Evaluation of Implementation Strategies of Health Security in Pakistan

Zain ul Abidin [1], Qaiser-ur-Rehman[2], Ihsan-ul-Haq[3], Kamran Khan [4], Muhammad Tayyab[5]

Citation:
Abidin, Z. U., Rehman, Q., Haq, I. U., Khan, K., & Tayyab, M. (2023). Evaluation of implementation strategies of health security in Pakistan. Khyber Journal of Public Policy, 2(4), 218-239

Article Info:
Received: 15/11/2023
Revised: 22/11/2023
Accepted: 10/12/2023
Published:*31/12/2023*

Disclaimer:
The opinions expressed in this publication do not implicitly or explicitly reflect the opinions or views of the editors, members, employees, or the organization. The mention of individuals or entities and the materials presented in this publication do not imply any opinion by the editors or employees regarding the legal status of any opinion, area, territory, institution, or individual, nor do they guarantee the accuracy, completeness, or suitability of any content or references.

Copy Right Statement:
© 2022 Khyber Journal of Public Policy

This work is licensed under a Creative Commons Attribution 4.0 International License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract:

Health security, a critical component of national security, necessitates robust health policies. In Pakistan, the absence of a dedicated health security policy is mitigated by the National Health Vision and the National Action Plan for Health Security. These frameworks aim to enhance health services, yet challenges persist due to low health financing, inadequate rural healthcare access, and insufficient universal health insurance coverage. The disparity in urban-rural healthcare facilities exacerbates maternal and child mortality rates and poor sanitation standards. Policy implementation faces hurdles such as weak provincial coordination, limited stakeholder engagement, and underutilization of technology. Addressing these gaps requires increased health spending, equitable resource allocation, and innovative public-private partnerships. Emphasizing technology adoption and incentivizing healthcare in underserved areas can drive systemic improvements. Strategic interventions can achieve universal health coverage and a resilient health system aligned with Pakistan's national security objectives.

Key words:

Health Security, Universal Health Coverage, Public Health Financing, Rural-Urban Disparity, Policy Implementation

[1] *Pakistan Audit &Accounts Service, Email: zainulabideen84@yahoo.com*
[2] *Prime Minister's Inspection Commission, Email:qaiskhan313@gmail.com*
[3] *Ministry of Planning Development & Special Initiatives, Email: pbs.nha@gmail.com*
[4] *Provincial Management Service-Khyber Pakhtunkhwa Email: kamran.doc1@gmail.com*
[5] *Railways Commercial and Transportation Group (RCTG), Government of Pakistan*

Introduction

Health security is an integral part of national security; therefore, a health security policy is of vital importance. Pakistan does not have a separate health security policy but has two national documents, i.e., the National Health Vision and the National Action Plan for Health Security. The overall objectives of these documents are to improve the quality of health services, leading to health security in the country. At present, Pakistan has the lowest spending on the public health system in the region, a low patient-to-doctor ratio, low access to health services in rural areas, low universal health insurance coverage, high child and maternal mortality rates, and poor food safety and water sanitation standards. Though the health policies are relevant and futuristic in nature, their implementation faces serious issues, including a lack of coordination with provinces, particularly at the provincial level. Moreover, the lack of stakeholder engagement at the policy formulation and adoption levels has created a gap in the implementation of these policies. The system has some inherent strengths and weaknesses, which provide opportunities and threats from external sources that need to be addressed to achieve operational efficiencies at the implementation level. The use of technology, or the lack thereof, has also led to below-par efficacy of the system thus far; however, this can be bridged by making optimal use of technology through real-time reporting, analysis, and forecasting of issues and challenges. The financial and economic analysis reveals serious issues in the mobilization of resources due to a lack of finances, hindering the ultimate goal of achieving health security. Consequently, it has been recommended that health spending be increased and concerted efforts made to overcome implementation and operational challenges.

Problem Statement

Health security remains the lynchpin of the national security policy of Pakistan. Health security policies and their implementation strategies will determine the overall objective of a healthy citizenry, pivotal for the economic and social development of the country. The study will, thus, explore the different dimensions of policy instruments and the resultant implementation strategy to assess their efficacy.

Scope of the Study

The scope of the research involves assessing the efficacy of health security policies in the realms of universal health coverage, resilience and robustness of the public health system, and preparedness for epidemics and pandemics at the national and international levels.

At the operational level, only the KP province has been selected for the assessment of implementation strategies. Qualitative analysis techniques using secondary data have been employed.

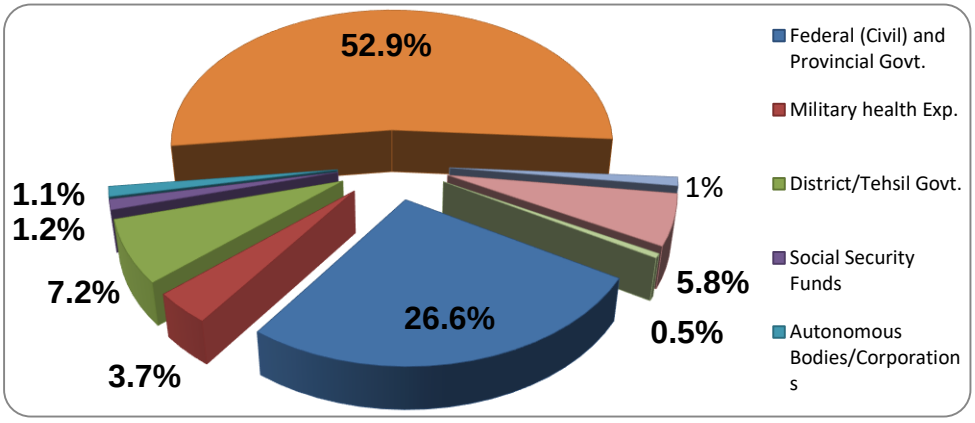
Research Methodology

The research study employed a qualitative methodology, utilizing both primary and secondary data sources. Data was gathered from research articles, newspapers, and reports available online. The collected factual and critical data was then analyzed using various methods including situational analysis, legal analysis, SWOT analysis, gap analysis, and log frame analysis

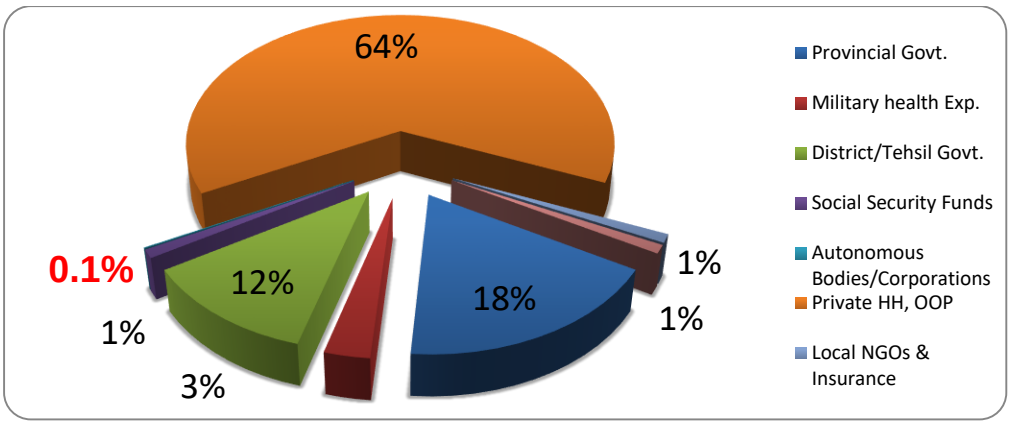
Situational Analysis

Pakistan stands at a crossroads in terms of health security and the efficacy of its public health system. All vital health indicators, including infant, maternal, and chronic disease mortality rates, fail to inspire confidence for the future. The country has one of the lowest health expenditures, with 3.4% of GDP allocated to health, including only 1.6% for public health, leading to significant out-of-pocket expenses. Alarmingly, the poverty rate in the country has reached 40%, while health coverage through insurance remains at only 33%, with only KP providing full coverage for the poor and vulnerable within the province. Pakistan also ranks low on nearly 90% of the International Health Regulations dimensions, to which it is a signatory. As a result, future donor funding may be jeopardized, further compounding the challenges in the health sector.

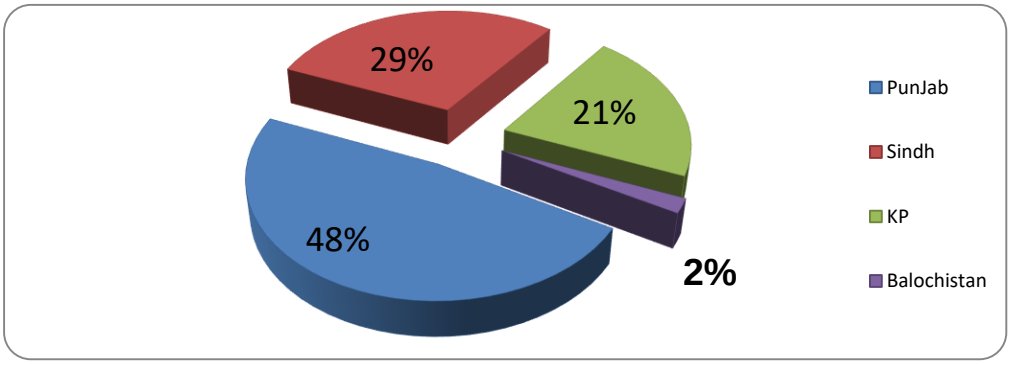
Health Care Financing – National Level



Health Care Financing – KP Province



Health Care Providers Spending by Province



Perform a critical analysis and evaluation of existing policies and policy documents (if any) based on the following parameters

Coverage and involvement of stakeholders:

The two main policy documents addressing the health security of Pakistan are the National Action Plan for Health Security 2018 (NAPHS, 2018) and the National Health Vision 2016-2025. Both documents extensively cover the stakeholders involved. These policies were formulated with the participation of both national and international stakeholders. All the mainstream departments of the Federal and Provincial governments, along with relevant line departments, were engaged in drafting these policy documents.

The health security policies focus on four main areas: universal health coverage, building the resilience of the health system, and preparing and adapting the system for outbreaks and emergencies of national and international concern (National Health Vision, 2016). However, the eight thematic pillars identified in these documents require further stakeholder engagement to ensure the policies' sustainability.

One key pillar includes health service delivery, where stakeholders from both the public and private sectors needed to be engaged. Surprisingly, private health service providers were not included in the policy formulation process. Even more striking is the exclusion of the Drug Regulatory Authority of Pakistan (DRAP), a key stakeholder in building resilience and adapting the health system for outbreaks and emergencies by ensuring the availability of quality drugs in the market. Furthermore, alternative medicines, which are deeply embedded in Pakistan's social fabric, were overlooked in the policy framework.

Current Relevance:

The policy documents are current and relevant, as both focus on the present health security challenges of Pakistan. The National Health Vision envisages affordable universal health coverage delivered through resilient and responsive health services (Arshad et al., 2021). With the ever-increasing social vulnerability of the population, including around 40% of people living below the poverty line in the country (PSLM, 2023), the policy is highly relevant to the current scenario.

Realistic vs. idealistic objectives:

A thorough examination of the objectives of the National Health Vision 2016 and NAPHS 2018 reveals that the objectives are both realistic and idealistic. The policies outline a unified vision to improve health while ensuring provincial autonomy and diversity. The framework addresses this through coordination and institutional support but assumes that the federal and provincial governments will work in harmony. This assumption, given recent discord, makes the objective idealistic.

Conversely, the second objective, which emphasizes coherence in efforts and learning from each other at the federal and provincial levels to achieve universal health coverage, is realistic, as demonstrated by the health care initiative. Similarly, synchronization for commonalities in international reporting is another realistic objective, as seen in the reporting of polio and COVID-19 cases (Sahito et al., 2022). Additionally, the goal of providing a foundational basis for charting and implementing SDGs through the policy documents is realistic and explicitly addressed. However, the objective of coordination for regulation, information collection, surveillance, and research to improve the health system remains idealistic due to the lack of a unified institutional mechanism.

Future Oriented Aspects:

The thematic pillars of the National Health Vision provide a future-oriented aspect of the policy. It encompasses access, coverage, quality, and safety for

improved health, responsiveness, social protection, and efficiency through robust health finances, governance, advanced medical technology, and a health information system. Thus, the foundation for a futuristic, resilient, and responsive health system has been provided in the policy document.

Examination of institutional mechanisms for implementation:

The National Health Vision was to be implemented through a national body, the high-level Interprovincial Health and Population Council, with a special mandate to endorse reports on monitoring and implementation and present them to Parliament. However, the national body has not been established thus far, and the implementation of the vision, without parliamentary oversight, remains in limbo. On the other hand, the NAPHS, which was primarily based on the International Health Regulations (IHR), has made considerable headway in formulating the institutional mechanism for implementation.

Assessment of impact:

The impact of the National Health Vision is inconclusive due to the absence of its national body for implementation. Though the vision has outlined the broader dimensions for a resilient, prepared, and responsive health system, its impact has not been meaningful thus far. However, the impact of the NAPHS has been recognized by the Joint External Evaluation (JEE) tool, conducted through an independent evaluation of IHR standards in 2023. The JEE covered 19 technical areas under the three major categories of prevent, detect, and respond, spanning from legislation, surveillance, financing, antimicrobial resistance, immunization, public health lab networks, healthcare provision, zoonotic diseases, food safety, biosafety, risk communication, and more. Through this, the progress of IHR implementation and the evaluation of multi-sectoral measures to improve health security were assessed to further strengthen the country's core capacity to prevent, detect, and respond to public health threats. The JEE tool identified many indicators under these 19 technical areas, each assigned a score from 1 to 5 based on the progress made. Based on this, the JEE score of Pakistan in 2023 was 43.2%.

Conduct a critical analysis of existing implementation strategies as outlined in the policy documents.

The implementation of the existing strategies will be analyzed with respect to policy dimensions of safeguarding public health, the robustness of health infrastructure to assess the resilience of the health system, and the effectiveness of the existing strategies in ensuring the quality and quantity of medical and paramedical training and education.

Safe Guarding Public Health:

Immunization remains a key source of safeguarding public health. Over the years, Pakistan has made rapid strides in enhancing immunization coverage through various indigenous and foreign-funded programs. The Expanded Program on Immunization (EPI) has increased the coverage for Fully Immunized Children (FIC) from 64% in 2017-18 to 77% in 2022 (JEE, 2023). The implementation strategy is aligned with WHO guidelines and is rigorously pursued. The strategy also aims to enhance FIC coverage to 90% at the national level and 80% in every district by 2025.

However, significant disparities in vaccination coverage exist among provinces. For instance, FIC coverage reached 89% in Punjab in 2020-2021, while FIC is estimated at only 37% in Baluchistan. Meanwhile, approximately 61% of eligible children in Sindh and 68% in Khyber Pakhtunkhwa (KP) were fully immunized against their provincial targets. In the federal regions, FIC coverage reached 89% in AJK, followed by 73% in GB, 71% in Islamabad, and 43% in NMDs.

Likewise, Pakistan remains one of the only two countries still grappling with polio. The implementation strategy for polio elimination has gained some momentum with social mobilization and community awareness.

Robustness of Health Infrastructure:

On the other hand, robustness of health infrastructure remains a challenge for capacity building and resilience of health system. Though, being part of the objectives of national health vision, there is only a single ongoing PSDP project for construction of new health facility i.e. Khyber Pakhtunkhwa Institute of Child Health Peshawar, however, there is no ongoing project for the uplift of existing health facilities in the entire country (National Health Accounts, 2022).

Ensuring the Quality and Quantity of Medical and Para-Medical Training and Education

The quality and quantity of medical and paramedical training and education is inconsistent and needs-based, with no single continuous sectoral program in the country. Although a single curriculum for training and education in field epidemiology and laboratory training programs is available, no unified policy or strategy for implementation exists (JEE, 2023). Moreover, uniform national-level training for medical and paramedical staff is practically non-existent.

Another challenge confronting overall health security is the imbalance in the availability of adequately trained medical and paramedical staff in the country's underdeveloped areas. The broad parameters of the implementation strategy to restore balance in the quality and quantity of medical and paramedical staff include incentivizing public health professionals by offering special allowances for healthcare workers deputed in remote or hard-to-reach areas. Additional incentives, including risk allowances for relevant health staff and non-practicing allowances for medical doctors, both at the federal and provincial levels, have been adopted. However, these measures have been inadequate, and the evaluation received on this front has been categorized as limited (JEE, 2023).

Analyze Stakeholder Involvement, Impact, and Engagement in Policy Design, Implementation Planning, and on-Ground Execution

The dimensions of stakeholder analysis are based on the level of interest and power wielded by each stakeholder in policy formulation, implementation and on-ground execution. The analysis tool employed is a 2×2 matrix, comparing the level of interest and power wielded thereof.

	Level of stakeholder Interest	
	Low	High
Low **Stakeholder Power** High	**Segment D** • Philanthropic Organizations • Law Enforcement Agencies	**Segment C** • National Institute of Health • Pharmaceutical Industry • Hospital and Health Service Providers • International Organization and NGOs • General Public • DRAP
	Segment B • Pakistan Medical and Dental College • Federal Finance • Provincial Finance	**Segment A** • Ministry of Health Regulation and Coordination • Health Departments of Respective Province • NDMA

Segment A:

The stakeholders in segment A, i.e., the Federal Ministry of Health Regulation and Coordination, Provincial Health Departments, and the National Disaster Management Authority, have high interest and wield high authority in policy formulation, engagement in policy design, implementation planning, and execution on the ground. Thus, the two basic documents, i.e., the National Health Vision and the Pakistan National Action Plan for Health Security, have been formulated through the active engagement of these stakeholders. However, the Federal Ministry of Health is dependent on other stakeholders for the implementation of its overarching objectives of universal healthcare, a resilient health system, and epidemic and pandemic preparedness and response mechanisms.

The implementation of these policies and on-ground execution requires stakeholder engagement from both the public and private sectors. For instance, epidemic and pandemic readiness is required at the district and even union council level; however, these stakeholders were not involved at any stage (Nisa et al., 2021). There is also an element of ad hocism in preparedness for epidemics and pandemics, a fact established in the Joint External Evaluation report (JEE, 2023). There is no on-ground mechanism in place for monitoring outbreaks of epidemics, and the system is dependent on the monitoring of district disaster management committees, which have no permanent structure in place.

Segment B:

Stakeholders in segment B wield high authority but have little interest in policy formulation. However, their role is quite significant in the implementation and on-ground execution of the policy. In NAPHS, the line departments were taken on board; however, in the National Health Vision, these stakeholders were left out, which ultimately created a vacuum at the implementation level. For instance, the role of the Pakistan Medical and Dental Council is pivotal in enforcing high standards for the intake of doctors into the labor force, which is one of the key objectives of the National Health Vision. This was completely ignored during the policy formulation and implementation stages.

Segment C:

Stakeholders in segment C have high interest in policy formulation and implementation but hold little power in formulating it. The NIH, which is a key stakeholder in research, testing, immunization, and diagnosis of various diseases, has been left out in the formulation of the National Health Vision. Likewise, the Drug Regulatory Authority of Pakistan (DRAP) is a key stakeholder in regulating the drug industry in Pakistan. It was supposed to have a lead and defined role in the implementation of the NAPHS and National Health Vision. Surprisingly, neither at the federal nor at the provincial level has the authority been involved in the on-ground implementation of the policies. Likewise, donor agencies and international organizations, such as the WHO, should have been actively involved in setting up policy benchmarks for implementation.

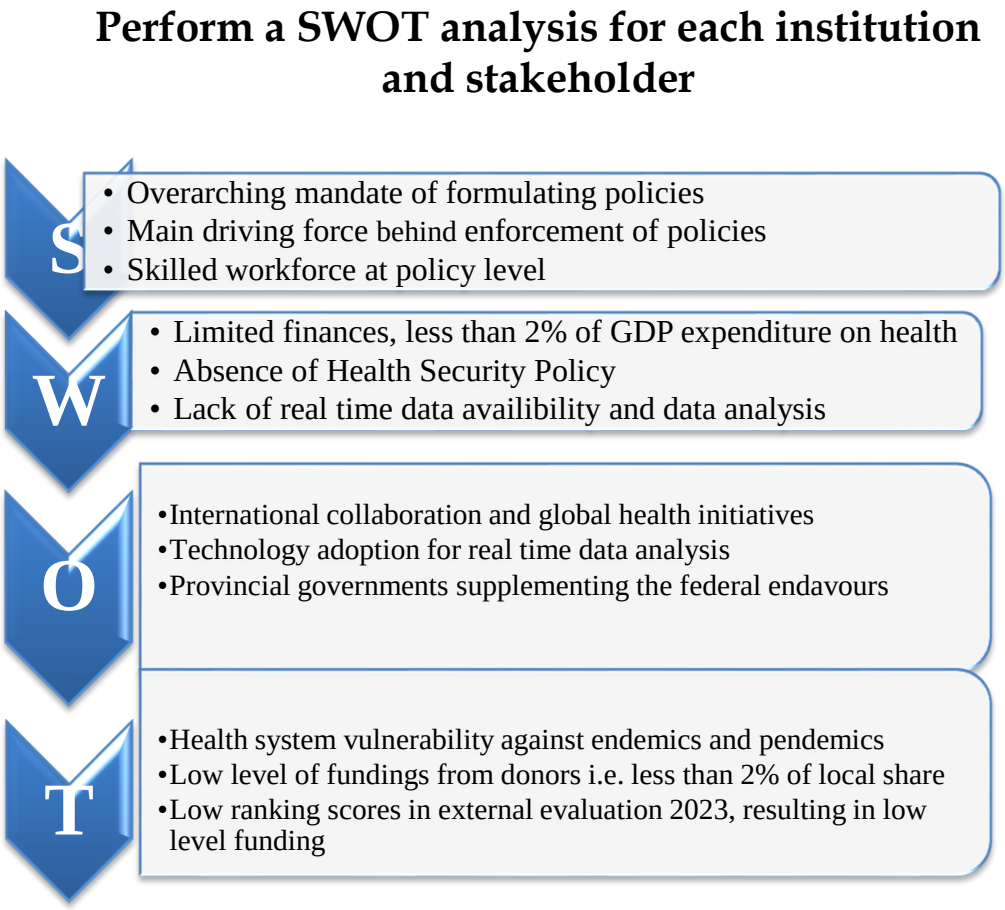
Segment D:

The philanthropic organizations and law enforcement agencies have low power and low interest in policy formulation. Still, they were to be engaged for the successful implementation of the NAPHS, in particular. For instance, the immunization drive against Polio had a pronounced role for law enforcement agencies.

Critically evaluate the performance of institutional frameworks for implementation:

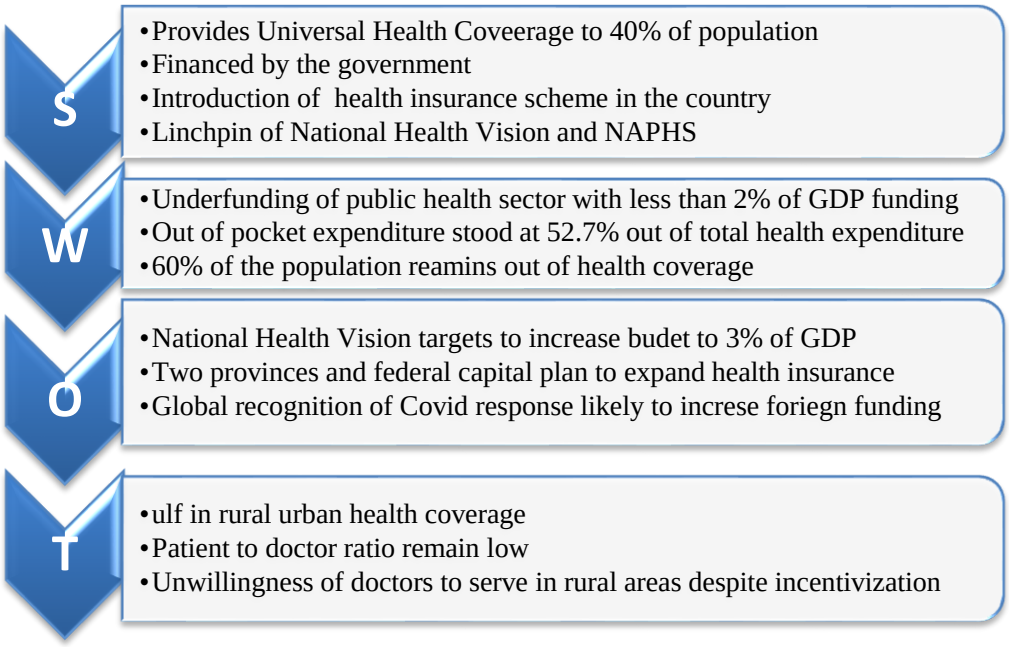
The performance of institutional frameworks for the implementation of NAPHS can be aptly gauged through the Joint External Evaluation Report. The institutional framework for implementation will be evaluated based on three policy dimensions: universal health coverage, robustness of the health system, and preparedness for epidemics and pandemics. The report reveals that Pakistan severely lags in the robustness of its health system. In terms of public health security and its linkage with public health management, this, in

turn, puts the robustness of the health system to the test. In health emergency management, i.e., emergency and readiness assessment, Pakistan scores extremely low and is categorized in the Red Zone. In public health service provision, i.e., overall coverage of health, it is categorized as average. On the other hand, in legal institutional framework, food security, financing, and research and development, the country is ranked in the Red Zone. However, in immunization access and radiation and nuclear emergency preparedness, Pakistan ranks high with the highest score of 5.



SWOT analysis of National Institute of Health as a main agency of implementation of strategy

Pakistan's health system is a mixed model and consists of primary, secondary, and tertiary care. Primary health care is the first access point for the majority of the population, with nationwide coverage through 5,584 dispensaries, 5,520 basic health units, and 798 maternity health care centers. Similarly, the secondary health centers include 697 rural health centers and district-level hospitals, while there are 1,284 tertiary care hospitals across the country (National Health Accounts, 2022). The SWOT analysis of public health institutes will shed light on the present status and potential future role of the public health system in Pakistan.



Address Technological Challenges Related to Implementation

Like any other public policy implementation, the success of health security policies hinges on the innovative use of technology. Pakistan's health system has made considerable progress in adopting technology, at least for reporting and identifying health issues in the public health sphere. The command and control system established during the pandemic created a proactive and accurate data reporting mechanism, which proved vital in controlling the pandemic (Emannual et al., 2023). Likewise, the district health information system, planned for expansion across all of Pakistan, provides a foundation for reporting and gathering information (WHO, 2018). However, the use of technology remains limited to reporting purposes, and a meaningful data analytics approach to identify and forecast disease hotspots, preparedness and response analysis, and need assessments for public health remains elusive (Emannual et al., 2023). The extension of the district health information system and the use of national health accounts for data analysis will provide a roadmap for technological progress in the implementation of strategies.

Examine administrative and human resources issues pertaining to implementation

Though regular and routine competency-based training programs and standards are available in some professions, cadres, or sectors at the national level, such as the epidemiology training program or the Field Epidemiology Laboratory Training Program (FELTP) and Human Resources Development Centers (HRDCs) for building the capacities of health professionals, competency-based training is limited to certain professions and cadres.

Conduct an economic and financial analysis

Health financing is a core function of health systems that can enable progress toward universal health coverage by improving effective service coverage and financial protection. It is based on a mix of publicly funded, out-of-pocket, and external funding. Health spending amounts to 3.2% of the gross domestic product (GDP), of which 55% is out-of-pocket payments. The total expenditure from healthcare providers shows notable disparities between the provinces. Punjab has the highest share at 48%, while Baluchistan currently stands at the lowest at 2% of the total expenditure. Sindh and KPK range between 21% and 29%, respectively. According to the National Health Accounts 2019-2020 by the Pakistan Bureau of Statistics (2022), current expenditures in Punjab, made by the provincial government in its capacity as a financial agent, stand at 19.4%, with a social security share of 1.8%, and out-of-pocket expenditures in private households account for 52.27% of overall health expenditures. Meanwhile, in Sindh, current expenditures stood at 32.38% of the total expenditures, with a social security share of 1.10%, and private households' out-of-pocket expenditure is 52.5%. In KPK, current expenditure stands at 18.45%. In Baluchistan and KPK, the social security share expenditures drop to 0.23% and 0.20%, respectively. Out-of-pocket expenditure in KPK is approximately 64.14%, and the donor share in total health expenditures in KPK is 1.04%. In Baluchistan, the share of expenditures by the provincial government is 30.96% (including district government expenditure), while the percentage share for out-of-pocket health expenditures is 62.92% (Pakistan Bureau of Statistics, 2022).

Thus, keeping in view the National Health Vision and National Security policy, investing in human capital to the optimum level remains a daunting challenge.

Perform a comparative analysis involving two developed and two developing countries.

The developed countries chosen for comparative analysis are Canada and Netherland.

Canadian Health System:

The Canadian health system consists of three tiers: federal, provincial, and territorial. Health coverage is universal in the country, with mandatory national insurance coverage paid for by the government, and private insurance service providers offering extra coverage in return for premiums.

Comparative Analysis of Health Coverage:

Unlike Pakistan, health coverage in Canada is universal, and out-of-pocket expenditure is practically non-existent. However, there remains a glaring difference in health coverage, where private health insurance, paid for through premium payments, is robust and supplementary to primary public health services.

Resilience and Robustness of Public Health System:

Unlike the Pakistani health system, the Canadian health system is a model of resilience and robustness, with the lowest wait times in the world. The system also stood the test of COVID-19 and did not collapse, thanks to an effective triage system for diagnosis and prevention of the virus's spread (Martin et al., 2018).
Thus, the health system of Canada is a model of public health for its coverage and resilience.

Netherlands:

Another health model worth comparing as a benchmark for international best practices is the Netherlands model. The Netherlands public health care model is a three-tiered system, consisting of long-term care for chronic patients, basic and essential health care, and supplementary health care.

Comparative Analysis of Health Coverage:

The Netherlands does not have a single health coverage provider. Instead, there are multiple private health providers that offer statutory primary health care to all residents, subsidized by the government. For supplementary and chronic health coverage, extra premiums are paid as out-of-pocket

expenditures to private health providers at a subsidized rate (OECD, 2021). Thus, the health coverage system in Pakistan is diametrically different from that of the Netherlands, as Pakistan has no universal health care system, and the health insurance provided to 33% of the population is paid by the government to a single private health insurance provider.

Resilience and Robustness of Public Health System:

The Netherlands spends the highest per capita on public health of any other EU country. Public sources cover a high percentage of health expenditure, resulting in a lower share of out-of-pocket spending for health care than the EU average (OECD, 2021). The system also demonstrated its robustness in the COVID-19 response, achieving complete vaccination by the end of 2021, despite a slow start. Thus, the comparative analysis of the Netherlands provides great insight into the prospects of providing health coverage for outpatient care in cases of chronic diseases.

Sri Lanka:

Sri Lanka has made rapid strides in improving its public health management system and has managed to improve all its primary health care indicators, with low infant and child mortality rates and improved access to health facilities. The public health structure is the same as Pakistan's; however, the glaring difference is the expenditure on public health, where government expenditure stands at 4.2% of its GDP (Rajapaksa et al., 2021).

Bangladesh:

Bangladesh has also made significant progress in all vital health indicators and is duly acknowledged by the World Bank. However, the total health expenditure of Bangladesh, including private expenditure, is 2.5% of its GDP. The success of Bangladesh's public health system is underpinned by the use of technology, real-time data analysis, and a focus on primary health care, which acts as a buffer to secondary and tertiary health care (World Bank, 2022). This is a model worth considering for Pakistan.

Conduct a comprehensive GAP analysis covering all dimensions

The gap analysis will focus on the dimensions of implementation of policy instruments.

Gap Analysis of implementation of National Health Vision:

Current State: Absence of national level interprovincial health and population council.

Key steps to bridge gap: Setting up the envisioned interprovincial health and population council to see through the implementation of the vision.

Desired State: Functional interprovincial health and population council.

Health Care Financing:

Another dimension ripe for gap analysis is the health care financing

Current State: Current national public health expenditure stands at 1.4% of GDP (National Health Accounts, 2022).

Key steps to bridge gap: Earmarking 1% of the provincial share in NFC for public health financing.

Increasing the federal expenditure on health to 3% of GDP.

Desired State: 3% of GDP expenditure on public health

Immunization Gaps

Current State: 77% fully immunized children in Pakistan in 2022

Key steps to bridge gap: Improving immunization coverage through established vaccination center and mobile outreach programs.

Integration of immunization in basic health services delivery program.

Desired State: 100% coverage for child immunization.

Health Emergency Management

Current State: Response based approach.

Key steps to bridge gap: management of health emergency through preparedness rather than responsiveness, by robust real time reporting, identification and analysis of hotspot.

Desired State: Robust preparedness based health emergency response system.

Health Insurance Coverage

Current State: Only 33% of the total population covered through health insurance.

Key steps to bridge gap: Increasing targeted health financing, especially for poor and vulnerable segments of the society.

Desired State: 100% coverage through health insurance.

Bio-terrorism preparedness

Current State: Country remains vulnerable to chemical events and emergencies.

Key steps to bridge gap: Adopting CDC guidelines in health facilities to guard against bio-terrorism and catastrophic chemical events.

Desired State: Health security against chemical and radiation emergencies.

Quality and Quantity of Medical and Para-Medical Training & Education

Current State: Absence of comprehensive curriculum based training programs.

Key steps to bridge gap: Respective health services academies and Pakistan nursing council to devise work plan for continuous capacity building of medical and para-medical staff.

Desired State: Trained medical and para-medical health professionals in the country**.**

Issues and Challenges

1. Gap in the implementation of the National Health Vision due to the absence of a high-level body, i.e., the Interprovincial Health and Population Council.
2. Health financing is at its lowest, with less than 2% of GDP allocated.
3. High out-of-pocket expenditure, which stands at 55%.
4. KP, despite being a pioneer in insurance coverage, has the highest out-of-pocket expenditure in the country, standing at 64.14%.
5. Rural-urban divide in health coverage and low patient-to-doctor ratio.
6. Unwillingness of doctors to serve in remote rural areas despite incentives.
7. Lack of resources for rural centers, including the deployment of doctors and para-medical staff.
8. Insurance coverage only caters to 33% of the total population.
9. Sustainability of the insurance program is a serious issue in KP and Punjab, as we witness constant suspension of services in these provinces.
10. Epidemic and pandemic monitoring remains on an ad hoc basis, with no permanent deployment of staff.
11. Real-time reporting and monitoring of epidemics and pandemics are not available to identify hotspots and forecast future trajectories.
12. Absence of a uniform curriculum and training program for medical and para-medical health professionals.
13. Low level of preparedness for chemical and biological hazards.
14. Lack of key stakeholder engagement in policy formulation and adoption.
15. Food safety measures remain unsatisfactory, leading to a spike in diseases.
16. Water and sanitation standards remain unhygienic, resulting in the spread of diseases.
17. Weak research and development by research institutes, leading to dependence on donors.
18. Donor share in health expenditure in public health remains only 2% of the national public health expenditure.
19. Immunization coverage remains a challenge, despite considerable progress in early-age immunization. A polio-free Pakistan still remains a challenge.
20. Use of technology remains restricted to reporting, despite having a framework in place. It has not been extended to forecasting and analysis of public health challenges.

Conclusion

The three most important conclusions in the realm of health security policies of Pakistan are:

1. Health financing is at its lowest level, despite being identified as one of the main causes for low health coverage and lack of robustness in the system.
2. Universal health coverage through the health insurance scheme covers only 33% of the total population, which is less than the number of people below the poverty line, which is close to 40%. Still alarming is the out-of-pocket expenditure, which constitutes 52.7% of the total health expenditure (National Health Accounts, 2022). Thus, the extension of universal health care is imperative.
3. The disparity in the rural-urban divide needs to be abridged to achieve the overarching objective of a healthy citizenry, which is pivotal for the economic and social development of the country, as envisaged in the national security policy.

Recommendations

1. Earmarking 1% of the NFC award to the health sector from the federation to provinces through horizontal direct transfers as health expenditure.
2. Diverting funds from recurring, non-developmental expenditures to health; for example, diverting 0.27% of recurring expenditure for the FY 2022 in KP would suffice to meet the gap in Sehat Sahulat card payments.
3. Increasing national public health expenditure from 1.4% to 3% of GDP, as envisioned in the National Health Vision 2016.
4. Enhancing the use of technology for data analysis, forecasting, and identification of hotspots for policy intervention.
5. Reducing the disparity in the rural-urban divide in access to public health facilities.
6. Incentivizing postings of doctors and para-medical staff in remote/hard-to-reach areas through special pay packages and a compulsory rotation policy.
7. Due to the changing nature of diseases, the research and development (R&D) section should be properly established at the provincial level.
8. Health insurance providers are exempt from service taxes; better terms should be negotiated so that they may provide full coverage to the population below the 40% poverty line.
9. Establishing a high-level inter-provincial health and population mechanism for the implementation of the National Health Vision 2016-2025.

Create a comprehensive implementation design for the two most critical recommendations using a logical framework matrix

	Description	Indicators	Means of Verification	Risks and Assumptions
Goal/ overall objective	Earmarking 1% of NFC award to health sector from federation to provinces	Increase in developmental budget of provinces	Developmental portfolio of provincial budget	NFC will agree to the changes to Redistribution formula
Purpose	Universal Health Coverage	Estimated increase of 20% increase in rural health coverage	District Health Information System	Estimated increase will follow the Historical data pattern
Outputs	Uplift of public health system	Increasing patient intake capacities by 20%	Outpatient and inpatient data monitoring	Accuracy of patient data
Activities	Construction of new RHCs in rural districts	100% increase in number of RHCs in rural districts	Availability of RHCs in rural districts	Selection of district purely on merit bases

	Description	Indicators	Means of Verification	Risks and Assumptions
Goal/ overall objective	Increasing the health insurance coverage in KP	Including all the population below the poverty line to insurance coverage	No. of poor people having access to health insurance	Finances will be diverted to insurance coverage
Purpose	Reducing the out of pocket expenditure by 10%	Reducing the out of pocket expenditure from 64.5 to 54.5% at least	Data verification from bureau of statistics	Sensitivity of out of pocket expenditure to increase in health insurance
Outputs	Including provision of medicines for chronic diseases in insurance coverage	Number of medicines provided to patients in public health facilities	Data analysis of provision and disbursement of medicines in public health facilities	No pilferages and wastages
Activities	Diverting funds from recurring budget for public health	0.92% and 1.37% for current budget.	Analysis of financial statements of provincial accounts through SAP system	Will of government to divert resources to health sector

References

1. ARSHAD, I., ALI, K., & ZEESHAN, M. (n.d.). *Analysis of health policy making process in Pakistan*.
2. Emmanuel, F., Hassan, A., Ahmad, A., & Reza, T. E. (2023). Pakistan's COVID-19 prevention and control response using the World Health Organization's guidelines for epidemic response interventions. *Cureus, 15*(1). https://doi.org/10.7759/cureus.34010
3. Gaitán-Rossi, P., Vilar-Compte, M., Cruz-Villalba, V., Sabina, N., & Villar-Uribe, M. (2022, August). A qualitative assessment of the essential health and nutrition service delivery in the context of COVID-19 in Bangladesh: The perspective of divisional directors. *Healthcare, 10*(9), 1619. https://doi.org/10.3390/healthcare10091619
4. Martin, D., Miller, A. P., Quesnel-Vallée, A., Caron, N. R., Vissandjée, B., & Marchildon, G. P. (2018). Canada's universal health-care system: Achieving its potential. *The Lancet, 391*(10131), 1718-1735. https://doi.org/10.1016/S0140-6736(18)30572-9
5. Rajapaksa, L., De Silva, P., Abeykoon, P., Somatunga, L., Sathasivam, S., Perera, S., ... & Weerasinghe, K. (2021). Sri Lanka health system review. *Health Systems in Transition, 7*(2). https://doi.org/10.24996/jhrr.2021.07.01.01
6. Riaz, S., Nisa, Z. U., Mushtaq, S., Ijaz, Q. A., Sohail, K., & Khan, A. (2021). Assessment of disease state awareness among chronic kidney disease patients undergoing hemodialysis in Divisional Headquarter Hospital Mirpur, Pakistan. *Journal of Pharmacy Practice and Community Medicine, 7*(2). https://doi.org/10.5530/jppcm.2021.2.16
7. Sahito, Z., Shah, S. S., & Pelser, A. M. (2022, June). Online teaching during COVID-19: Exploration of challenges and their coping strategies faced by university teachers in Pakistan. *Frontiers in Education, 7*, 880335. https://doi.org/10.3389/feduc.2022.88033
8. World Health Organization. (2018). *Health system profile: Pakistan*. Retrievedfrom https://rho.emro.who.int/sites/default/files/Profiles-briefs-files/PAK-Health-System-Profiles-2018.pdf