

MANAGEMENT OF CORONAVIRUS IN PAKISTAN

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ABSTRACT: The COVID-19 pandemic has affected people, especially in developing countries. There are problems and shocks from its rapid proliferation and fears of further growth. The situation demands that Pakistan's government deeply engage in planning, consultations, and fixing constitutional breaches to develop a comprehensive national health policy. The issues of a compromised healthcare system need to be urgently addressed. The best way to save lives is to have quality protective gear. It is also crucial to create international health partnerships to save lives. The policy should also focus on the growing problem of fake news. Every effort should include creating investment opportunities in digital platforms and managing external economic domains to achieve growth. Policymakers must also ensure that small businesses stay operating while health emergencies arise. This study examines the entire range of rescue operations, management, and planning but concentrates on specific factors that affect the Pakistani government's ability to enact far-reaching policies for the people's benefit. Considering how pervasive the impacts of the COVID-19 epidemic are, studying what could happen next is inherently more probabilistic. Related perspectives and concerned subjects may be explored in a study of the present outbreak and the policies and efforts to end it. This study uses an analytical approach to take an insight into the health governance of Pakistan and the challenges it faces.

Keywords: *COVID-19, pandemic, governance, health, policy.*

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INTRODUCTION

COVID-19 has affected the world on a massive scale, potentially affecting everybody while infecting millions worldwide. The scenarios of social, economic, and political disturbances and psychological and monetary annihilation have been immense, unprecedented, and destructive. Desperate times required desperate measures to protect the communities, social structures, and government systems. These measures primarily included global lockdowns, which involved "stay home, stay safe" advisories, social distancing measures, shutting down entertainment, food, and social gathering hubs, workings of education, communications, small, medium-sized, and large businesses, and corporations were primarily compromised. Billions of dollars were lost by flourishing companies, millions of jobs were gone, and globally, healthcare became the most discussed topic among the masses.

Still carrying its destructive impacts to new heights, the COVID-19 pandemic has increased the vulnerability of all healthcare domains and compromised the safety of healthcare professionals and associates. The responsibility comes to the shoulders of respective governments to ensure that these brave individuals working for better health are employed in secure and protected environments (Khalid &

Ali, 2020). Pandemics reflect a "community-level ignorance" (Khan M. R., 2021), uncovering the fundamental importance of better health measures adopted for community safety, keeping the healthcare governance coherent and at pace, and having endemics controlled and keeping from becoming outbreaks or pandemics. COVID-19 has challenged global human health and politics, inadvertently challenging the governance and healthcare management systems (Khan M. R., 2021). In Pakistan, the governmental healthcare system has never been up to the standards that could make people feel safe. The reason lies in the *emergency healthcare policy*, which is seldom found at the national level.

Literature Review: Khan, Gilani, Raza, & Hussain (2021) analyzed the days of the pandemic in Pakistan, addressing both basic and complex facts. At the time, self-isolation was the only preventive measure to stop this virus's spread. Therefore, it is essential to understand this viral infection's risks. Pakistan has among the highest incidence ratios of contagious diseases globally and has a record-setting number of cases. The disease's causes, control, and spread must be studied. Professionals are also susceptible to contracting the infection.

Regarding the lockdowns, they have trusted an internet-based compilation of data by filling out a self-constructed questionnaire that 1132 individuals answer. The data were observed using standard methods such as

SPSS and MS Excel. This questionnaire also focused on the degree of critical information concerning infection prevention among experts. Azam *et al.* (2020) said that COVID-19 has the most significant impact on developed countries, leading to further economic degradation in developing countries such as Pakistan amid the pandemic. Lockdown has led to the deterioration of the economy and poverty.

Pakistan started the intelligent and micro lockdown strategy to prevent the sudden rise in COVID patients, death toll, poverty, and economic decay. Controllability of government is the only solution to reducing COVID-19 while saving the economic outlook. This move can also reduce the negative impact of poverty in Pakistan. Rasheed, Rizwan, Javed, Sharif, & Zaidi (2021) assessed that lower public healthcare capacity, poverty, and environmental factors played an essential role in spreading the virus in Pakistan. The result of the COVID-19 peak on Pakistan's socio-economic aspects was reviewed in the paper. They estimated an economic loss of about 10% in FY 2021. The authors analyzed the policy measures, including lockdowns, social distancing, and travel restrictions. The poverty level will rise by 33.7% because of the pandemic. Adverse impacts on the financial system's primary, secondary, and tertiary domains, i.e., education, healthcare, and agriculture, were also examined. During lockdowns, a significant change in the country's air quality index of metropolitan cities was also recorded. The authors suggested that public authorities must improve health infrastructure.

Meta-Analysis of Literature: The authors have identified several problematic issues considering the literature reviewed and cited. There was a time when people could only prevent the spread of this infection by isolating themselves. Because of this, it is essential to know about this virus infection's new and changing risks. There must be research into the disease's origins, prevention methods, and spread rate to develop coherent policies at the governmental or institutional level. As a result of the pandemic, the economies of underdeveloped countries like Pakistan were already bad. Nevertheless, according to the WHO, the COVID-19 pandemic has the highest impact on developed countries. Since the lockdown began, the economy has declined, and poverty rates have risen. Better health care and medicine policies could help reduce the terrible effects of mental and physical illness and poverty in Pakistan. In most of the literature, the authors have found that the lack of public health care, poverty, and environmental factors are significant reasons for the spread of the virus in Pakistan. Thus, the authors looked at how the COVID-19 peak affected Pakistan's economy and society and what governance issues disturbed the healthcare systems, facilities, and institutions. The authors also investigated

how it hurt the economy's first, second, and third tiers: education, health care, and farming.

Objectives: This study aims to underpin that there should be a universal healthcare policy in Pakistan to help supply coverage for every individual who needs it. Reforming international funding institutions to make better use of assets is a part of this strategy, as is promoting more private sector investment in affordable, high-quality health care and health coverage. Using international health alliances to save lives worldwide is also very important.

Scope of Study: Although this research looks at the whole spectrum of crisis response, management, and planning, it focuses on a subset of variables related to the government of Pakistan's ability to implement far-reaching policies for the welfare of the people. Also, this study only looks at Pakistan's federal and provincial governments and how well they can manage health emergencies and disasters, especially the current COVID-19 epidemic.

Methodology: Given the facts, a more rational approach is needed to understand the resources necessary for this investigation. The present analysis is based chiefly on mixed methods, with more significant qualitative components to support the declared aims. In addition to supplying meaningful context, this study is primarily descriptive. For this article, the authors looked at research that covered a wide range of points of view on the issue, such as regional, historical, core themes, religious, and ideological points of view.

This study draws upon the existing literature for its analysis and aims to increase understanding of the response of Pakistan's government and its allied institutions to the COVID-19 pandemic. As a pandemic is an extraordinary situation with a global impact, thus, studies conducted by foreign authors have also been considered. Although the current study is cross-sectional, i.e., relating to the days of the pandemic primarily, associated historical timestamps are also included to increase understanding of the topic and the conclusion. The authors have extracted these historical events or issues from primary sources, including government documents and reports formulated by the United Nations and its associated institutions. Other primary sources include the qualitative work of researchers and social scientists. The authors have also considered secondary sources such as descriptive and quantitative studies in research articles, commentaries, short accounts, reports, and journalistic op-eds.

Major Deductions: Studies of emergencies may encompass every notion relevant enough to be noticed. Since there is still uncertainty about the extent of the damage caused by COVID-19, the strategy has remained inductive. Therefore, the authors have distributed the

results of this study into two groups: (a) generalizable observations and consequences that they could apply based on their appropriateness, and (b) specific findings that they can only apply up to a certain point where the size of breakdown and definitive measures for prospective prevention are known. Because the COVID-19 pandemic still has widespread effects today, researching its potential future outcomes always involves a higher probability element. Different viewpoints and related topics can benefit current and future research in a study about the existing pandemic and policies and steps to stop it. Based on the analytical point of view of the authors of this study, the following are the diagnostic deductions and results.

1. Even though Pakistan's federal government adopted a model national health strategy in 2001, it still does not have a clear plan to deal with all the country's public health problems.
2. The Pakistani Ministry of Health (MoH) and the World Health Organization (WHO) worked together in 2009 to produce a plan to deal with the country's health problems.
3. All constitutional bodies, such as the Council of Common Interests, Advisory Divisions, and the Senate, could not do their jobs well when it came to giving provinces more responsibility because of the power struggle between the federal and provincial governments.
4. Even though the government based its NVH-2025 on the six pillars of health and was in line with the UN framework of SDGs 2030, it did not have the desired effect.
5. The Global Health Security Index 2019 gave Pakistan a score of zero in categories related to the safety of its healthcare system.
6. COVID-19 is a tricky situation that cannot be solved by just looking at how public health policy is.
7. Planned responses to catastrophes, health crises, epidemics, and pandemics are fundamental to effective governance. If there were no such plan, it would show that the government was not taking care of the public's health and not making good healthcare policies.
8. Different healthcare facilities must work together, like hospitals, public clinics, dispensaries, and labs. An integrated public health care system (IPHS) and core health human resources are needed, and the COVID-19 workforce needs to learn a wide range of skills.
9. Most medical centers in Pakistan lack the personnel and equipment necessary to combat epidemics, pandemics, or diseases affecting vulnerable populations.
10. The government's slowness in running awareness programs, developing surveillance procedures, and

implementing early detection tools indicate its failure to prepare for the SARS-CoV-2 pandemic.

11. The commercialization of life-saving drugs and their production centers also negatively impacted Pakistan's battle with COVID-19. It led to chronic overcrowding and the spread of disease.
12. The pharmaceutical sector in Pakistan is in crisis across all areas of manufacturing.
13. Because of the coronavirus, which has caused trouble, the supply of critical raw materials for medicine and primary and secondary healthcare has been severely affected. As a result, prices have increased, which further delayed domestic delivery.

DISCUSSION

National Health Policy: The federal government of Pakistan approved a preliminary document of a national health policy in 2001, but it did not clearly define health problems or supply a clear roadmap to address all outstanding public health issues. Even insiders were perplexed by it, as it could not be regarded as a genuine policy document or a framework for dealing with future complications in health care. There were no clear definitions of population, health, or their factors in the policy draft. The policy modal was fraught with ambiguities in the formal health sector, particularly the position and role of all stakeholders, from patients to providers. However, the Ministry of Health (MoH) made another effort, collaborating with the World Health Organization (WHO) in 2009, to develop a policy that could effectively address healthcare issues in Pakistan. The policy document was titled "National Health Policy 2009" and is a series of recommendations by various stakeholder experts that would lead to fair access to health services for all people in Pakistan. The policy delivered more powers to the provinces. But the ministry faced unavoidable constitutional glitches. The 18th Amendment also played its role, which "can be considered a first step toward the fundamental restructuring of Pakistan's mixed health governance system. Nevertheless, the Amendment has offered meaningful perspectives for public governance improvement.

But on the other hand, it also introduces significant risks for economic and political union" (Khan S. A., 2019). MoH, like the other twenty-one ministries, was dissolved because of the 18th constitutional Amendment, which "divided power and sovereignty between national and regional levels of government" (WHO, 2020). "The 2010 devolution abolished the 'concurrent legislative list' and replaced it with an exclusive shorter list of federal powers and a longer list of exclusive provincial powers. The functions of health planning, legislation, service regulation, financing service delivery, human resource production, and service

delivery programming were devolved to the provinces” (Zaidi, et al., 2019). Resultantly, “provinces took active steps to pass provincial health bills... by the Punjab health commission (PHC) in 2010, the Sindh health commission (SHCC) in 2014, and Khyber Pakhtunkhwa in 2015” (Khan S. A., 2019). “Provincial contribution to the country’s government health expenditure ... rose from 72% in 2009/10% to 82% in 2013/2014. There was also a visible rise in per capita health allocations by provincial governments” (Zaidi, et al., 2019). The text of the policy was divided into several sections: the core aims; health sector performance and achievements; human resources for health; maternal and newborn health; sexual and reproductive health (SRH); communicable diseases; and emergency preparedness and response. Whereas all constitutional bodies (including the Council of Common Interests, Advisory Divisions, and the Senate) were supposed to play an influential role in devolving responsibilities to provinces, they failed to do so through the power struggle between the federal and provincial governments over their respective authority to approve the budget of local health departments and regulate the human resources for health in their respective jurisdictions. However, the Ministry of Health (MoH) could not overcome the problems.

The Constitution of Pakistan Mentions health and measures to prevent health problems in two separate articles. First, in article 24, clause 3 (a) states that “nothing in this Article shall affect the validity of any law permitting the compulsory acquisition or taking possession of any property for preventing danger to life, property or public health.” In contrast, under the “Interprovincial Trade,” article 151 (4) declares that “an Act of a Provincial Assembly which imposes any reasonable restriction in the interest of public health, public order or morality, or to protect animals or plants from disease or prevent or alleviating any serious shortage in the Province of any essential commodity shall not if it was made with the consent of the President, be invalid” (National Assembly of Pakistan, 1973). The provinces have their health departments, but the federal government still controls the province’s budget. Section 11 of the National Health Policy says it is the federal government’s job to regulate human resources and make rules and standards.

Meanwhile, the Federal Ministry of Health Service Regulation and Coordination (FMHSRC) produced the National Health Vision 2025 (NHV-2025) as a binding document to fulfill the requirements of the Millennium Development Goals (MDGs). “The provinces had a disadvantage ... in terms of technical capability as the past context of federally dominated political, fiscal, administrative power stunted the maturity of provincial administrative structures” (Zaidi, et al., 2019). The United Nations Organization later transformed the MDGs into Sustainable Development Goals (SDGs), in which

goal number 3 primarily addresses human health. The NVH-2025 did not make the desired impact, although it was said to be aligned with the UN’s framework of SDGs 2030 (WHO, 2020) and stands on the six defining pillars of health.

Table 1: Thematic pillars of NHV-2025 (WHO, 2020).

1	Health Financing
2	Health Service Delivery
3	Human Resource for Health
4	Health Information Systems
5	Governance
6	Essential Medicines and Technology

“Historically, Pakistan’s health system has faced various challenges, not just financial and infrastructural but also administrative and bureaucratic.” “Being a developing nation, Pakistan has a health system with a lack of financial autonomy, poor district health management, and inadequate monitoring and supervision” (Ittefaq, Hussain, & Fatima, 2020). “According to the Global Health Security Index 2019, Pakistan attained 0 index scores in various aspects of the healthcare system, including emergency preparedness and response planning, communication with healthcare workers, infection control practices, availability of equipment, and cross-border agreements on public health emergency response and risk communication systems” (Atif & Malik, 2020). Policy guidelines can only help the public if they are aligned with concrete actions, implemented with necessary practical applications, and brought to reality with a will. On the other hand, COVID-19 is a demanding situation beyond the capability of a policy addressing only the normality of the state of public health affairs. A careful, coherent, and comprehensive plan to deal with both ordinary and extraordinary situations, i.e., disasters, health emergencies, outbreaks, and pandemics, is needed with urgency as a fundamental requirement of good governance; the absence of which would expose governmental incompetence in adopting better, actionable, and concrete procedures for public health and developing extensive healthcare planning. And to make it happen, “priorities for disease control and precautions must be set in advance” (Khan M. R., 2021).

For this, the first step is to unify existing and fragmented health facilities (such as hospitals, public clinics, dispensaries, laboratories, and others), form an integrated public healthcare system (IPPHS), develop core health human resources, and train a workforce with diverse skills to reduce health vulnerabilities in COVID-19. Existing institutions are not flexible enough to respond to the challenges and demands of COVID-19, which is why most health facilities in different regions lack diverse healthcare resources and the ability to tackle the challenges of diseases, epidemics, high-risk

population exposure, and pandemics. Furthermore, there should be a high-level collaboration between different parties and stakeholders, such as government agencies, health ministry units, community groups, and professionals with specific responsibilities for preparing for pandemics. Through this health system, the national and local governments must accept the challenge to predict and ensure the country's high-risk and vulnerable populations' readiness for pandemics. And they should set up a platform to integrate different parties' work at national and local levels, including various sectors such as public health, media, academia, civil society organizations, non-governmental organizations (NGOs), and other relevant institutions. All WHO (World Health Organization) members should focus their efforts on priority areas to improve public health surveillance. This will help them use their limited resources and funds, deal with urgent problems, and keep the effects of pandemics on vulnerable groups to a minimum. A practical health policy would include domestic health issues, prevention and precautionary measures, policy priorities, social capital, and institutional outreach, as described in the figure below.

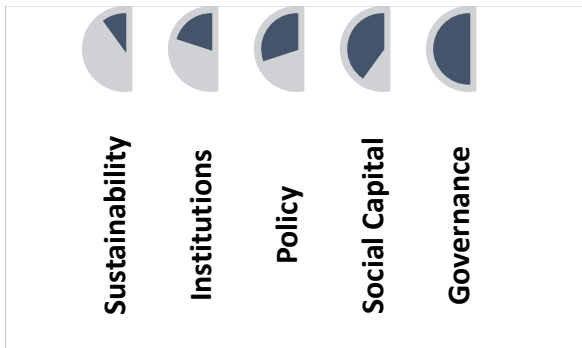


Figure 1: Variables of a better healthcare policy and governance

Compromised Healthcare Institutions: Pakistan is a developing country where increasing socio-political activities within the democratic systems that pull and push the government, distract its attention, and keep from addressing essential and outstanding issues, remain a big hurdle in making policies and strengthening institutions. Hence, the health sector has been a target of continuous denial and ignorance. This fact shows that the government could not come up with the timely provision of a sufficient number of quarantine centers for the people infected with SARS-Co-V-2, and its measures to run awareness campaigns, development of surveillance mechanisms, and methods of early detection were slower (Khalid & Ali, 2020), as compared to other nations fighting the pandemic globally. Through the literature cited, the authors have observed that commands and guidelines of the National Command Operation Center (NCOC), which is continuously dealing with COVID-19

at the national level, were ignored many times. Resultantly, lockdowns were delayed or eased earlier than suggested by the respective department. Also, there has always been continuous pressure from economic domains within the country to open business hubs for economic activities, putting healthcare institutions under pressure and keeping them overcrowded with infected patients. It increased the mortality rate and put the lives of healthcare experts, specialists, doctors, and nurses at stake. So, those who managed saving lives were also dying of infections, and their number crossed two hundred by May 12, 2021, as ANI (2021) quoted Pakistan Medical Association (PMA). It is a significant loss for a country already facing a scarcity of expert practitioners in the healthcare sector. Reasons behind this loss may be rational, but also include continuous work, overcrowded hospitals, lack of medical safety gear, compromised hygiene conditions at the hospitals, and the absence of tangible medicines to deal with the virus.

Table 2: Mortalities of doctors and paramedics in Pakistan till May 12, 2021, from COVID-19.

Doctors and Healthcare Specialists	
Province	Number
Punjab	74
Sindh	64
Khyber Pakhtunkhwa (KPK)	53
Balochistan	6
Kashmir	3
Gilgit-Baltistan	1
Others	
Paramedics	30
Total	231

Figures in table 2 present quite a grim picture of compromised healthcare institutions in Pakistan. Vague policy guidelines, unplanned measures of prevention and cure, indiscriminate efforts of practicing the unclear and risky concept of *herd immunity* to deal with the virus, flexibility in obeying as well as in imposing Standard Operating Procedures (SoPs), all these reasons played significant roles in making domestic health situation even worse.

Moreover, there is an imminent need to address "the misinformation crisis," which has become much "complex due to inadequate health infrastructure, lack of gerontological expertise of the health systems, limited trust in governments, and lack of media and health literacy among the populace" (Ittefaq, Hussain, & Fatima, 2020). Communities cannot accept adequate measures to save their lives and keep their loved ones from getting infected amid storms of fake news, forged truths, and propaganda. This fake news or misinformation makes the work of healthcare professionals even more complicated. On one end, they must tell troubled people the best

course of action amid growing fears; on the other, they make utmost efforts to bust misinformation. So, it is the government's responsibility that "monitoring of social media, essentially to debunk fake, distorted, partially true, and propaganda posts are conducted regularly" as "access to verified sources, free of disinformation and malcontent, is the right" of the citizenry (Khan M. R., 2021).

Pharma Industry Amid the Pandemic: Pakistan's pharmaceutical industry has faced a crisis in all production domains. The industry relies on China for its raw material imports to produce around 98,000 medical products. Almost 95 percent of the raw materials are imported from China, while the country manages the other 5 percent from Italy, Spain, and Japan (Hanif, 2020). The coronavirus has badly disrupted the flow of these raw materials, resulting in price hikes and domestic delivery hiccups. However, the government actively planned and remained busy eradicating COVID-19 with the pharma industry. In April 2020, "the Central Licensing Board of the Drug Regulatory Authority of Pakistan (DRAP) has approved local manufacturing of Chloroquine phosphate active pharmaceutical ingredient ...a drug used in the management of SARS-CoV 2 infected patients" (KPMG, 2020). In this respect, Fitch Solutions has positively reported measures that Pakistan has taken for better health services, especially for the mitigation of coronavirus. "The country is making several improvements in its healthcare delivery system and has established several reforms" (Fitch Solutions, 2021). However, "Pakistan's weak healthcare system with 0.6 beds for 1000 people and less than 0.75% of GDP as health spending is doubtful to bear the COVID-19 shock in case of exponential increase in cases" (Noreen, et al., 2020). Coronavirus is a global challenge, and fighting this pandemic needs an all-out approach by the government which would involve all governments and all of society for an effective plan against the spread of the current pandemic (Noreen, et al., 2020).

Pandemic and Economy: The coronavirus pandemic has fiercely impacted Pakistan's economy, significantly affecting small and medium-sized businesses, painfully hurting both employed and self-employed individuals, enormously shrinking market abilities, and in the process, also compromising consumers' buying abilities. Researchers suggest that the post-crisis scenarios in Pakistan are going to be even worse "as the country will face \$19 billion of debt payment including principal and interest, a big drop in remittances and exports, and a worst-case scenario of up to five million job losses" (Almas, 2020). Before the COVID-19 pandemic, Pakistan's economy was already entangled in hiccups, slowing down at a rapid pace, consumers were continuously facing shocks of rising prices, and it was feared even by the State Bank of Pakistan, that the Gross

Domestic Product (GDP) growth could decline even below 3.5% in the fiscal year 2020 (Chohan, 2020). While the International Monetary Fund (IMF) forecasted "a 4.4% fall in global 2020 GDP" (Simmons & Culkin, 2020), others predicted a GDP even lower than 2.4% (Chohan, 2020). Increased loans create complicated financial conditions, and "tightening of financial conditions in the developed world will complicate the refinancing of external debt" (Almas, 2020).

COVID-19 has increased digitalization in Pakistan; online presence has significantly increased from online platforms for education and business meetings to buying groceries and cheap household items. This phenomenon has opened new horizons for businesses. The government should formulate new and consumer-oriented policies for these virtual platforms and internet-based economic hubs by offering incentives, tax leverages, training, financial support, and easy and flexible loans. These actions will motivate business owners, investors, finance geeks, and financial institutions to invest more in this domain of internet-based businesses.

The COVID-19 pandemic has taught new lessons in economics, politics, and governance. These lessons are crucial for future socio-political policies and economic planning, especially for the health sector's development. "Covid19 represents a global problem but requires addressed through an interconnected web of global and local actors" (Chohan, 2020). There must be a clear path to domestic development, both economic and social, which would supply linkages to better healthcare systems and policies, encourage the public to take part more in the matters that are related to their health and wellbeing, and lay down a futuristic and stimulative plan for international investors.

Conclusion: The COVID-19 pandemic has affected the entire world, especially developing countries like Pakistan, on an immense scale. Disturbances and shocks from its swift proliferation and fears of its further growth and spread persist. The situation demands that Pakistan's government deeply engage in planning, consultations, and fixing constitutional breaches to develop a comprehensive national health policy. The government must urgently address the matter of "compromised" healthcare institutions. Besides, saving the lives of healthcare experts requires international health partnerships to extensively address the scarcity of safety gear in hospitals, quarantine facilities, and vaccination centers and reduce the working hours of doctors and paramedics. The policy must also focus on the growing problem of fake news and health misinformation.

Moreover, economic engagement should seek new horizons for the falling economy, i.e., creating investment opportunities in the online and virtual platforms, besides working to stabilize other economic

domains for consistent economic growth. Moreover, with the collaboration of international experts, policymakers must devise a formula, especially for small businesses, so that they keep running amid health emergencies. The authors have produced the following recommendations based on their analysis and conclusion.

1. Pakistan's federal and provincial governments must have a clear plan to deal with all the country's public health problems.
2. All constitutional bodies must function as one and promote coherent and coordinated policies to develop robust strategies.
3. Pakistan's health policies must remain aligned with the set parameters of the World Health Organization (WHO) and reflect sustainability in all health-related measures.
4. On the policy level, the government must follow the UN framework of SDGs 2030 to achieve the desired effects.
5. An integrated public health care system (IPHS) and core health human resources are needed.
6. Governmental and Private medical centers must have the required personnel and equipment to combat health discrepancies.
7. Awareness programs, surveillance procedures, and their implementation must be rapid, especially in outbreaks.
8. The government must investigate the problems faced by the pharmaceutical sector and remove their reservations as early as possible.
9. There must be a precise and sustainable price-setting mechanism and price control for all life-saving drugs and equipment.
10. The government must also remove the objections of the private sector, especially related to the import of raw materials.

Declarations

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