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Network of Water Problems in the Press of Mexico City in the COVID-19 Era

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Abstract: The pandemic generated containment and mitigation policies, as well as distancing and confinement strategies that limited the supply of water resources to social sectors. Residential areas- The offer is maintained, but with an increase in rates. Marginalized areas were subsidized and exempted from paying for an increasingly intermittent supply. The anti-COVID-19 policies guided water policies in two ways: The first consisted of disseminating anti-COVID-19 policies in water management agencies. Another second consisted of the autonomy of the institutions and their disassociation or agreement with the anti-COVID-19 policies. In this way, the literature from 2020 to 2023 around anti-COVID-19 policies in their water dimensions, registers problems of scarcity, famine and unsanitary conditions. Scarcity had already been observed in marginalized sectors, famine in residential neighborhoods, but unsanitary conditions were appreciated in migrant communities. In fact, the type of exposure to occupational hazards determined the health status of the migrants. The water problems were recorded in the circulation press to highlight the asymmetries of the anti-COVID-19 policies in the public and private sectors, as well as in the political and social actors. The objective of the study was to reveal the network structure of relationships between nodes and edges related to press releases on water issues. A documentary, cross-sectional and retrospective study was carried out with national circulation newspapers: El País, El Reforma, La Jornada and El Universal, considering the water problems of scarcity, unsanitary conditions and famine. The results show a structure of nodes where the water problems were initiated by La Jornada and ended by El Reforma. Both findings are relevant considering the ideology of the newspaper. La Jornada, a newspaper identified with the political ideology of the left, began the diffusion of water problems in a city administered by a government of the same ideology. El Reforma, a newspaper designated by the executive as a spokesperson for the opposition ideology, culminates the network of notes on water problems. In other words, regardless of the type of political ideology attributed to newspapers, the problems of scarcity, unsanitary conditions and famine are spread.

In relation to the state of the art where it is shown that ideology does not influence the establishment of the agenda, the present work corroborates and recommends expanding the study to other entities administered by the opposition such as the cities of Guadalajara and Monterrey.

Keywords: Famine, COVID-19, Shortage, Unsanitary, Agenda.

1. Introduction

The pandemic containment and mitigation policies, which often included measures such as lockdowns, quarantines and social distancing, could have had various impacts on water supply [1].

Impact on general access to water: In many areas, lockdown and social distancing policies may have affected the operation of water supply and sewerage systems [2]. The reduction in the workforce, the interruption of supply chains and movement restrictions could have caused delays in the maintenance and repair of infrastructure, which could have affected access to safe drinking water and basic sanitation.

Economic challenges: The containment measures of the pandemic, such as business closures and movement restrictions, could have had a negative impact on people's income, especially in marginalized areas [3]. This could have made it difficult to pay for public services, including water services. In some areas, families may have struggled to pay water bills, which could have led to outages.

Social inequalities: Marginalized areas often have less developed water and sanitation infrastructure systems, which could have resulted in unequal access to clean and safe water during the pandemic [4]. People who already faced difficulties accessing safe drinking water could have been further affected by the interruption of services and the lack of resources to take preventive measures.

Hygiene and prevention: During a pandemic, hygiene practices are essential to prevent the spread of the virus [5]. Constant access to soap and water is crucial for frequent hand washing. Containment policies could have hindered the effective implementation of these practices, especially in areas with water supply problems.

Government interventions: In some cases, governments may have implemented specific measures to ensure continued access to water in residential and marginalized areas [6]. These measures could include the distribution of potable water through tanker trucks or the temporary exemption of fees for low-income families.

Long-term policy reassessment: The pandemic might have led to increased awareness of the importance of adequate water and sanitation infrastructure [7]. This could have prompted governments and organizations to reassess and strengthen their policies and strategies to ensure equitable and sustainable access to water in the future. The use of distancing and confinement strategies during the pandemic may have had a significant impact on the intermittent supply of water resources in different communities.

Reduction in workforce: Distancing and lockdown measures may have led to a reduction in the workforce tasked with operating and maintaining water supply systems [8]. This could have affected the ability to keep the infrastructure running and to perform repairs and preventative maintenance in a timely manner, which in turn could have led to interruptions in the water supply.

Distribution constraints: Movement restrictions may have made it difficult to distribute resources and supplies needed to operate water systems, such as water treatment chemicals and

spare parts for equipment [9]. This could have affected the quality of the water supplied and the ability to keep the systems in good working order.

Financial difficulties: Financial constraints resulting from the lockdowns could have affected the ability of communities and water service providers to finance and maintain their systems [10]. In some areas, declining income and ability to pay may have led to underinvestment in water infrastructure, which in turn may have increased supply interruptions.

Increased residential demand: With more people confined to their homes due to movement restrictions, the demand for water in residential areas could have increased [11]. This could have put pressure on water supply systems, especially in areas where limited infrastructure already existed.

Impact on underserved communities: Underserved communities often face challenges in consistently accessing safe drinking water [12]. Distancing and lockdown strategies could have exacerbated these difficulties, as these communities could have faced irregular distribution of water and even more limited access to basic resources.

Adoption of alternative measures: In some cases, communities could have resorted to alternative solutions, such as the installation of temporary water sources or the implementation of rationing measures [13]. These measures could have had an impact on the quality and quantity of available water.

Water management agencies around the world have implemented a variety of policies and measures in response to the COVID-19 pandemic [14]. These policies were intended to ensure a safe and continuous supply of water, promote proper hygiene practices, and address water-related challenges that arose during the crisis.

Ensure continuous water supply: Many water management agencies worked to ensure that the supply of drinking water was not interrupted due to the pandemic [15]. This included the implementation of measures to keep water treatment plants and distribution networks running. Priority was given to essential repairs and preventative maintenance to avoid power outages.

Suspension of shutoffs for non-payment: In many regions, water management agencies have made the decision to temporarily suspend water shutoffs for non-payment [16]. This was done to ensure that people had continued access to clean drinking water, regardless of their financial hardship during the crisis.

Promotion of Hygiene Practices: Water management agencies played an important role in promoting proper hygiene practices to prevent the spread of the virus [17]. This included awareness campaigns on frequent hand washing and the efficient use of water.

Regulatory relaxation: Some agencies have temporarily relaxed certain regulations to allow for faster production and supply of disinfectants and chemicals needed for water treatment [18].

Support for marginalized communities: Water management agencies in some locations implemented specific strategies to ensure that marginalized communities had adequate access to safe drinking water and sanitation [19]. This could have included distributing water via tanker trucks to areas that lacked constant access to water.

Water quality monitoring: Monitoring the quality of drinking water remained a priority during the pandemic [20]. The agencies continued to monitor and test the quality of the water to ensure it met safety standards.

Remote work and security measures: Water management agencies have also taken measures to protect their staff, including remote work whenever possible [21]. Those working in the fields took extra precautions to ensure their safety while maintaining water supply operations.

Coordination with other authorities: Water management agencies often worked closely with other health and government authorities to ensure a comprehensive and coherent response to the pandemic [22].

The relationship between the autonomy of water management institutions and the agreement with anti-COVID-19 policies in solving problems of water scarcity, unsanitary conditions, and famine could have influenced the resolution of these problems [23].

Institutional autonomy and decision-making: If water management institutions have a high degree of autonomy and the ability to make independent decisions, they could have responded more quickly to changing needs during the pandemic [24]. This would have made it possible to adapt water management policies to the health and social crisis, prioritizing the prevention of water scarcity, unsanitary conditions and famine.

Inter-institutional coordination: The agreement between water management institutions and anti-COVID-19 policies could have facilitated coordination with other government and health agencies [25]. Effective cooperation between these entities could have made it possible to address the problems of water scarcity, unsanitary conditions and famine in a more comprehensive manner, considering both public health needs and those related to water and food security.

Flexibility for the implementation of measures: Institutions with a certain level of autonomy might have had the ability to adapt their strategies and policies to address emerging water-related challenges [26]. For example, they might have implemented temporary measures to ensure continued access to safe drinking water, such as distributing emergency supplies to affected areas.

Access to resources and financing: The autonomy of water management institutions could also have influenced their ability to obtain resources and financing to address problems of water scarcity and unsanitary conditions [27]. If these institutions had more autonomy to manage their budgets and seek additional funding, they could have responded more effectively to urgent needs.

Adaptive policies: Water management institutions with greater autonomy might have had the flexibility to develop adaptive policies to adjust to changing conditions caused by the pandemic [28]. This could have allowed the implementation of innovative and rapid solutions to solve the problems of water and food security.

The exposure of migrant communities to occupational hazards, including those related to water, during the COVID-19 pandemic could have had a significant impact on their health [29]. Precarious working conditions, lack of access to adequate health services, and other factors may have increased the health risks for these communities.

Lack of protective measures: Migrant communities often occupy low-paying or informal jobs that may lack adequate security measures in the workplace [30]. Lack of personal protective equipment, hygiene protocols, and social distancing measures could have increased your risk of exposure to the virus.

Housing conditions: Housing conditions in migrant communities are often precarious and densely populated [31]. Lack of access to safe drinking water and adequate sanitation in their homes could have made it difficult to adopt effective hygiene practices, increasing the risk of infection.

Essential jobs and exposure: Some migrants work in essential sectors such as agriculture, construction, cleaning, and healthcare, where it is difficult to maintain social distancing and protective measures [32]. This could have increased their risk of exposure to the virus at their workplaces.

Limited access to healthcare: Migrant communities often face barriers in accessing quality healthcare services, including access to testing and treatment for COVID-19 [33]. This could have delayed detection and treatment of the disease, increasing the risk of complications and spread.

Job insecurity: The pandemic could have led to the loss of jobs and wages for many migrant communities, which in turn could have impacted their access to food, clean water, and

other essential resources [34]. Economic insecurity can have negative effects on physical and mental health.

Pre-existing vulnerability: Many migrant communities already face health inequalities due to adverse socioeconomic conditions and lack of access to health services [35]. Exposure to additional occupational hazards during the pandemic could have exacerbated these pre-existing vulnerabilities.

Information and communication difficulties: Migrant communities may have had difficulties accessing accurate and up-to-date information on the pandemic and preventive measures, which may have limited their ability to adequately protect themselves [36].

In general, the exposure of migrant communities to occupational hazards, including those related to water, could have had a significant impact on their health during the COVID-19 pandemic [37]. Existing inequalities, lack of access to essential services and precarious working conditions may have increased their vulnerability to the disease.

In the context of water issues, the implementation of anti-COVID-19 policies by the public and private sectors, as well as the participation of various political and social actors, could have led to notorious discrepancies in various aspects [38].

Equitable access to water: Water access policies during the pandemic may have varied between the public and private sectors [39]. While the public sector might have prioritized equitable access to water as a basic public health need, private companies might have been more focused on financial viability and profitability.

Tariffs and payments: There could have been discrepancies in the application of water tariffs and payment requirements between the public and private sectors [40]. The private sector may have continued to require regular payments, which could have affected individuals and communities in financial distress during the pandemic.

Investments in infrastructure: Investment policies in water infrastructure could have varied [41]. The public sector may have redirected funds towards improving and expanding water infrastructure to ensure access during the pandemic, while some private companies may have faced financial difficulties and limited investment.

Responsibility for water quality: Policies for monitoring and maintaining water quality may have differed [42]. Public entities may have strengthened supervision of water quality to ensure its safety, while some private companies may have faced difficulties in maintaining high standards due to operational constraints.

Community participation: Discrepancies could have arisen in terms of community participation in decision-making [43]. The public sector could have involved communities more in planning policies and measures, while private companies could have prioritized their operational efficiency.

Communication and transparency: Communication and transparency policies in relation to water could have varied [44]. Some political and social actors might have advocated for clear and open communication about the implemented measures and their implications, while others might have sought to keep certain information confidential.

Sustainability and environment: Discrepancies could have arisen in the consideration of environmental and sustainability issues [45]. Some actors might have advocated for the conservation and sustainable use of water resources, while others might have prioritized short-term economic recovery.

Political pressure and resources: Different political and social actors may have exerted divergent pressures on water-related policies [46]. Some might have called for more public investment, while others might have urged reduced regulation to promote economic recovery.

Discrepancies in the implementation of anti-COVID-19 policies in the context of water issues could have arisen due to the differences in approach between the public and private sectors, as well as the varied perspectives of political and social actors [47]. These discrepancies often reflected a tension between public health, economic, and social considerations.

The network structure of relationships between nodes and edges in the press coverage of water issues during the pandemic can provide valuable insight into how these issues were addressed and communicated in the media [48].

Dominant topics and approaches: By identifying the most prominent nodes in the network, we can understand which water-related issues during the pandemic received the most attention in press coverage [49]. This could include issues such as water scarcity, access to drinking water, hygiene and sanitation measures, impact on marginalized communities, among others.

Interconnections between topics: Analysis of the network structure can reveal how different water-related topics are interconnected in press coverage [50]. For example, we might discover that discussions of water scarcity are related to the lack of access to safe drinking water in marginalized communities.

Key players and sources of information: Nodes representing key players, such as government agencies, non-governmental organizations, water and sanitation experts, could be instrumental in understanding who was providing information and guidance in press coverage [51]. This would allow us to identify which voices were influential in the public discussion.

Discrepancies and divergent approaches: The connections between nodes could reveal discrepancies or divergent approaches in press coverage [52]. For example, we could see how different actors or media differently addressed the challenges of access to water in marginalized communities or the relationship between hygiene and the pandemic.

Temporal evolution: If the analysis is carried out over time, we could observe how the structure of the relationship network changed at different stages of the pandemic [53]. This could indicate how approaches and media attention changed as the crisis evolved.

Identification of gaps: By looking at the missing nodes and connections in the network, we could identify areas that did not receive enough attention in the press coverage [54]. This could help highlight important issues that may have been overlooked.

Contextual factors: The structure of the network can also help us understand how contextual factors, such as geographic location, government policies, and local concerns, influenced media coverage of water issues during the pandemic [55].

Analyzing the network structure of relationships between nodes and edges in the press coverage of water issues during the pandemic can provide a more complete picture of how these issues were communicated and addressed in the media [56]. This can help us understand the priorities, influences and approaches in the public discussion around water issues in the context of the health crisis.

"La Jornada" and "El Reforma" are two prominent newspapers in Mexico, and as in many other countries, the media often have different political stances [57]. A media outlet's political stance can influence its focus, tone, and emphasis in coverage of events such as the water crisis.

Thematic approach: Depending on their political stance, "La Jornada" and "El Reforma" could have approached their coverage of the water crisis differently [58]. "La Jornada" could have given more emphasis to the social and economic dimensions of the crisis, while "El Reforma" could have addressed more aspects related to management and public policies.

Emphasis on key actors: Media with different political positions could have singled out different actors as responsible for the water crisis. "La Jornada" could have focused on government responsibility and the need for policies to support marginalized communities, while "El Reforma" could have highlighted issues of infrastructure and management [59].

Evaluation of solutions: Political stance could also have influenced the proposed solutions to address the water crisis [60]. One milieu might have advocated for greater government involvement and investment in public services, while the other might have preferred decentralization or private sector-based approaches.

Focus on political implications: Coverage of the water crisis could have focused on the political implications of crisis management [61]. Depending on their political stance, a media outlet might have highlighted the government's response and actions as positive or negative.

Presentation of data and statistics: The way in which data and statistics are presented may vary depending on political stance [62]. One outlet might feature figures that underscore the urgency of the crisis and its impact on vulnerable communities, while another might focus on data related to management and progress.

International perspective: Political stance could have influenced how water crises were related to broader issues such as economic policy, governance, and international relations [63].

Editorials and columnists: The editorials and columnists section could have reflected the political positions of the outlet more directly [64]. The editorials could have expressed the opinion of the newspaper on the causes and solutions of the water crisis.

The political stance of "La Jornada" and "El Reforma" could have influenced their approach, tone, and emphasis in coverage of the water crisis [65]. Differences in political perspective could have affected the way they presented and analyzed the crisis, as well as the proposed solutions and assessment of responsibilities.

The structure of stories and media coverage may evolve as the pandemic progresses through its various stages [66]. A general understanding of how the structure of the notes might have evolved at different stages of the pandemic, from the economic crisis to the lockdown involves seven phases.

Initial phase or detection of the crisis: Focus on reports of new cases and spread of the virus [67]. Description of the first effects on the economy, such as business closures and job losses. Contextualization of the nature of the virus and how it affects health. Exploring initial responses from governments and health organizations.

Economic crisis phase: Broader coverage of economic impacts, such as mass layoffs, falling markets, and company closures [68]. Analysis of government policies and economic stimulus measures. Reports on how different sectors (tourism, retail, entertainment, etc.) are affected. Stories of people and companies struggling financially due to restrictions.

Government response phase: Detail on government policies, restrictions and containment measures implemented [69]. Reports on the capacity of the health system to handle the crisis. Analysis of the legal and ethical implications of confinement measures. Stories of how communities respond to government guidelines.

Social and human impact phase: Stories of affected individuals and communities, including aspects of mental health, education, and daily life [70]. Exploring the digital divide and adapting to online education and work. Reports on the role of health workers and the challenges they face. Focus on social inequalities and how they affect marginalized groups.

Vaccination and hope phase: Coverage of advances in vaccine research and development [71]. Information on the distribution and administration of vaccines. Stories of people who receive the vaccine and their experiences. Analysis on how vaccines can change the dynamics of the pandemic.

Reopening and recovery phase: Reports on how restrictions are gradually lifted and how economies start to reactivate [72]. Analysis on whether the economic recovery is sustainable and equitable. Coverage of permanent changes in society, such as remote work and online education.

Adaptation and learning phase: Reflections on what has been learned from the pandemic in terms of preparing for future crises [73]. Reports on changes in mindset, such as increased awareness of the importance of public health and resilience.

The recommended framework for risk communication at the outset of any crisis is based on providing clear, accurate, and timely information to the affected population and stakeholders [74]. Effective risk communication in the initial stages of a crisis is crucial because it helps to minimize uncertainty, guide appropriate actions, and build confidence in the actions taken.

Transparency and clarity: Communication must be transparent and clear to ensure that the public understands the situation, the risks involved, and the necessary actions [75]. Lack of information can lead to the spread of rumors and misinformation, which increases anxiety and panic.

Evidence-based information: The information provided must be based on reliable scientific data and evidence [76]. This helps prevent the spread of incorrect or misleading information and provides a solid foundation for making informed decisions.

Empathy and sensitivity: Communication must be empathic and take into account the emotional concerns and needs of the public [77]. Showing understanding and empathy can help reduce fear and anxiety.

Reliable communication channel: Identifying and using reliable communication channels is essential [78]. Health organizations, governments and experts in the field are trusted sources for transmitting accurate and up-to-date information.

Consistent and consistent messaging: Ensuring that messages are consistent and consistent over time and across different sources is important to avoid confusion and mistrust [79].

Risk assessment and contextualization: Providing a clear assessment of risk, including its probability and potential impact, helps the public understand the seriousness of the situation and make informed decisions [80].

Recommended actions: It is important to provide clear guidelines on the actions that people should take to protect themselves and minimize risk [81]. This may include hygiene practices, social distancing measures, among others.

Expectation management: Communication should manage realistic expectations and emphasize that the situation may evolve [82]. This prevents frustration and mistrust if things don't go as expected.

Constant updating: As the situation evolves, communication should also be updated to reflect changes in risk, measures, and the overall situation [83].

Feedback and feedback: Providing an avenue for the public to ask questions and get answers is essential [84]. This demonstrates an open and receptive attitude.

The recommended framework for risk communication at the start of any crisis is based on transparency, clarity, evidence and empathy [85]. Effective communication in the early stages of a crisis can influence public perception, guide appropriate action, and contribute to a coordinated and well-informed response. The information verifiability framework is an approach used to assess the credibility and reliability of information, especially in a context of proliferating fake news and disinformation. This framework should be applied in situations where there are doubts about the veracity of information or where there is a high risk that incorrect or misleading information could cause harm. Here are some conditions that may warrant the use of the informational verifiability framework:

Dissemination of critical information: When the information refers to critical or urgent issues, such as public health, national security or emergency situations, it is essential to verify its veracity to avoid possible serious damage [86].

Disinformation spread: If there is widespread spread of disinformation online or in the media, it is critical to apply a verifiability framework to distinguish between accurate and false information [87].

Impact on decision-making: When information could influence important decisions by individuals, communities or authorities, verifying its veracity is essential to ensure that informed decisions are made [88].

Changing circumstances: In situations where the situation is rapidly evolving, such as a pandemic or natural disaster, verifying information is essential to provide accurate and up-to-date guidance [89].

Unreliable sources: If the information comes from unreliable, unknown or anonymous sources, it is prudent to apply a verifiability framework to assess its credibility [90].

Potential to cause harm: When information has the potential to cause physical, emotional, economic or social harm, it is necessary to verify its veracity before sharing it [91].

Public interest: If the information is in the public interest and has the potential to influence public opinion or perception of events, it is important to verify it to ensure that the discussion is based on accurate facts [92].

Contradictions and doubts: If the information presents contradictions with other reliable sources or if there are legitimate doubts about its authenticity, it is important to apply a verifiability approach to clarify the situation [93].

The information verifiability framework should be applied in situations where there is the possibility of incorrect or misleading information that could cause harm, influence important decisions or affect public perception. Their aim is to ensure that information is based on verifiable facts and to help combat the spread of disinformation in critical contexts [94].

Aim

The objective of the study was to establish the network of interactions between the press releases to appreciate the structure of the resulting media agenda, considering the review of national print media and their notes related to the water problem associated with the pandemic in the period from November 2019 to May 2023.

Are there significant differences between the structure of press releases related to water issues during the pandemic with respect to the network analysis of this study?

The premises that guide this work indicate that the pandemic generated an expectation of availability of water, sanitation and cost of public service. As the pandemic intensified, expectations turned to despair in the face of the health, economic, social and water crises. Consequently, the print media had to intensify their stories related to water problems to correspond to social expectations. Once the vulnerable society was immunized, expectations decreased and media coverage was oriented towards the dissemination of risk scenarios such as migrant communities. In this way, the establishment of the local water agenda was due to citizen expectations that decreased as their need for information about the pandemic decreased after the vaccination campaigns. Once readers demanded content from before the pandemic, press releases on water problems were combined with information from vulnerable sectors such as migrants. Consequently, the water problem went from being an axis of the media agenda to an axis of the migration agenda.

2. Method

The present work followed the PRISMA methodology (see Figure 1).

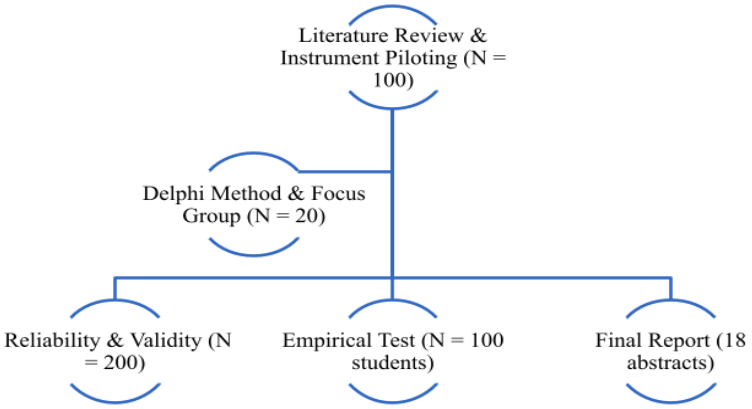

Figure 1. *PRISMA flow chart*

A retrospective, correlational and exploratory study was carried out with a selection of articles published in newspapers of national circulation and with opposite ideological attribution, during the period from November 2020 to May 2023.

For the coding of the information, the Delphi Inventory was used. Experienced judges who are experts in water issues were contacted. The objectives and managers of the project were informed, as well as the warning of non-remuneration for their responses. Confidentiality and anonymity were guaranteed in writing following the Helsinki protocol and the APA format for studies with experts. The judges rated the press releases related to water resources and services. In a second round, the averages were compared with the initial scores. In the end, the qualification of each note was reconsidered or ratified. The judges assigned a score a zero if it was not related to any of the problems, or assigned a value of five for scores that were significantly related.

The information was captured in Excel and processed in JASP version 14. The coefficients of centrality, grouping, and structuring were estimated to be able to test the hypothesis about the significant differences between the press releases network with respect to the analyzes observed in the present work. Values close to zero were considered evidence of neural networks due to the proximity of relationships and configuration of nodes and edges.

3. Results

Figure 1 shows the centrality values of water problems in the press from 2020 to 2023. The stories of El País reflect a closer proximity of the nodes and edges with respect to the stories of El Universal. In other words, the water problems reported in the country are less removed from the media agenda than the articles in El Universal.

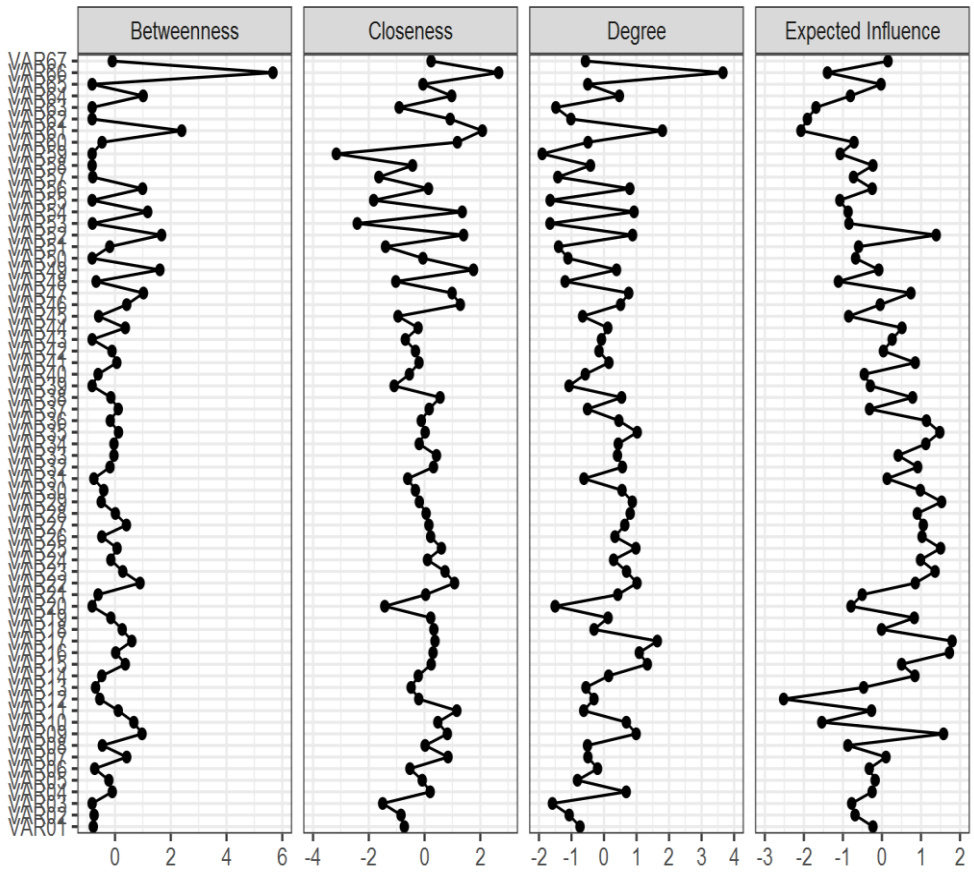

Figure 2. *Centrality of water issues in the press from 2020 to 2023.*
Source: Prepared with data study

Figure 2 shows the grouping values of the water problems reported in the press from 2020 to 2023. The press releases of La Jornada and El Reforma show greater proximity with respect to the releases of El País and El Universal. That is, if the country's stories are closer to the media agenda, they are not reconfigured towards that agenda by interrelating with each other and with other stories. On the other hand, the press releases of La Jornada and El Reforma are more related to the emerging agenda.

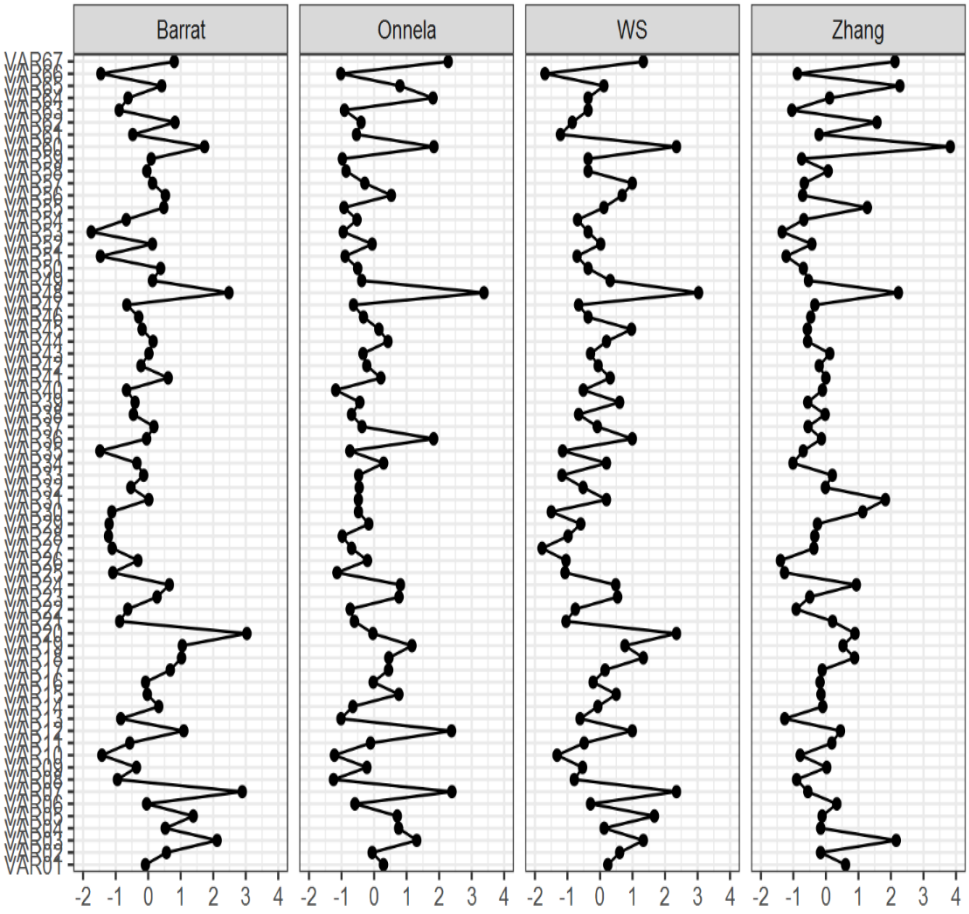

Figure 3. *Grouping of water issues in the press from 2020 to 2023.*
Source: Prepared with data study

Figure 3 shows the structuring values of water issues reported in the press from 2020 to 2023. The neural network suggests learning from print media when disseminating water issues. In other words, the press moved from a verifiability framework to a plausibility framework. The data prevails in the first phase because reduced interactions are appreciated, but as the pandemic progresses, reader expectations drop and force the press to generate a plausible framing. The difference is substantial, the verifiability framework assumes data-focused information and readers comparing sources. The credibility suggests notes in accordance with the ideologies attributed to the left for La Jornada and to the right for El Reforma.

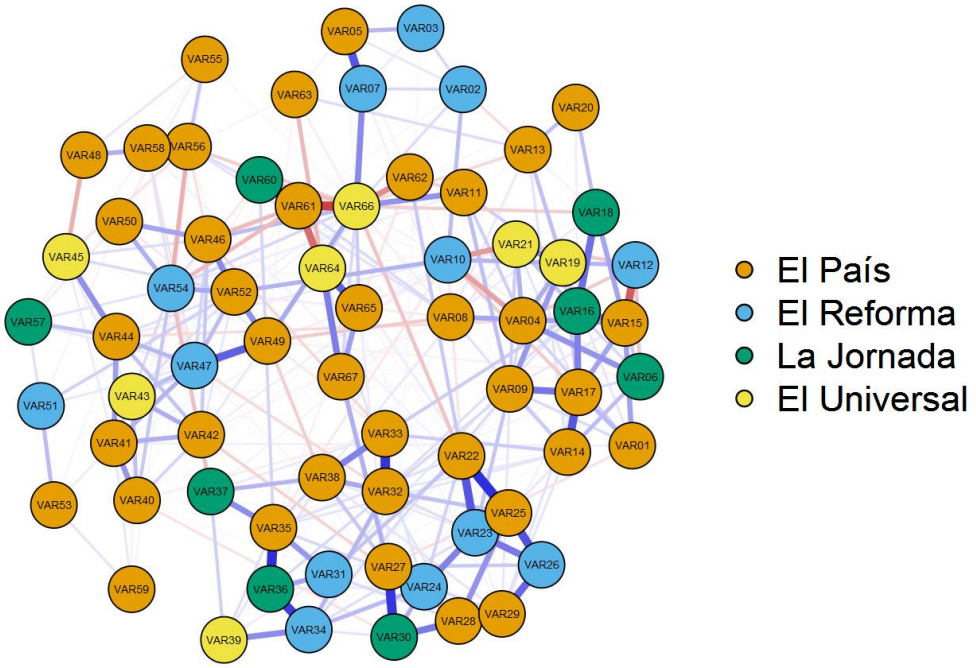

Figure 4. *Structuring of water issues in the press from 2020 to 2023.*
Source: Prepared with data study

The results show that the structure of the press releases in the period 2020 to 2023 is grouped around a plausibility agenda. That is to say, the high expectations of the readers led the newspapers to offer data to compare with other sources, but once the immunization and the consequent lack of confinement had passed, the demand for information was reduced. Faced with this situation, the press opted for a new credibility framework that consisted of disseminating images rather than data. Readers were able to learn from the same content oriented to vaccines, the reduction of infected, sick and dead from COVID-19. Therefore, the hypothesis of significant differences between the theoretical structure of the agenda and the framework of water resources and services with respect to the analyzes presented is not rejected.

4. Discussion

The contribution of this work to the state of the art lies in the establishment of a credible agenda for water problems reported by the press from 2020 to 2023. The articles on water problems had a centrality and asymmetric grouping in the newspapers observed [95]. The structuring of the notes related to scarcity, unhealthy and famine are initially framed in a verifiability framework due to the high data content, but in the end interactions explained by the plausibility framework adopted by the sources [96] are appreciated. In relation to the studies of the establishment of the agenda and the framework where asymmetries between the sources of information are evident, the present work observed the same behavior [71]. In a prolonged phenomenon such as the COVID-19 health crisis, the media moves from the verifiability framework because they try to reduce fake news with data towards a verifiability framework because they try to maintain the level of audience and expectation [97]. In the present study, the same structure is appreciated, although the ideology of the source does not explain this tendency or communicative strategy [98]. Framing studies warn that verifiability is generated in sources that seek to sustain a narrative in the face of an uncertain and prolonged event [99]. In the present work it is appreciated that verifiability was the first strategy of the print media to propagate the pandemic [100]. Likelihood studies have shown that this framework emerges once audiences have given up seeking information from different sources because they believe that the problem or risk event has been controlled [101]. In the present work it is noted that the

underlying plausibility framework once the pandemic has been declared controlled and immunization has been carried out.

However, verifiability and plausibility coexist in risky media diffusion scenarios [101]. The pandemic, assumed as a risk event, was disseminated by the media from both frames, but in the case of the water problems of scarcity, unsanitary conditions, and famine derived from the health and economic crisis, the frames were structured linearly [102]. Lines of research related to the differences between the coverage of the pandemic and the water problem will allow us to corroborate the studies of the framework and the establishment of the agenda from the path that goes from verifiability to plausibility.

5. Conclusion

The objective of this work was to establish a network of notes related to the water problem associated with the pandemic. The results show that the structure of the notes is oriented from verifiability at the beginning of the economic crisis to plausibility at the end of the confinement and distancing of people. The application of the observed results to risk communication suggests a plausibility framework at the beginning of each crisis and a verifiability framework without the risk being imminent, immeasurable, unpredictable and uncontrollable.

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