

# Exploring the role of policy actors in the implementation of social distancing: a case of COVID-19 in Pakistan

Role of policy actors in social distancing

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## Abstract

**Purpose** – At the outbreak of the COVID-19 pandemic, the absence of pharmaceutical agents meant that policy institutions had to intervene by providing nonpharmaceutical interventions (NPIs). To satisfy this need, the World Health Organization (WHO) issued policy guidelines, such as NPIs, and the government of Pakistan released its own policy document that included social distancing (SD) as a containment measure. This study explores the policy actors and their role in implementing SD as an NPI in the context of the COVID-19 pandemic.

**Design/methodology/approach** – The study adopted the constructs of Normalization Process Theory (NPT) to explore the implementation of SD as a complex and novel healthcare intervention under a qualitative study design. Data were collected through document analysis and interviews, and analysed under framework analysis protocols.

**Findings** – The intervention actors (IAs), including healthcare providers, district management agents, and staff from other departments, were active in implementation in the local context. It was observed that healthcare providers integrated SD into their professional lives through a higher level of collective action and reflexive monitoring. However, the results suggest that more coherence and cognitive participation are required for integration.

**Originality/value** – This novel research offers original and exclusive scenario narratives that satisfy the recent calls of the neo-implementation paradigm, and provides suggestions for managing the implementation impediments during the pandemic. The paper fills the implementation literature gap by exploring the normalisation process and designing a contextual framework for developing countries to implement guidelines for pandemics and healthcare crises.

**Keywords** COVID-19, Normalization process theory, Nonpharmaceutical interventions, Policy actors, Social distancing, Pakistan

**Paper type** Research paper



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## Introduction

In the initial days of the COVID-19 pandemic, no pharmaceutical drugs were available to prevent the spread of the virus. With the lack of better alternatives to treat the disease and reduce contamination, government policies were introduced as solutions (Moraes, 2020). Public health policy institutions intervened with the provision of nonpharmaceutical interventions (NPIs) to prevent or reduce the burden from the disease. NPIs include state policy decisions to limit and manage the pandemic, such as social distancing (SD), imposing a ban on public gatherings, mandating home confinement, enforcing the closure of schools and nonessential businesses, compulsory face masks, and forced quarantine (Fong *et al.*, 2020). This study focuses on SD in medical establishments in the local context (i.e., in the Multan district of Pakistan's Punjab province) given the worldwide adaptability of SD in managing the pandemic (Prem *et al.*, 2020). SD is vital modus of augmenting the space between the public to reduce disease contamination (Sen-Crowe *et al.*, 2020).

The role of policy institutions in the absence of pharmaceutical agents urged the need to study COVID-19 under a sound theoretical and methodological lens. Accordingly, to understand the implementation of SD in actual settings in the context of COVID-19 in Pakistan, researchers studied the implementation intervention performed by the policy actors guided by the following core research question: How do policy actors engage in SD while performing their professional duties?

The first necessary step is to identify the relevant actors. For example, Amanor-Lartey (2019) recognised that identifying key actors within functional groups could improve the implementation process. In response to WHO guidelines, the Pakistani government implemented "The National Action Plan for COVID-19" as a principal policy document. It is pertinent to explore how these policy guidelines helped SD implementation. SD plays a crucial role in mitigating the spread of the pandemic (Guimaraes *et al.*, 2021). Other methods, such as testing and screening for the virus, are financial burdens for low- or middle-income countries (Lammers *et al.*, 2020), such as Pakistan. Healthcare providers were instructed to closely follow SD (Anthony, 2021) as they are more prone to the disease because of the nature of their work (i.e., characterised by close patient contact). Razaq *et al.* (2020) observed that approximately 10% of reported infections were among healthcare workers. Therefore, SD can reduce the risk of infection in healthcare workers and help manage the disease's financial implications. It is pertinent first to identify the sub-group of policy actors or those actively involved in SD implementation, followed by healthcare workers' adherence to SD. Accordingly, the core research question was divided into the following two sub-questions:

1. Who are the policy actors actively implementing SD in the local context?
2. How do healthcare providers integrate SD into their professional lives?

In the forthcoming sections, the authors explain the current state of implementation literature, and identify a research gap in the context of a complex and dynamic environment. The following section describes the theoretical framework, wherein we illustrate the importance of a theory for understanding the implementation process and indicate the reasoning behind the selection of Normalization Process Theory (NPT). The methodology section covers the settings, sampling strategy, sample size, and primary and secondary data collection. The section on data analysis and results addresses the sub-questions by first identifying the active policy actors in the implementation of SD, followed by explaining SD integration in the professional lives of healthcare workers as per the operating mechanisms of NPT.

## Literature review

Brodkin and Kingdon (1985) observed multiple interest groups or networks in the policy process. Howlett (2018) prolonged the policy actors' concept of these authors by including the

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policy implementation stream after combining the advocacy coalitions framework and policy cycle model with the multiple streams framework. Howlett concluded that the policy actors identified in the initial stages of the policy cycle also participate in its later stages (i.e., implementation).

The contemporary issues for policy scholars are policy choices and implementation. Public policy and its implementation are never self-enacting. Rather, relatively organisational activities link the government's determination to fix certain problems. Such calamities as the COVID-19 pandemic require a mandate with immediate and coordinated actions. Implementation is a significant piece of policymaking and indicates a collaboration between several relevant actors and institutions (Stewart *et al.*, 2008). Moreover, introducing contemporary concepts in policy sciences relocates the administrative functions of institutions and actors with the collective aim of streamlining coordination and implementation (Lester and Krejci, 2007). Policy implementation progresses according to certain factors, such as political, social, economic, organisational, and attitudinal. However, the role of policy actors in policy implementation cannot be ignored (Goggin *et al.*, 1991).

The literature has been expanded, indicating that implementation research is growing under relevant themes (Roll *et al.*, 2017). Implementation researchers have explored policy implementation issues and focused on developing analytical frameworks and explicit theory building, which has yet to be realised (Paudel, 2009). The contemporary paradigm of implementation research has emphasised revisiting the subject and object of implementation for theory building, testing, and application (Howlett, 2018). Dickinson and Sullivan (2013) highlighted the need to search for new conceptual tools to understand implementation dilemmas and apply existing tools in such novel scenarios as the COVID-19 pandemic. Lotta *et al.* (2020) observed how actors have addressed COVID-related implementation challenges, and Roziqin *et al.* (2021) pointed out that the virus, as a complex issue, requires unique frameworks to be followed for the successful implementation of disease prevention and control policies.

The lack of a sound implementation theory, the resultant calls within the current implementation paradigm, and the importance of actors' role in implementation highlight the literature gap that there is a need to understand the role of policy actors while applying the implementation theories in a complex and dynamic environment, such as that of the COVID-19 pandemic.

### Theoretical framework

Policy practitioners and researchers have understood the practical importance of policy research, leading many to adopt explicit theories for studying the implementation process (Nutley *et al.*, 2010; Woolf, 2008). Theories offer applicable frameworks in diverse settings, such as in knowledge accumulation, analysis (Forster *et al.*, 2011), and understanding the various implementation factors. Theories may develop the capacity to design, shape, and improve policy interventions and implementation processes (MacFarlane *et al.*, 2012). It is thus key to analyse new models and theories – which may originate from different disciplines – to review their applicability and utility for the healthcare field (Murray *et al.*, 2010).

The implementation literature has advocated adopting certain frameworks or theories to study policy interventions. The Non-adoption, Abandonment, Scale-up, Spread, and Sustainability (NASSS) framework seems to be more adaptable regarding technological intervention. However, in the case of healthcare intervention, NPT is more frequently used (Morrison and Mair, 2011). NPT emphasises the implementation process between the context, actors, and objects consistent with social and interactive research models. The theory originated from studies exploring implementing complex and innovative interventions within the healthcare setting. Therefore, NPT is highly relevant to our case of understanding the implementation of SD as a complex and innovative intervention in a COVID-19 context.

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NPT can help understand how any healthcare intervention becomes part of everyday activities. Previous studies accord in the understanding of the NPT's core constructs: Coherence (Co), Cognitive Participation (CP), Collective Action (CA), and Reflexive Monitoring (RM). However, researchers have provided various definitions of the constructs' specific uses. For example, [Browne \*et al.\* \(2014\)](#) modified the theoretical constructs to make them more relevant in understanding intervention. [Morden \*et al.\* \(2015\)](#) illustrated that the rigorous application of theoretical constructs may influence data collection, analysis, and findings. Accordingly, researchers have tended to use the theoretical constructs following the objectives of their study ([May \*et al.\*, 2009](#)).

### **Methodology**

The current study satisfies policy implementation and emphasises the facets of the NPIs that occurred in the wake of the COVID-19 pandemic. The authors adopted NPT as an instrument with which to frame the study in order to clarify the organisational aspects and establish a theoretical link to the intervention. NPT is a mid-level theory established for understanding how interventions come to be entrenched into routine practices ([May and Finch, 2009](#)). The data collection methods supported the study's qualitative research design, research questions, purpose, and theoretical framework. The data were collected through policy document analysis and semi-structured interviews (n=17) from three hospitals in the Multan district of Punjab (Pakistan's most populous province).

#### *Setting*

The study was conducted in Pakistan. The authors selected one district (in the COVID-19 red zone at the time of data collection) in Punjab. After approaching all available government hospitals, three of them gave us positive responses for data collection from May 2021 to July 2021. As such, the data collection was spread over three case-specific sites: Nishtar Hospital, a tertiary care teaching hospital with a capacity of 1,800 beds; Multan DHQ Hospital, a primary and secondary healthcare hospital with a 350-bed capacity; and the Fatima Jinnah Women's Hospital, a specialised healthcare hospital with a 200-bed capacity.

#### *Sampling strategy*

For qualitative data collection, the authors adopted a mix of purposive and snowball sampling strategies. Moreover, the participants were made fully aware of their rights, the data collection mode, the purpose of the study, research objectives, and the reasons behind them having been identified as potential participants, as per the protocols of informed consent.

#### *Sample size*

The authors aimed for a medium-range sample size for interviews to support a qualitative study design guided by the data saturation for the qualitative dataset. The saturation point served as a guide, and was achieved when an interview session with a participant did not yield additional information and apprehension of the phenomenon of interest.

#### *Secondary data collection*

Secondary information was obtained from authentic sources. This involved collecting a comprehensive set of documents, such as public records (policy documents), personal documents, and physical evidence (training materials). The documents considered evidence for this involved those related to the notification of provincial technical committees and functional distribution of COVID district teams, including the study area's district management, health, and allied departments.

*Primary data collection*

Instrumentation involves collecting primary data, and eliciting sound and rich descriptive information to address the core and subsequent research questions. The interview guide was initially adopted from the work of [McNaughton et al. \(2019\)](#), and amended by considering the current study’s objectives, research questions, and literature review. In so doing, the authors developed themes that helped update, enrich, and amend the interview guide. The resultant interview questions and probes allowed us to explore the depth and breadth of the participants’ experience. The study used three preliminary interviews from each study site and seventeen semi-structured interviews. Personal and individual invitations were sent to all participants, and maintained a degree of anonymity. The interview guide was pilot-tested; interviews were audio-recorded, transcribed, and analysed under framework analysis protocols. Themes were identified per the theoretical constructs, following the study objectives and theoretical support. NPT supported the coding, analysis, and reporting of the qualitative data obtained.

Thirty interviews were initially distributed, of which seventeen responses were received. The participants provided a cross-section of healthcare professionals from three study sites, thus representing a variety of experiences in healthcare settings. Details of the participants’ demographics are given in [Table 1](#).

*Study limitations*

The study’s limitations relate to the sample, environment, and timings of the interviews. The interviews were conducted from May to July 2021, with fluctuating numbers of COVID-19 infections in Pakistan making some potential participants unwilling to be interviewed. The study was conducted in a complex environment in COVID wards with high infectious areas.

**Data analysis and results**

The research question was divided into two sub-questions. The first was addressed by analysing the secondary and primary sources. The policy actors involved in this case were the

CHARACTERISTICS	NCOC	HOSPITAL 1	HOSPITAL 2	HOSPITAL 3	TOTAL
<b>Age Group</b>					
21 years to 30 years	-	1/5	2/5	1/5	4/17
31 years to 40 years	-	4/5	3/5	4/5	11/17
Above 40 years	2/2	-	-	-	2/17
<b>Gender</b>					
Male	2/2	4/5	4/5	-	10/17
Female	-	1/5	1/5	5/5	7/17
<b>Occupation</b>					
Dy Medical Superintendents,	-	1	1	1	3
Doctor-Medical Officer,	-	1	1	-	2
Doctor-PG Registrar,	-	1	-	1	2
Member NCOC	1	-	-	-	1
Member PTC	1	-	-	-	1
Principal Medical Officer	-	-	1	-	1
Senior Medical Officer	-	1	-	1	2
Ward Registrar	-	1	1	1	3
Female Medical Officer	-	-	1	1	2

Source: Interview data by authors

**Table 1.**  
Demographics of the interview participants

intervention actors (IAs) that actively interacted in implementing SD. Active interaction refers to the activities performed by the relevant officials in the wake of implementing SD within the framework of the COVID-19 Disease Prevention and Control policy. For the second sub-question, a qualitative inquiry was conducted on the data collected through interviews and analysed through the framework analysis approach. The authors adopted the seven-stage process of framework analysis of [Gale et al. \(2013\)](#) which illustrated the enhanced analysis in healthcare research, and satisfied the requirements of transparency and rigor in qualitative data analysis. These seven steps included transcribing the interview data, familiarising ourselves with the interview, making codes, developing the analytical framework, adopting the framework, listing data in the framework, and finally, the interpretation. The analytical framework and code book containing the listed data were thus developed.

*Policy actors*

This section covers the first sub-question. The base document (The National Action Plan for COVID-19 Disease Prevention and Control) in Pakistan divided the policy actors into three groups to deal with the risk of contamination and community engagement. The influential group included political figures, media persons, and religious leaders. The functional group included the health sector, allied departments, and finally the public as end beneficiaries. The authors closely aligned these three groups with the [Walt and Gilson's \(1994\)](#) basic triangle policy model to identify relevant policy actors, including the political-administrative authorities, implementation agencies, and end beneficiaries. First, the political leadership, relevant ministries, the National Command and Operations Centre (NCOC) are defined as political-administrative authorities. Second, the District Health Authorities (DHA), hospital managers, government administrative bodies are the implementation agencies, and finally, the end beneficiaries include local individuals and members of civil society organisations.

The document analysis gave a brief list of the policy actors implementing SD in the local context. NPT-based studies on interventions are focused on healthcare professionals ([Quinn et al., 2016](#)), patients, clinicians, health managers, and team coordinators ([Franx et al., 2012](#)), as well as with professionals responsible for planning and implementation ([Murray et al., 2011](#)). In order to be able to more broadly refer to these officials, the term 'intervention actors' (IAs) is used, which includes the policy actors responsible for implementation. Resultantly, the entire government machinery was involved in this research. The district health managers, hospital managers, district government officials, and medical and allied healthcare providers were involved in the implementation of SD. [Table 2](#) lists the IAs in detail.

Policy Actors Active in the Implementation of Social Distancing

<b>Political administrative authorities</b>	Members of NCOC/Provincial Technical Advisory Committee (PTAC)	Medical/public health experts providing technical, advisory, and managerial services to the core institutions managing COVID-19 policies, such as the NCOC/PTAC.
<b>Implementation agencies</b>	District machinery, Healthcare professionals	Healthcare professionals, such as CEOs of the district health authority and medical superintendents of hospitals, and some clinical experts, like senior registrars, post-graduate registrars, medical officers, psychologists, lab technologists, respiratory therapists, head nurses, and charge nurses.
<b>Monitoring Bodies</b>	Healthcare monitoring bodies	Medical/public health experts with experience in appraising government-led interventions.

**Table 2.**  
Policy Actors Active in the Implementation of Social Distancing

Source: Thematic analysis by authors

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## **Integrating Social Distancing (Description as Per Operating Mechanisms)**

*Making Sense of Social Distancing* – Can policy actors make sense of SD as a new way in which to operate?

SD, as a fundamental NPI, was considered a vital measure for managing the pandemic. All the policy actors/IAs involved in its implementation considered it the right time to make sense of SD. Due to the novelty of the current pandemic, such policy institutions and state organisations as the WHO and NCOC provided guidelines to be followed by IAs. As some of the interviewees informed us:

As this disease was new to the world and no guidelines were initially available, it was the first pandemic in the last hundred years after the Spanish flu in 1918. (DMS3, 10 years as a health manager)

SD is mainly used for COVID prevention and to stop its spread. Suppose one person is a carrier, SD prevents its spread to another person. Most healthcare providers or workers are carriers, and it is very pertinent for them to follow SD. (SMO5, 12 years as a medical expert)

All of the interviewees believed that, initially, such interventions were the only available source to manage the pandemic by breaking its chain of contamination. At first, people were resistant to accepting SD and following its protocols. Indeed, some members of the population were even sceptical of the pandemic's existence. However, medical professionals were keen on observing SD protocols. Most medical professionals reported the difficulties in observing SD while treating patients. As one post-graduate registrar stated while sitting in the COVID ward:

Initially, people took SD as a social stigma, but over time, people developed their conscience about SD and started accepting it partially. (PGR6, 5 years as a medical expert)

Another medical expert stated that:

We always try to follow SD because if we do not, how can we make examples for others to follow? (MO7, 3 years as a medical expert)

Another participant added:

We, as medical professionals, cannot easily follow SD. With personal protective equipment, it is challenging to perform eight hours of duty and long calls. (MO7, 3 years as a medical expert)

*Actors' Investment in Social Distancing* – Are the policy actors engaged with SD?

While the various IAs were involved in implementing SD with specific roles, this level of engagement differed. One expert explained that the government had made significant investments to enrol all the relevant actors in implementing SD and illustrated that:

Historically, we have faced a lot of other diseases, like chickenpox and polio. We are also striving with this disease. We are hopeful that one day we will completely curb its effects, and no more training would be required as the government has already delivered enough training materials and sessions. (DMS8, 9 years as health manager)

However, the analysis of the duty roster revealed that the enrolment allowed the medical experts from various functional units/hospital wards to perform long calls and shift duties within designated COVID-19 wards.

As one medical expert noted:

The new ward registrars did not receive any specific training. Every ward administrator sends a post-graduate registrar for COVID duties. So, the issue is with the duty roster. They should specify a team and train them to work in such an environment. (SMO10, 11 years as a medical expert)

IAs are playing a positive role in implementing SD, as evidenced by one participant:

It is a learning process; we need to be aware of people repeatedly through different mediums. (DMS13, 11 years as health manager)

The government has invested every available resource involving local governments, security agencies, health and allied departments, and district machinery to implement NPIs (including SD). One participant explained that government schools and their staff could also be used:

The main point is education and training; specifically, it is required in underdeveloped areas. The government schools and their teams could be used for this assignment. (MO7, 3 years as a medical expert)

Many medical experts reported that their profession allowed them to more comprehensively understand the need for SD. Accordingly, they both follow SD and advise others to do so. However, they noted that following SD for long periods of time was challenging. A medical expert explained that:

The environment is now challenging to work with other colleagues, but it's manageable. (DMS13, 11 years as health manager)

*Adaptation of Social Distancing* – What do the policy actors need to implement SD?

All of the participants or IAs appeared to play their due and constructive roles in enacting SD. The IAs were clear about their roles and responsibilities for implementing SD as per the operating mechanisms (interactional workability, relational integration, skill-set workability, and contextual integration). The practices of the IAs followed the required protocols and frequencies. It is worth mentioning that the skills necessary to perform the intervention practices and heighten the public's awareness of them were upgraded with time and resulted in a considerable change in the adoption of intervention among the IAs. Some of the interviewees illustrated that:

The response varied; the whole community was not receptive initially. Somewhere people observed, but the majority did not give it the value it required. (SMO10, 11 years as a medical expert)

Fruitful implementation of the intervention depends upon the actor's commitment to the adaptation of the intervention, specifically the administering staff. In implementing this intervention, relevant policy actors were clear about their roles. Moreover, they performed specific assignments, like those of the NCOC, which enacted policy decisions and forwarded its decisions to other actors for implementation.

As one of the interviewees explained:

The decisions were made by the NCOC and forwarded for implementation. The success story behind this was that the decisions were trickled down from one place to the other. (DMS13, 11 years as health manager)

All the actors involved in the implementation process were aware of their role in the process and the engagement of other supportive institutions. One of the interviewees demonstrated that:

Civil administration with security forces was with us right from the beginning. (MO17, 2 years as a medical expert)

*Appraising Social Distancing* – Are there evaluation mechanisms? Are the policy actors aware of the changes required?

All of the actors interviewed evaluated SD as valuable and understood its integration. The healthcare providers made constructive deviations in their lifestyles, and consistently tried to follow SD and advise others to do the same. However, some believed that:

If you want to adopt SD, we have to create social space. (WR14, 8 years as a medical expert)



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There is a precise appraisal mechanism; local governments, district machinery, and security agencies observe its implementation and provide daily reports to the NCOC for data analysis. One participant explained:

The government formed task forces, and WHO surveillance teams were working on this. They used to survey and analyse their reports, and gave feedback to government policymaking institutions. The NCOC published different reports for public awareness, and other allied departments played their due role. (DMS03, 10 years as health manager)

## Discussion

COVID-19 has affected millions of people around the globe. Mandatory NPIs (Suzuki *et al.*, 2021) – and, specifically, SD measures – amplified the likelihood of people staying in their homes (Engle *et al.*, 2020), thereby ultimately reducing the disease’s burden. Alimohamadi *et al.*’s (2020) empirical study in Iran employed the segmented regression model and interrupted time series analysis, and demonstrated the positive relation of SD in managing the pandemic. However, the findings of our study offer insights into the policy implementation being entrenched into actual practice. The authors stretched the application of theory within the novel case of COVID-19 and explored the IAs active role in the implementation.

Most of our participants recognised SD’s differences to usual work practices as well as the difficulties to its adoption due to the nature of their work. Accordingly, the government of Pakistan introduced some specialised, managerial, and skill-based training for the IAs, which helped them understand, implement, and integrate SD into their professional lives (to some extent at least). Nevertheless, it has not been easy for them to fully observe SD because of their direct contact with patients. Anthony (2021) illustrated that healthcare providers need to follow SD. In healthcare organisations, people learn through training, development, and knowledge dissemination (Noe *et al.*, 2014; Nembhard and Tucker, 2011; and Tsai *et al.*, 2015) demonstrated that the effective use of organisational management practices can improve outcomes in healthcare organisations. Although government initiatives have helped IAs to create a shared understanding, the nature of their job has been the foremost hurdle to observing SD, ultimately resulting in a low degree of coherence.

The authors observed that several IAs have been involved in implementing SD with different levels of engagement. The government has involved all of its resources, and designed a higher-level cabinet committee to oversee COVID-19 matters and a specialised operations centre (the NCOC) for policymaking. The NCOC launched data-driven policies, and coordinated with provinces and districts for their implementation. However, provincial autonomy was a major barrier to NCOC operations. In a study in Brazil, Martins-Filho *et al.* (2020) observed that restrictions concerned decentralised manners. The government has combined such bodies as the district machinery, local governments, security agencies, and allied and health departments to fight the pandemic. Scientists and persuasive civilizations have often cautioned about the menaces of evolving infections and the threat of global pandemics. Nations typically depend on health systems for combatting pandemics, developing vaccines, public health reporting, and health decisions. However, addressing the implications of the COVID-19 pandemic on societies entails more than just the actions of healthcare professionals – it calls for the participation of national and international policy institutions, and government benches. Accordingly, the notions of teamwork and leadership are critical to the success of healthcare organisations (Weaver *et al.*, 2014), such as in the case of the COVID-19 pandemic. The concept of motivation is also vital for policy intervention (Michie *et al.*, 2011). In our case, the working of various departments as one team represents not only a high level of motivation, but also of actor participation.

Involved policy actors play a constructive role in implementing SD. IAs are fully aware of their role – in no small part due to the NCOC's advice on the implementation of their evidence-based policies. [Hirschhorn et al. \(2020\)](#) observed that evidence-based policies could be effective in the case of COVID-19. Implementing NCOC directions at the regional level has policy issues, such as initiating COVID-19 treatment wards in tertiary care hospitals and increasing the number of cases. [Leerapan et al. \(2021\)](#) observed that the policies in Thailand initially and unintentionally helped spread the disease around the country and resulted in low adherence to SD, leading the Thai government to organise task forces for the strict implementation of SD. A study conducted on determinants of SD by [Morales \(2020\)](#) found a positive correlation between forced SD and the number of cases. [Battiston and Gamba \(2021\)](#), in an Italian study, positively associated the strict implementation of SD measures with the reduction in the pandemic's spread. [Falah Hasan \(2021\)](#), in a study on Arab countries, associated the implementation of SD with economic support. Instead of being a developing country with meagre financial and human resources, the Pakistani government provided every available resource for implementing SD, resulting in a high degree of collective action.

IAs have adopted the changes to their lifestyles led by SD implementation. The majority have welcomed the opportunity to expand their roles from clinical management to data analysis, policy implementation, and coordination tasks. Their enhancement of their skillsets through specialised training and orientation programmes has created a new role for clinical professionals, and expanded the role of infection control studies. The government used all the required resources to develop evaluation mechanisms, such as enrolled security agencies, district management, regulatory bodies, and such international organisations as the WHO. [Morales \(2020\)](#) observed that people adhere to the obligatory rules of SD rather than respond to the pandemic's severity, which ultimately enabled IAs to make necessary changes in their lifestyles and behaviour. As behavioural change is crucial for improving policy outcomes ([West et al., 2020](#)), the participants explained that SD acceptance takes time, which consequently represents a high degree of reflexive monitoring, as per the theoretical constructs.

Understanding the intervention implementation can explain the actions of existing policy actors in terms of SD and its integration in the local context. The analysis resulted in a mixed-models policy implementation approach. The practices succeeding the intervention decorum and the mix of notions lead to the responsible implementation of SD to manage the pandemic. These notions include:

- a) Centralised decision making: creating a national-level committee within the upper legislative house, the NCOC, provincial support systems, and COVID district teams.
- b) Capacity development: training and development for IAs and the general public.
- c) Innovative policy instruments: using data-driven policymaking from the NCOC.
- d) Inter-departmental coordination and rigid enforcement: enhanced inter-departmental coordination by involving various departments and rigid enforcement through security agencies.
- e) Resource utilisation: using every available resource, including human and financial.

## Conclusion

This study validates the utility of exploring policy implementation for developing a framework for applying WHO guidelines for low-or-middle-income countries. Through analysing the application of a rich theoretical design, the authors emphasise the need to explore the actors' work in implementing complex interventions, such as implementing SD as an NPI. Moreover, we also observed a wide range of policy actors active in implementation.

Following NPT, SD implementation has weak coherence and cognitive participation of IAs in terms of its integration. We observed strong collective action of the IAs towards integrating SD and more robust reflexive monitoring. Therefore, lower levels of coherence and cognitive participation, and higher levels of collective action and reflexive monitoring lead to the integration of SD in the local context. However, this could be improved through stronger coherence and cognitive participation, as well as the enhancement of certain policy and coordination issues. While the Pakistani government adopted WHO policies, it did not do so blindly. Rather, it prepared its own plans and guidelines for implementing NPIs. Accordingly, we observed a mixed-models policy implementation approach.

The IAs, including the healthcare providers, district machinery, and staff from other allied departments, were active in implementing SD in the local context. The phenomenon of SD integrates with the local context through the mixed-model's policy implementation framework. After the intervention implementation in the wake of process normalisation, the healthcare providers partially implemented SD in their professional lives. The chief roles of all IAs have thus become more responsive. Therefore, it could be concluded that integrating SD through a mix-models policy implementation approach in the local context leads policy actors to partially implement SD, thereby resulting in the partial support of SD integration within the professional lives of healthcare workers.

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