities' dynamics influenced local responses to the pandemic and their effectiveness and how the pandemic disrupts social practices and institutions characteristics of border spaces. We recognize that we are at the beginning of a full and deep understanding of the interaction between COVID-19 and border communities. Still, there is a need to document—even if preliminarily—events and processes that make palpable the complicated social interactions that produce the adjacency of asymmetries and complementarities between cities on the Mexico-United States border.

Undoubtedly, the spread of COVID-19 across the border has among its most important transmission vehicles the strong interaction generated by highly integrated labor and consumer markets, as well as the relationships produced by family arrangements and cross-border lifestyles common in the region. However, it is also clear that unilateral and centrist measures, such as the closure of the border, do not reduce health risks and can contribute to the spread of the disease and even amplify it.

However, despite a history of collaboration and the degree of institutionalization of cross-border cooperation networks in the field of health, it is obvious that these structures fell short in the face of the magnitude and complexity of the emergency created by the COVID-19 pandemic in border cities. Although instances such as the Binational Health Councils could have been logical instruments in coordinating crossborder responses to the pandemic, the information collected does not record significant actions involving these local actors. Regarding epidemiological actions, our results indicate that local action has mainly accompanied the implementation of centralized actions, whether national health authorities or state authorities take these measures. The public health system in the United States and Mexico gives states jurisdiction over the planning and coordination of policies to manage health emergencies. Both in Mexico and the United States, local governments play an important role in protecting public health through a series of regulatory activities. For example, through inspection programs and licensing systems, counties and municipalities ensure that businesses within their jurisdiction operate according to adequate safety and health standards. They also intervene so that inhabitants do not engage in individual or collective risky behaviors through health surveillance systems and ensure the confinement of people suffering from infectious diseases. As a result, state border governments assumed the main role in designing and implementing the strategy for the containment and mitigation of the pandemic. In contrast, local governments concentrated their activity on promoting state programs and monitoring compliance with the measures included in emergency declarations.

In sum, the emergency created by COVID-19 is projecting a dual scenario in terms of cross-border governance. On the one hand, the pandemic has revealed the weakness of local structures for cross-border cooperation in health because national and state governments continue to dominate decision-making spaces and local actors are subsidiary agents within this space. This is particularly worrisome when national actors diverge in priorities and strategies while confining border communities to a



sort of territorial and political trap that assumes that the beginning and end of border social relations coincide with the international line (Agnew, 1994). On the other hand, the situation created by the pandemic could be seen as an opportunity to promote new institutional practices and the renegotiation of spaces for cross-border cooperation in health. It is possible that once the magnitude and implications of the closure of the border and other centrist measures are fully expressed, it will be necessary to create conditions for local actors to assume a more proactive and strategic position that emphasizes resilience and preparedness for future external shocks that could affect dynamics and cross-border relationships essential to local life. An example of what is possible for escaping the territorial trap is the model of interprovincial bubbles proposed by Detsky and Bogoch (2020) to maintain mobility between neighboring cities in Canada. Applied to the border, the model could be the basis for creating binational bubbles that would maintain cross-border mobility and essential economic and social relations when two neighboring cities show a consistent reduction in the number of cases of COVID-19. However, the governance mechanism necessary for the implementation of solutions such as this need to be built.

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