

# **From Crisis to Coordination: Examining Organisational Performance of Healthcare System to Tackle Covid-19 Pandemic in Bangladesh**

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## **Abstract**

Coordination is widely perceived as an essential function of crisis management in the public sector. However, the pre-pandemic public health policies of Bangladesh lacked a well-defined blueprint for intra and inter-organisational coordination, creating a void that the government had to fill as the pandemic unfolded. This situation served as an ultimate stress test for the country's political and administrative leadership, as well as for its societal and institutional resilience. In the past two decades, Bangladesh has confronted more than thirty epidemic outbreaks of various magnitudes, which stretch healthcare organisations to the limit, rendering standard operating procedures inapplicable and severely testing professional norms. Therefore, considering the context, this study focuses on analysing the factors influencing the crisis response mechanism of the health sector in Bangladesh during the pandemic in order to identify gaps in existing frameworks. The research has applied qualitative method to probe the research objective and questions. Data was obtained through semi-structured interviews with key informants at the strategic level of health, administration and non-government sectors. The findings indicated that trust-based informal coordination, supplemented by a hybrid approach with a shadow hierarchical mechanism, played a significant role in tackling the crisis at the periphery level, whereas the role conflict, fragmentation and duplication marred central level operation. This study has suggested a coordination framework for managing upcoming crises of this kind, providing an additional and modest contribution to the current national crisis management framework, specifically addressing the challenges encountered by the health sector in Bangladesh during the pandemic.

**Keywords:** Crisis management, Collaboration, Coordination, Pandemic, Capacity, Public Sector

## **1. Introduction**

The Covid-19 crisis exposed the fragility of the healthcare systems and its uncoordinated governance structure worldwide, creating an unprecedented need for coordinated response to a common problem. Crisis management theory tells us about the effectiveness of collaborative network to respond to a

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transboundary crisis like pandemic. In such situations, governments must identify and define the crisis and then clearly communicate and coordinate their response (Wang & Weinstein-Tull, 2022). This study has argued that the existing health policies in Bangladesh largely failed to accomplish the tasks proper coordination, opening up space for the more ad hoc governance which further complicated the response mechanism. After the first detection of Covid-19 cases on March 8, 2020, a total of 0.55 million confirmed cases and 8,502 deaths had been recorded in the country till March 12, 2021 (Zafri et al., 2021, p. 2). Since then, the pandemic has exposed the fragility of healthcare system in Bangladesh. For a long time, the health sector of the country had been in shambles due to trivial budget allocations, inadequate equipment, deficient infrastructure, low-quality services and high out-of-pocket (OOP) expenditures. Along with supply-side constraints, there are demand-side barriers in this sector as well, pertaining to less responsive healthcare-seeking behaviour, sociocultural barriers and a lack of empowerment (Joarder et al., 2019; Titumir, 2021).

Against this backdrop, this study explores crisis episodes that affect specific organisations (e.g., central and local administration of the health sector) rather than entire governments. The core claim of this paper is that the structure and management of public organisations are responsible for shaping the crisis response mechanisms. If the organisation can bridge the gap between decision-making and coordination, it can better deal with the transboundary crisis (Boin, Ekengren, et al., 2014; Boin & Hart, 2003). In addition, this thesis brings together debates on whether the government should be all-powerful ‘deciders’ or ‘facilitators’ of an institutional arrangement that produces an adequate response from a public administration and organisational perspective (Boin et al., 2016). Scholars have conducted and published research identifying the immediate concerns regarding policy making for appropriate Covid-19 response (Moazzem & Shibly, 2022). However, research on comprehending organisational perspective in public health crisis management is scant in Bangladesh. This thesis also highlights how effective coordination can be achieved through strategic decision-making, employing better organisational culture, mobilising available resources and, above all, enhancing its capacities. All these questions must be answered again in the context of the newly emerged global pandemic.

## **2. Methods and Study Design**

### ***2.1 Selection of Organisation and Informants***

The study applied a highly rigorous qualitative cross-sectional strategy, gathering data at the national, district and sub-district levels. Participants were carefully chosen based on their expertise and background as policy makers and front-line responders during the pandemic. The divisional administrative units were chosen based on the rate of confirmed cases and coordination patterns in bordering areas, to identify the factors impacting coordination associated with the intensity of infections.

### ***2.2 Data Collection***

This study conducted semi-structured interviews using a topic guide whose development was informed by the study’s conceptual framework. A thematic approach has been applied to analyse the data. NVivo 12 software has been used for coding and aid the analysis. The themes were derived from the perspectives of organisational culture, structure, networking and leadership, respectively, although it should be noted that the factors often interplay and borders between these perspectives are diffuse.

## **2.3 Data Analysis**

The researcher prepared transcription of interview audio in the MS Word. The transcription was cross checked against the audio recordings as a quality assurance measure. The researcher then imported the transcribed data into NVivo 12 software for coding and aid the analysis. Each transcription was given a unique identifier consisting of a code, date, organisation and respondent's identifier to ensure the anonymity and facilitate informed analysis. A thematic approach has been applied to provide interpretations and practical recommendation that will be relevant to policymakers.

## **3. Results**

This section presents the findings of the health sector coordination mechanism in tackling Covid-19 pandemic, which have direct implications for national and periphery-level health-related decision-making and service-providing organisations, as well as the interactions between government-responding organisations, donors and non-government sectors. The analysis of the data suggests that healthcare system at the local level formed mixed form of coordination, mostly depending on the trust-based network management. In contrast, at the national level, the study found fragmented, redundant mechanisms, compromised accountability and duplication in coordination efforts.

### **3.1 Effective Role of Lead Agency**

In the field of crisis management, the establishment of a lead agency has been recognised to be an effective method for enhancing coordination (Soujaa et al., 2021). Feedback from respondents in the health service sector suggests that the “lead agency provision” within the response framework functioned well at the local level, given the current power structure of Bangladesh. The current institutional power structure of Bangladesh is directly related with administration and government (Habib & Mizan, 2016, p. 136). It facilitates local administration to take role in coordinating activities at the district level. In Bangladesh the local administration manages all local networks and engage relevant stakeholders during disaster. In the face of crisis, such as pandemic, local administration have acted effectively in collaboration with health services and other related stakeholders. The existing lead agency setup has been proved to be instrumental in building trust and gather resources from the local network. Lead agency is generally a practitioner-based system. Therefore, a debate persists regarding whether the health sector should take the lead or function as a support body during acute health crises. One district administrator said that:

“The power structure of the country supports lead agency mechanism and delegates authority to the local administration to deal with the crisis in collaboration with the relevant responding agencies. In this case, we provided support to health services in fulfilling their responsibilities and established district-level coordination committee keeping civil surgeon as member-secretaries.”

### **3.2 Trust-based Response Network**

The study investigated the emergence and efficacy of trust-based network in allocating resources and communicating risk. This network effectively facilitated resource mobilisation and rapid exchange of information. Health professionals at the district and sub-district levels expressed their opinion that they often had to manage daily commodities through informal local network due to insufficient government funding. The voluntary engagement of business, private and political community members has proved to be effective in building a trust-based networks. Literature illustrates that in the context of

public health emergencies, trust is of utmost importance. Crisis management process requires trust and confidence which can influence people's willingness to cooperate, share information and facilitate risk communication (Correia, 2024; Siegrist et al., 2012). One of the officials claimed that:

“We informally contacted to the private hospitals and related stakeholders unofficially. They helped us with their ICU and Oxygen support without any formal official documentation. Also, we received financial support from local donors only by requesting them. I must say, an informal communication network was working at that time.”

### **3.3 Social Capital in Risk Communication**

The study found that risk communication was more effective in rural than in urban areas. In rural areas, a vast network of vaccination programmes, the social connectivity of community- health staff and widely accessible mobile phone networks significantly contributed to spreading awareness regarding the pandemic safety protocols. Also, the partnership between the Directorate of Family Planning and local government representatives, facilitated through the Extended Programme on Immunization (EPI) and maternity health support activities in community clinics, has expanded the social network and improved access to frontline healthcare professionals at the rural level. Kapucu (2006a) asserted social capital networks established before a disaster can perform better, as they tie responding agencies together and are less constrained by cross-sectoral boundaries during a crisis. In addition, boundary expansion has proven to be more instrumental in rural areas than in urban settings.

In contrast, urban areas faced challenges because of inadequate and fragmented coordination and communication. This performance made the risk management tasks difficult for the health sector. The local government, responsible for providing primary healthcare in urban areas, lacked the logistics and resources necessary to establish a robust risk communication platform. Additionally, the study confirms that the poor coordinating and deficiency in resource distribution cause logistical complications in urban areas (Chan et al., 2004, p. 1232). For example, several digital platforms such as “Shastho Batayon-16263” and national health call centres offering 24/7 tele-services including information on Covid-19 did not perform well, particularly in urban areas. Similarly, multiple emergency hotline services established by various responding organisations confused people by providing numerous conflicting or no information. Hence, the limited access to primary health data by the Civil Surgeon (CS) deteriorated the coordinated functions with city corporations and municipalities in urban areas. Therefore, the study confirms that the greater presence of bonding social capital networks is associated with the higher level of coordination and had a significant and positive effect on the overall crisis management capacity of the health sector. The findings provide insight on informal collaboration level based on the community level contextual factors at play.

“Our strong factor is that we have a social network support system for health up to the ward level. We can send and collect information rapidly. Moreover, the village people know the health workers and easily access them whenever needed.”

## **4. Discussion**

This study examined the coordination capacity of the health sector in Bangladesh during the pandemic crisis. The findings revealed that the Bangladesh health sector employs a formal coordination mechanism characterised by both hierarchical and network-type features. According to WHO (2017) both of these

Directorates govern their own health officials at sub-district, union and community clinic levels, which creates problems in a number of areas, including data collection and reporting, hinders monitoring and supervision and referral of patients between two types of services.

This study analysed how multi-layered coordination mechanisms split the role of cohesive coordination, weakened the performance of the health service sectors and undermined the authority of the Directorate General of Health Services (DGHS) as outlined in existing Acts. This scenario partly explains the absence of a formal organogram and an effective coordination blueprint of crisis management. Data analysis shows that four vital ad hoc national-level committees established to address pandemic had overlapping and fragmented responsibilities that were misaligned, which compromised accountability and created role conflicts.

The lack of coordination among these committees affected the local-level managers' ability to make decisions and to take apt action, ultimately resulting in non-cooperation among the responding agencies. Additionally, the cabinet division added an extra layer of coordination by appointing high-ranking officials as chief coordinators for 64 districts. These coordinators were tasked with reporting directly to the Cabinet Division, which meant they were not accountable to the Ministry of Health and Family Welfare (MoHFW).

During Covid-19, the response mechanism is influenced by the organisational culture. Issues related to internal politics and professional power dynamics became increasingly visible among responding organisations. Bowman (2004) and Mandell (2001) argued that politics and power struggle issues could be important for agencies during collaboration. However, they also have the potential to downsize collaborative actions of an organisation. The tendency to seek individual credit for collective action and superimposed authority undermines collaboration. Hankering after praise and other benefits by any individual organisation creates discontent among other responding agencies in a collaborative framework. This tendency makes horizontal relationships ineffective (Clarke & Chenoweth, 2006).

It is important to comprehend the effectiveness of underlying value system of an organisation for better coordination (Vanagas & Stankevič, 2014). Peters (1998, p. 229) argues that coordination is more likely to occur without using authority if there is common logic shared among organisations. The analysis of this study suggests that if organisations share common policy values, coordination is also likely to occur with less disruption of organisational routines. At the local level the study found that shared value can guide coordination among different networks. In contrast, conflicting value systems hampered the process of coordination during crisis. Internal organisational practices, along with professional norms and values, are essential for both internal and external coordination. It is argued that these organisational practices are akin to the core culture of an organisation, which significantly influences the achievement of its goals (Mahar et al., 2021). For example, the study found that responding agencies often uphold a culture prioritise their individual role within the collaborative network rather than embracing shared responsibilities. The challenge lies in fostering an environment where all responding agencies from various sectors perceive the shared risk and are eager to coordinate their responsibilities. These findings reinforce the idea that implementing inter-governmental relations among culturally and structurally diverse organisations encounters several challenges, including a lack of common understanding among stakeholders, low trust levels, limited authority and insufficient capacity for participation (NAPA, 2004 as cited in Kapucu et al., 2010, p. 229). Therefore, it is important

to overcome the structural and cultural differences among organisations by determining their strengths and weaknesses.

ICT networks influence the coordination capacity of the health sector. Rice (1990) argued that the success of intra and inter-organisational communication systems in emergencies is determined by their effectiveness in gathering and utilising available resources, knowledge and technology. The findings indicate that the coordination capacity of the health sector received an advantage by replacing the constraints of traditional communication systems with updated digital communication tools (Comfort, 1999; Louise K Comfort & Naim Kapucu, 2006; Quarantelli, 1997). Additionally, these tools facilitated a robust communication platform in managing multiple actors in scattered locations by providing them with a rapid access to data and information during the pandemic crisis (Rice, 1990). The findings of the study supports the argument that “organisations vary considerably in organisational form, mission and constituency in ways that affect the types of social capital available to them, which in turn can be expected to influence their capacity in emergency response operations” (Kapucu, 2006a, p. 210).

The study found that risk communication was more effective in rural than in urban areas. In rural areas, a vast network of vaccination programmes, the social connectivity of community- health staff and widely accessible mobile phone networks significantly contributed to spreading awareness regarding the pandemic safety protocols. Also, the partnership between the Directorate of Family Planning and local government representatives, facilitated through the Extended Programme on Immunization (EPI) and maternity health support activities in community clinics, has expanded the social capital network and improved access to frontline healthcare professionals at the rural level. Kapucu (2006a) asserted social capital networks established before a disaster can perform better, as they tie responding agencies together and are less constrained by cross-sectoral boundaries during a crisis.

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Therefore, the study confirms the argument that achieving integration was challenging in turbulent situations when multiple actors need to be synchronised simultaneously (Kellogg et al., 2006). This scenario is particularly true for the extreme settings in which fast-response organisations operate (Faraj & Xiao, 2006; Schakel et al., 2016). Without having “shared social cognitive resources”, it is very difficult to adapt quickly to the crisis situation and coordinate diverged response organisations (Louise K. Comfort & Naim Kapucu, 2006; Uhr et al., 2008). Therefore, for faster response, the integration or linking together of different parts of an organisation to accomplish a collective set of tasks is important (Van de Ven et al., 1976, p. 322).

The health sector at the central level played a crucial role in coordination until the Prime Minister’s Office assumed control of the mechanism. At the local level, health sector acted primarily as a technical

advisor and support entity, working in collaboration with local administrative services to respond to the pandemic. In the existing administrative structure of Bangladesh, local administration is responsible for overseeing coordination activities during disasters. It has been reported that a lack of coordination, monitoring and strategic data management negatively impacted coordination operations at the local level. This situation allowed the Cabinet Division to circumvent the roles of health sectors, establishing a shadow command and control network utilising the existing power structure. For instance, at the district level, a committee was formed and chaired by the Deputy Commissioner. At the same time, the Civil Surgeon (District Health Administrator) acted as the member secretary of this committee, which formalised the lead agency activities while managing crisis. This approach enabled the centralised cabinet command outside the health sector to manage the crisis. In another respect, this provision encouraged lead agency arrangements at the local level, which somewhat undermined the expert role of the health sector in handling crises.

However, the study observed that the lead agency successfully managed a network of organisations and directed its policy (Soujaa et al., 2021, p. 1024), which set out the agenda, maintaining cohesion and consensus among various agencies while retaining supervisory powers over other jurisdictions (Christensen et al., 2016b). Research in this areas has shown that lead agencies can pressure non-profit organisations and other local agencies to participate in collaborative governance (Jang et al., 2016). In the case of Bangladesh, the district administration worked as an inter-organisational hierarchy using a “centralised command to manage a network of multiple organisations” (Moynihan, 2008, p. 206). Coordination management from the perspective of an ‘incident control agency’ or ‘lead agency’ has proven effective during several disasters in Bangladesh. The lead agency system provides a practitioner-based functional response to all types of crises (Boin, Busuioc, et al., 2014). However, in case of Bangladesh, it is noted that when the health sector opts for taking the role of lead agency, it outmatches the existing political-administrative system in place.

The study has conclusively show that during crisis, the coordination arrangement has been observed in Bangladesh supports the argument of ‘hybrid coordination arrangement with a shadow hierarchy’ as mentioned by Héritier and Lehmkuhl (2008). This approach coordinated its core members alongside voluntary participants from the business, political and individual levels, forming a trust-based network that contributed significantly to accumulate local resources in managing crises. This framework, however, supports the argument that coordination in a crisis captures an intermediate form between traditional hierarchy and horizontal networks, referred to as the lead agency approach (Boin & Van Eeten, 2013; Christensen & Lægreid, 2014), which proved to be more effective than fragmented and overlapping patterns of coordination in central administration. Evidence suggests that the coordination process was shaped by several internal and external factors as well as their interactions. These findings are linked to the scholarly argument that the interplay among multiple factors may lead to a hybrid coordination arrangement for managing crises in the health sector (Boin, Busuioc, et al., 2014; Moynihan, 2008). Furthermore, it has been observed that the vertical dimension of coordination managed centrally at the national level by the Cabinet Division and Prime Minister’s Office (PMO) proved to effective to an extent to employ command over local administration. However, the rigorous control of vertical coordination at the local level was absent due to the transboundary nature of the crisis and local network arrangements for resource accumulation.

Finally, the findings underscore the critical role of effective coordination. This assertion is supported by a range of scholarly articles emphasising the successes and failures of coordination capacity in crisis management in dealing with transboundary crises (Ansell et al., 2010; Boin & Bynander, 2015; Boin et al., 2013; Kettl, 2003). A notable finding from the study is its support for the claim of Christensen et al. (2016b), which presents the significance of organisational institutional and instrumental culture in fostering coordination response mechanisms. Hence, the analysis identified the pertinent nexus between the formation of lead agency formation and the adaptation of an emerging hybrid coordination framework with shadow hierarchy.

## 5. Conclusion

The findings suggest that the crisis coordination has impacted the organisational capacity of the health sectors to tackle pandemic. The impact of the crisis was seen as multifaceted, focusing on the managerial aspects of resource management and organisational culture as well as livelihood issues. Each aspect is important and covers several policy dimensions, prompting the health sector to collaborate and build interconnectivity with other related stakeholders. The whole process of governance came under the influence of the crisis as it spanned its boundaries to the farthest corners of the nation. The primary and direct impact was felt by the Direct Responding Organisations (DROs), where healthcare officials opted for a locally organised trust-based network to manage the crisis. The role of transformational leadership, complemented by traditional transactional characteristics, was observed at the local level, while the National Strategic Organisations (NSOs) adhered to the hierarchy set up by forming ad hoc committees to tackle the pandemic, which often faced role overlapping, fragmentation and disorientation in managing the crisis. Therefore, it is challenging to analyse which organisations had a greater impact and which played a more significant role. However, both organisations contributed to coordination, decision-making, risk communication, personnel management and shaping the organisational culture, which also suffered a blow from the pandemic. In the process of organisational adjustment, the health sector has undergone certain changes and adopted new policies. The response was initially done solely without the help of community engagement and lack of proper IT management. The difficult and unique part of the response was the fear of getting infected and dying from the crisis the medical practitioners were dealing with.

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