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ASSESSING HEALTH EQUITY AND ACCESSIBILITY IN TEHSIL SARAI NAURANG, DISTRICT LAKKI MARWAT, PAKISTAN.

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ABSTRACT

This study explores the availability, accessibility, quality, and key issues faced by health services in Tehsil Sarai Naurang, District Lakki Marwat, based on Multi-Sectoral Assessment data facilitated by Kafalah Foundation. A convergent parallel research design was followed, which involved quantitative community-level data, Focus Group Discussions, and transect walks. Chi-square, Pearson correlation analysis, and binary logistic regression were used to determine the relationship between health service availability and perceived mayoral performance in quantitative data analysis. The results show that significant differences exist between the different Village Councils in the services provided, including essential medicine, ambulance and emergency services, maternal and child healthcare, hygiene, safe drinking water, and transportation. Pearson correlation indicated a positive and significant correlation between health service availability and the mayor's performance ($r = .706$, $p < .001$), with a large effect size (Cramer's $V = .660$), and the chi-square test showed that the correlation between the two was significant ($\chi^2(1) = 175.473$, $p < .001$). The binary logistic regression also revealed that the availability of health services was a significant predictor of higher perceived performance of the mayor (OR = 108.401, $p < .001$; Nagelkerke $R^2 = .532$). Qualitative evidence emphasized the interdependencies between unsafe water, poor sanitation, poverty, transportation limitations, and vulnerability to drug abuse within communities on the impact on community health. The overall results show a strong link between the citizens' perceptions of good governance and good healthcare delivery and highlight the importance of multi-sectoral interventions in primary healthcare, essential medicines, emergency services, MCH services, WASH infrastructure, and increasing community awareness about health issues.

Keywords:

Healthcare accessibility, delivery system, healthcare disparity, health system challenges, Pakistan's healthcare system

1.INTRODUCTION

1.1. BACKGROUND

Health is a right, and good health is essential and universal, but access to health care is a major concern. A key measure of health systems effectiveness is their capacity to deliver equitable and universal health coverage. The constraints faced in accessing essential health services are many and diverse, depending on region and population, and shaped by a complex mix of socio-economic, cultural, geographic, and policy factors. Access to health care is a complex global issue and is strongly limited by geographical, financial, and structural barriers. It is impossible to call any health system perfect due to the increasing demand of the population, the ever-changing

public health issues, and the differences in population characteristics across the world. All systems must be continually trimmed to serve the people's needs, based on a review and diagnosis of the problems and assets of the system. Universal Health Coverage (UHC) is a fundamental global health priority and a core target of the Sustainable Development Goal (SDG) 3, which states that everyone should have access to promotive, preventive, curative, rehabilitative, and palliative health services, without suffering financial hardship (World Health Organization, 2025; United Nations, 2026).

PHS is facing numerous challenges that limit its citizens' access to good and effective health care services. One of the significant challenges is insufficient funding. At current spending levels, Pakistan is spending approximately USD 38 per capita on health care – significantly less than other developing nations. India, the Philippines and Ghana spend 57, 165 and 85 USD per capita on healthcare, respectively, as compared with Pakistan. The share of gross domestic product (GDP) on the public health sector in Pakistan was 1.2% in 2020-2021 as compared to 1.1% in 2019-2020, which is not much when expressed as a proportion of GDP. It is estimated that 32,879 doctors graduate each year in Pakistan, while 40% of them opt to seek better opportunities overseas due to low income, long working hours, and inequality (Ministry of Finance 2021).

The situation in Tehsil Sarai Naurang, District Lakki Marwat, KPK is plagued by some of these difficulties. Supported by Kafalah Foundation, the Multi-Sectoral Assessment is valuable data on the current health situation and development needs of local communities. Based on the assessment, essential health facilities, qualified staff, and electricity exist in some of the Village Councils, but a significant gap exists in essential medicines, ambulances and emergency services, maternal and child health care, hygiene, safe drinking water, and health-facility infrastructure. Most of all, it hinders timely health care, especially in rural areas, when relying on public transport. Another major finding of the assessment is the strong link between improved health and WASH (water, sanitation, and hygiene) itself. Water-borne diseases and poor hygiene, combined with unsafe drinking water, inadequate sanitation, and leakage of sewerage systems, cause a health burden on communities.

Hence, a multi-sectoral approach is required to improve the health sector in Sarai Naurang, which must involve strengthening health services, enhancing WASH facilities, ensuring faster emergency transport, raising community awareness, and providing socio-economic support. The results of the Kafalah Foundation evaluation are useful in the identification of priorities for interventions and facilitating access and equity of healthcare and the improvement of public health outcomes in Tehsil Sarai Naurang, KPK.

1.2. RESEARCH QUESTION:

Based on the review of the literature, the following research questions were formulated.

1. What is the extent of access to health care in the study area?
2. What are the significant health system issues that impact access, availability, and quality of health system services within the study area?
3. What is the impact of healthcare access, health equity, and health system issues on the health of the population in the study area?

1.3. OBJECTIVES OF THE STUDY

Based on the research questions, the following research objectives were formulated.

To evaluate the status of accessibility of health care facilities to households in Tehsil Sarai Narang, considering physical, geographical, financial, and service accessibility.

To analyse the health equity in access to healthcare services among various population groups in the study area.

To evaluate the relationship between the accessibility of health care, health equity, health care system problems, and public health in the study area.

1.4. PROBLEM STATEMENT:

There are significant issues in accessing quality and equitable healthcare services in Tehsil Sarai Naurang, District Lakki Marwat, KPK. The Multi-

Sectoral Assessment, supported by Kafalah Foundation, identifies deficiencies in basic medicines, ambulance services, maternal and child health services, hygiene, safe drinking water, and health-facility coverage in various Village Councils. The poor WASH conditions, transportation difficulties, and socioeconomic vulnerabilities further compound these challenges. Thus, it is important to measure these gaps to determine interventions that are a priority for enhancing health services and public health in Sarai Naurang.

1.5. SIGNIFICANCE OF THE STUDY

The study is important because it provides a comprehensive picture of the healthcare accessibility, service delivery, infrastructure, and WASH-related issues faced by communities in Tehsil Sarai Naurang, District Lakki Marwat, in KP, Khyber Pakhtunkhwa. The study highlights the key gaps in essential medicines, ambulance & emergency services, maternal and child healthcare, hygiene, safe drinking water, and health facility availability at different Village Councils, based on the Multi-Sectoral Assessment supported by Kafalah Foundation. The results offer a valuable evidence base for government departments, local authorities, Kafalah Foundation, and development bodies to pinpoint priority areas, make effective resource allocation decisions, and to design specific interventions. In conclusion, the study has the potential to enhance access to equitable health services, support local health systems, and promote health in vulnerable communities in Sarai Naurang.

2. LITERATURE REVIEW

The primary healthcare (PHC) concept as a foundation of "health for all policy" was first introduced at the convention of Alma-Ata in 1978 (Behzadifar, Taheri Mirghaed, and Aryankhesal 2017). It is a holistic approach that focuses on overall physical, mental, and social health, instead of treating diseases and organ systems individually. The World Health Organization (WHO) states that PHC is about addressing the needs of people, from primary prevention to early detection of disease and intervention, rehabilitative services, and palliative care (Primary Health Care, 2023).

It contains medicine for common ailments and wounds, access to essential drugs, and a range of services including immunisation, family planning, nutrition, prenatal care, prevention, education, and containment of local epidemic outbreaks. Figure 1 illustrates eight important elements of PHC which were explicitly outlined in the Alma-Ata Declaration. All of these are fundamental goals, which are actually integrated in the Sustainable Development Goals (SDGs) for 2030, from SDG 2 to SDG 4 (Behzadifar, Taheri Mirghaed, and Aryankhesal 2017).

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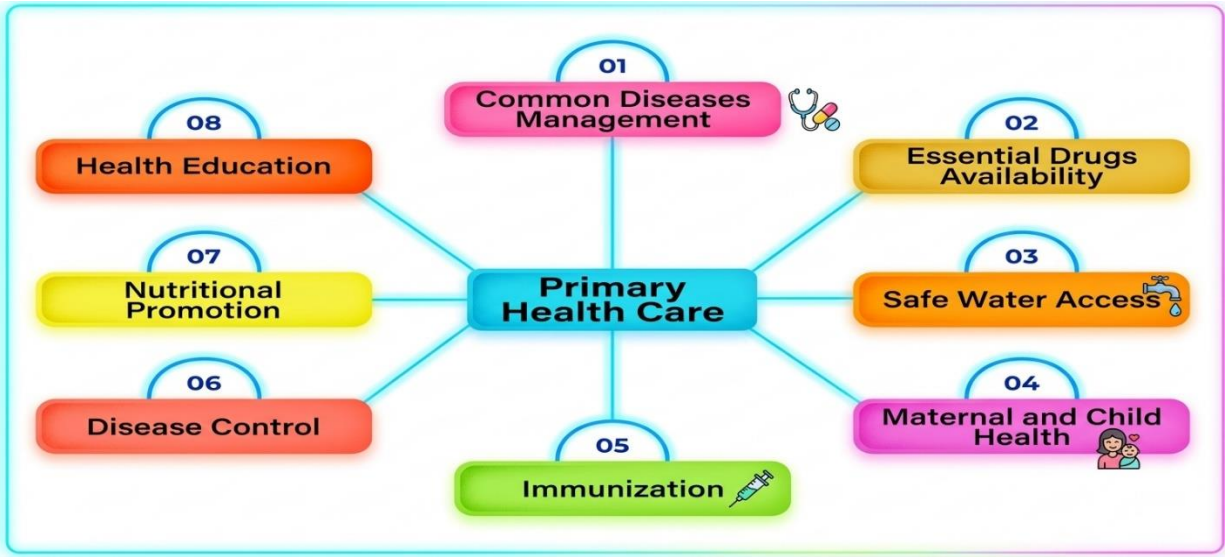


Figure 1.

However, despite the capacity of primary health systems to contribute an impressive 70% to the total disease burden reduction, the majority of countries invest a considerable part of their health budgets in secondary and tertiary health systems (Behzadifar, Taheri Mirghaed, and Aryankhesal 2017). If appropriately implemented, PHC can help low-to-middle-income countries (LMICs) save almost 60 million lives and increase life expectancy by 3.7 years (Primary Health Care, 2023).

Pakistan Demographic and Health Survey 2017–18 shows that only 15.4% and 5.4% of the population have access to basic health units (BHUs) and rural health centers (RHCs) in the community, respectively. Neonatal, infant, and under-5 mortality rates are 42, 62, and 74 per 1000 live births, respectively, which are alarming. Limited healthcare facilities prevent 6 out of 10 mothers and newborns from getting postnatal care within two days of giving birth (Pakistan Demographic and Health Survey 2017-18).

Most of these are attributable to a shortage of health care providers, particularly in rural areas, where health care facilities are often underserviced, poorly equipped, and denied basic medications and supplies. In spite of all these hurdles, the Government of Pakistan has started several initiatives, such as the National Health Vision 2016-25, to improve the quality and accessibility of PHC services. In this review, we aim to assess the status of PHC in Pakistan, identify its shortcomings, and outline the way forward. Another issue that is related to PHC is that there is no monitoring or regulation, which leads to more absences of staff absenteeism, long waiting times, poorly developed facilities, lack of maintenance, etc., which leads to poor health practices among staff members and the general public (Hussain, Radwan, and Habib 2021). One of the eight elements of PHC is the supply of essential medicines. WHO introduced the idea of essential medicines and recommended that countries make them accessible to people in a standard dosage form, of assured quality and at affordable prices. One of the numerous problems is a poor pharmaceutical supply and distribution system in underdeveloped countries such as Pakistan (Dixit et al., 2011).

The Lady Health Workers Program (LHWP), which was launched in 1994, is a major step in the implementation of PHC and the availability of basic, promotive, preventive, and curative services, particularly in disadvantaged areas. It is among the most comprehensive community-based programmes in the world, with nearly

90,000 staff providing services to nearly 115 million women and children.

3. METHODOLOGY

In this study, a convergent parallel research design was used to assess the availability, accessibility, functionality, and major challenges of healthcare services in Tehsil Sarai Naurang, District Lakki Marwat, Pakistan, in the context of a Multi Sectoral Assessment supported by the Kafalah Foundation. The selected Village Councils were from rural and relatively urbanized areas of the country, and the assessment was related to the availability of health facilities, infrastructure, qualified health staff, electricity and backup power, clean drinking water, hygiene and sanitation, ambulance and emergency services, availability of essential medicines, having separate wards, maternal and child health care, transportation, common health problems, vulnerability to drug abuse, and WASH-related health risks. A structured community-level questionnaire was used for quantitative data collection, and Focus Group Discussions (FGDs), transect walks with direct observations of health facilities, water sources, sanitation systems, sewerage, hygiene practices, and accessibility were used for qualitative data collection, with 402 responses collected for the former. Quantitative data were described in terms of frequency and percentage statistics of availability of services and variations across Village Councils, and inferential statistics were computed as Kruskal–Wallis H test, Mann–Whitney U test, chi-square test of independence, Spearman's rank order correlation, and Binary Logistic Regression with appropriate effect size, false discovery rate-adjusted p-values, odds ratios (ORs), and 95% confidence intervals reported. Qualitative data were analyzed thematically, and the main themes included: accessibility of healthcare, shortage of medicines, maternal and child health, transport, sanitation, drinking water quality, hygiene, common diseases, and socio-economic issues. The results of the quantitative assessment, FGDs, and transect walks were triangulated to determine the interconnected health, WASH, infrastructural, and socioeconomic vulnerabilities. Because of the cross-sectional observational design, statistical associations were interpreted as associations and not causal effects.

4. RESULT & DISCUSSION

Table 4. 1. Availability of Health Facility and the Mayor Performance Index

Indicator	Finding	Interpretation for paper
Health facility availability	Highly uneven across VCs	Indicates spatial inequality in healthcare access
Building condition	94% satisfactory	Basic infrastructure is generally adequate
Qualified staff	90% available	Staffing is relatively strong overall, but geographically uneven
Electricity/backup	94% available	Basic operational infrastructure is comparatively strong
Clean drinking water	80% available	Important WASH gap remains in one-fifth of facilities
Hygiene	54% satisfactory	Major quality/infection-control concern
Ambulance	Only 35% available	Critical emergency-access gap
Separate wards	Only 7% available	Very limited capacity for differentiated/inpatient care
Medicines	Only 14% adequate	Major service-functionality problem
Maternal/child services	Only 38% available	Significant gap in essential MCH services

Transportation	Mostly public transport	Potential barrier to timely healthcare, especially emergencies
Drug abuse	48% medium, 29% high risk	Indicates emerging community/youth vulnerability

Table 1 shows that there is a significant gap between the level of basic health infrastructure and the level of functioning of health facilities. While building conditions (94%), electricity/backup (94%), and qualified staff (90%) were reasonably good, there were significant deficiencies in hygiene (54%), ambulance availability (35%), maternal and child health services (38%), separate wards (7%), and medicine adequacy (14%). The results indicate that the physical availability of health facilities is not the primary consideration, but also the extent to which they are able to offer comprehensive, safe, and accessible healthcare services. The significant disparity in facilities across VCs further highlights spatial inequity in accessing healthcare, which can lead to increased risk of delay in seeking care for geographically disadvantaged communities. There is low availability of ambulances, and the use of public transport could also limit timely access to emergency services. Likewise, poor medicines and a low level of MCH services are a critical issue with respect to service functionality. There is also a relatively low level of satisfactory hygiene, which gives reason for concern about infection prevention and quality of care. Moreover, the reported medium and high rates of drug abuse suggest another form of emerging community vulnerability beyond the provision of conventional health facilities. The overall results point to the importance of local government and health authorities adopting a more integrated approach to interventions, moving beyond infrastructure-related ones and focusing on the quality of services, the distribution of services, preparedness for emergencies, essential medicines, conditions of WASH and health of children and mothers, and health risks at the community level.

Table 4.2. Chi-Square Test of Associations Between Health Conditions and Overall Mayor Performance.

Domain	IDV	N	χ^2	df	p	Cramer's V	FDR p
Health	Health	402	175.473	1	<.001	.660	<.001

Table 2: Depicts the Chi-Square test results, which indicate a very strong and statistically significant relationship between health status and overall rating of the mayor's performance. The test was applied to 402 respondents (N=402), and the Chi-Square value was high (χ^2=175.473), and the degrees of freedom were 1 (df=1). The unadjusted p-value (p<.001), and even the False Discovery Rate-corrected p-value (FDR p<.001), are well below the standard p-value of .05, indicating that this relationship is highly unlikely to be due to random sampling variation or to be a false positive arising from multiple testing. In addition to being statistically significant, the magnitude of this relationship is very high; the value for Cramer's V was .660. A Cramer's V of .50 or higher is considered a very high effect size and is reflective of a strong prediction of mayoral approval in social science research in this instance. This Chi-Square test shows a strong correlation but does not indicate causation. Rather, it proposes that citizens' views of the state of the local health environment, access to health care, or their own health are important factors in determining their assessment of their city's leadership and management.

Table 4.3. Relationship between Health Conditions and Overall Mayor Performance

	Health Services Accessibility		Mayor Performance
Health Services Accessibility	Pearson Correlation	1	.706**
	Sig. (2-tailed)		<.001
	N	402	402
Mayor Performance	Pearson Correlation	.706**	1
	Sig. (2-tailed)	<.001	
	N	402	402

The correlation analysis also shows there is a positive, significant relationship between the availability of health services and the mayor's performance. This relationship shows that the perception of citizens of the accessibility of healthcare and its quality makes a significant contribution to the assessment of the Tehsil Mayor. The governance aspects of health seem to affect citizens' trust in the performance of the local government, as basic health facilities, good hygiene, maternal and child health, and access to health facilities are all related. Moreover, the difficulties mentioned by the respondents include significant health issues, common health issues in the community, and identified improvement needs, which offer valuable insight into the fact that health issues continue to be an element that affects a public's assessment of governance effectiveness

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Table 4.4. Binary Logistic Regression Model of Health Conditions and Overall Mayor Performance

Predictor	N	B	S.E.	Wald	df	95% CI for Exp(B)	Sig.	Exp(B)
Health Services Accessibility	402	4.686	.429	119.358	1	[48.24, 243.63]	<.001	108.401
Constant	402	-7.700	.727	112.162	1		<.001	.000

The results of the binary logistic regression analysis show that health availability and service conditions significantly predict ratings of mayor performance. The findings indicate that there was a significant difference in the likelihood of respondents rating the mayor's performance as high, depending on their experience of the quality of health services. This predictive relationship conveys the idea that the way government does its job isn't judged solely by political endeavors, but by the ways it helps its community. In particular, citizens' perceptions of the effectiveness of the mayor are shaped by their observations of service delivery outcomes such as health services, the mayor's accessibility to the public, effectiveness of mechanisms for redressing citizens' grievances, and other development initiatives.

4.5 Descriptive Assessment of Health Facilities

There is significant disparity in the availability and functioning of health facilities across Sarai Naurang's Village Councils (VCs) with regard to health conditions. The distribution of health facilities was very unevenly distributed in VC. Abu Samand Begu Khel, Gandi Khan Khel 2, and Gandi Sahib Khan Naser Khel reported relatively good facility availability, whereas Baragi, Chando Khel, Dadewala, and Paseeni 1 and 2 had significant gaps in their facility availability. This trend shows a lot of geographical variation in access to healthcare infrastructure. The state of the existing health facility buildings was relatively good. The 402 respondents included 379 (94%) who had satisfactory building conditions and 23

(6%) who had unsatisfactory building conditions. However, more people were found to be unhappy in Baragi, Manjewala, Garzai, Nor Muhammad Naurang, and Wali, indicating that targeted maintenance and/or some minor infrastructure upgrades might still be needed. Qualified health personnel were also relatively available. Around 90% of the respondents (361/402) said that there were qualified staff, and 10% (41/402) said that there were no qualified staff. Overall, however, there were more reports of staffing inadequacies in Wali, Baist Khel, Chando Khel, Manjewala, and Garzai, reflecting significant geographical variations. Another relatively robust facility infrastructure component was electricity and backup power. There were a total of 378 respondents (94%) who reported that they had electricity and their backup power was on duty, and 24 (6%) who reported no electricity or backup power. These were more noticeable in Manjewala, Nor Muhammad Naurang, and Wali. Clean drinking water was not as consistent. Although 321 respondents (80%) reported the availability of clean drinking water in health facilities, 81 (20%) reported that it was unavailable. Chando Khel, Wali, Garzai and Takhti Khel were the worst affected areas. However, hygiene was a more serious issue: 219 of the respondents (54%) felt the hygiene of the facilities was satisfactory, while 183 (46%) said the hygiene was unsatisfactory. The lack of hygiene was clearly reflected in Chando Khel, Garzai, Manjewala, Baist Khel, and Wali. Substantially greater deficiencies were observed in the emergency and specialized healthcare services. There were 261 (65%) respondents who said that ambulance services were not available, while 141 (35%) respondents said they were available. The places where ambulance service was found to be very rare were Baist Khel, Baragi, Chando Khel, Dadewala, Wali, and Takhti Khel. Likewise, only 7% (27 respondents) said that separate wards were available, and 375 said that separate wards were not available (93%). The highest level of deficiency was observed with essential medicines. A total of 344 (86%) respondents reported that there was inadequate availability of medicines, while 58 (14%) respondents reported that there was adequate availability of medicines. The severe shortage was reported particularly in Baragi, Chando Khel, Marmandi Azeem, Mama Khel, Nor Muhammad Naurang, and Sarai Naurang 3. Limited availability of maternal and child health services was also reported: 153 respondents (38%) indicated availability, while 249 respondents (62%) reported their unavailability. Access was very limited in several VCs, such as Baragi, Baist Khel, Dadewala, Wali, Takhti Khel, and Paseeni. The above descriptive results suggest a significant difference between the existence of physical health infrastructure and the availability of health services. Buildings and electricity were found to be relatively adequate, while essential medicines, ambulance services, separate wards, and hygiene and maternal and child health services were reported as very inadequate.

4.2 Major Health-Related Challenges

The lack of medical equipment, the lack of trained personnel, inability to provide enough health facilities, unsafe drinking water, low sanitation, lack of employment, inflation, and shortage of food were identified as key health-related issues. The lack of safe drinking water and sanitation was believed to be linked to diarrheal and other water- and sanitation-related illnesses, with socioeconomic stressors being seen as factors in poor nutrition and health status. Another important access consideration is transportation. Most of the respondents said public transport was their preferred mode of travel to healthcare facilities. This dependence, along with the restricted capacity for emergency transport, can pose further challenges for quick access to care, especially in urgent situations. The community's priorities as stated further support the above-mentioned gaps in service delivery. The low cost and accessibility of medicines, and service coverage and expansion of health centres were identified as significant improvement priorities. These priorities align with the challenges identified with the supply of medicines, availability of special services, emergency transport, and facility operations. Another community-level vulnerability was drug abuse. Almost half of the

respondents deemed the level of risk for drug abuse to be 'medium' (48%), and 29% deemed it to be 'high'. Around three-quarters of all respondents believed that there was at least some risk of being vulnerable, emphasizing the need for youth engagement, prevention, social support, and community-based interventions.

5. DISCUSSION

The results of the present study indicate that there is a significant relationship between citizens' perceptions of the performance of the Tehsil Mayor Aziz Ullah Khan and the availability of health services as well as challenges in relation to health services. All three results of the chi-square analysis, the correlation analysis, and the binary logistic regression show that health-related service delivery is an important factor in the performance evaluation of local governments. The correlation analysis showed a positive correlation between health availability and mayor performance ($r = .706$, $p < .001$), which means that people who said that health was available were more positive about Tehsil Mayor Aziz Ullah Khan's performance. The chi-square test also revealed a statistically significant relationship between health availability categories and mayor performance categories, $\chi^2(1) = 175.473$, $p < .001$, and a large effect size (Cramer's $V = .660$).

These findings show that citizens consider the provision of health services as one aspect of the political leadership and effectiveness of governance. These findings were corroborated by the logistic regression analysis, which showed that health availability has a significant impact on perceived mayor performance. The regression model was statistically significant, and health availability was a significant predictor of higher mayor performance ratings ($B = 4.686$, $SE = .429$, Wald = 119.358, $p < .001$). The odds ratio ($OR = 108.401$) shows that those who felt that health services were good were significantly more likely to rate Tehsil Mayor Aziz Ullah Khan's performance as high. In addition, the model accounted for a substantial portion of the variance in citizens' perceptions of mayor performance (Nagelkerke $R^2 = .532$), indicating that citizens' perceptions of the service delivery of their city's mayor are significantly influenced by healthcare-related service delivery. The strong relationship between the availability of key health indicators and mayor performance indicates that an increase in the performance of local health facilities is associated with an improvement in the perception of governance performance.

The presence and proximity of health facilities, availability of services, and quality of health facility buildings are considered the basic components of citizens' perceptions of government responsiveness. The statistics suggest that citizens judge the performance of political leadership not exclusively based on administrative decisions or political actions; they judge the effectiveness of political leadership through physical improvements that they see in the provision of basic services that they are directly involved with in their daily lives. Thus, provision and access to health services boost citizens' trust in local leadership and development. In addition, healthcare quality indicators such as the availability of qualified healthcare staff, electricity/back-up power supplies, clean drinking water facilities, and satisfactory hygiene conditions are important elements of functional healthcare delivery.

The above factors will determine whether healthcare facilities can deliver services in a reliable manner to the communities. The positive correlation between health conditions and the mayor's performance indicates that citizens believe that the effective performance of the mayor is linked to their capacity to provide facilities and to keep them functioning, maintained, and serviceable. The accessibility of ambulance services, separate wards, and drugs also exemplifies the real-life aspects of healthcare accessibility and effectiveness. The provision of emergency transportation, proper healthcare facilities for patients to be treated, and access to essential medicines has a direct impact on community satisfaction with health care systems. The strong statistical correlation between health measures and mayor performance shows that the electorate assesses the work of their local government

through health measures that have a direct impact on their well-being. Improvements in these areas could bolster public confidence in Aziz Ullah Khan and boost his reputation as an effective administrator.

Healthcare challenges and common health problems were also explored. These indicators show the challenges faced by communities and where additional interventions are needed. Better services in healthcare have a positive effect on the perception of governance, but if the services are not available or are not satisfactory, the citizens' satisfaction will be low if they feel that governance is not responding. Thus, tackling healthcare problems in the context of better planning, resource allocation, and community-based interventions is key in ensuring the strengthening of public trust. Maternal and child health services, utilisation of health care facilities, and citizen suggestions for improvements show that citizens' expectations go beyond the provision of basic facilities. Local governments are held increasingly accountable to communities regarding their responsiveness to vulnerable populations, the accessibility of healthcare, and their ability to meet community needs. The results highlight the need for a holistic strategy for achieving sustainable healthcare development, which must include preventive healthcare, women and children's health protection, greater accessibility, and ongoing citizen engagement.

The results also confirm that the performance of the mayor is a multi-dimensional phenomenon, encompassing not only healthcare improvement but all development activities. The evaluation of the effectiveness of leadership is reflected in the overall perception of the respondents regarding the overall performance of Aziz Ullah Khan during his tenure, comparison with the performance of other former MNAs, MPAs, and Tehsil Nazims who served the area, perceived weaknesses, and personal strengths. Citizens evaluate political leadership not only from a personal viewpoint but also based on tangible development results. So accessibility and responsiveness, and the capacity to provide public services, become central components of political legitimacy. Perceptions of performance are also shaped by political and administrative influences. Knowledge of support received by the municipality during the mayor's tenure, knowledge of citizens' support for the mayor's position in the village council, and awareness of support from NGO or the private sector are important dimensions of transparency, resource mobilization, and institutional capacity. These results imply that citizens appreciate leaders with the ability to properly manage resources, win development assistance, and mobilize the population to understand the achievements.

Other aspects of effective local governance are access and accountability. Participatory governance is reflected in the reach of Aziz Ullah Khan to the people and the role of grievance redressal mechanisms. The success of local government is not only highly reliant on development projects but also on the interaction between the leaders and citizens. An accessible and responsive mayor can build trust and enhance perceptions of good government service. Beyond health care, respondents rated the performance of the mayor on other areas of development. Citizens see governance performance, as seen in their answers to sectoral indicators such as health services, education services, WASH services, livelihood support, community engagement, and infrastructure development. There is a need for multi-sectoral development in order to achieve effective local leadership, as any improvements in education, sanitation, livelihoods, community participation, and infrastructure all contribute to sustainable community development. In general, the results of the statistics are empirical proof that the availability of health services and health problems are important factors in perceived mayor performance. The availability of health services is significantly correlated with citizens' perceptions of local government effectiveness ($r = .706$, $p < .001$), highly associated with the perceptions of citizens ($\chi^2(1) = 175.473$, $p < .001$), and a significant factor through which citizens assess the effectiveness of their local government.

The results indicate that the development of healthcare infrastructure, better health facility access, availability of qualified health personnel,

medicine, hygiene and sanitation, the resolution of community health issues, and the expansion of citizen services can help to increase satisfaction with local governance. Investment in the health sector and other development areas is a major means through which Tehsil Mayor Aziz Ullah Khan plans to boost public trust, enhance governance, and perceptions of the effectiveness of the leadership in the area.

6. CONCLUSION

This study has found that the availability of health services has a large impact on citizens' perception of local government performance. The results show that there is a strong correlation between the availability of health services and the perception of the performance of the mayor, with a correlation coefficient (r) = .706 and p-value < .001. The chi-square test also confirmed that there is a significant association between health availability and mayoral performance, $\chi^2(1) = 175.473$, $p < .001$, large effect size (Cramer's V = .660). The results of binary logistic regression showed that there was more support that health availability significantly predicted positive perceptions of mayoral performance (B = 4.686, SE = .429, Wald = 119.358, $p < .001$). When the odds ratio (OR = 108.401) was calculated, it was found that the odds of respondents reporting a high level of mayoral performance were much higher than the odds of those reporting a low level of mayoral performance, and the model accounted for a significant proportion of the variance in perceived level of mayoral performance (Nagelkerke R^2 = .532). The findings in this study indicate that citizens assess local government to some degree based on actual enhancements in access to and delivery of health care. Basic infrastructure and qualified personnel were reasonably good, but there were significant gaps in medicines, cleanliness, ambulances, wards, and the maternal and child health services. Spatial disparities in health care access may also be exacerbated by unequal access to facilities and reliance on public transportation services. The results thus emphasise the need to improve healthcare facilities and service functionality and accessibility. Greater provision of health care services, accountability in the management of resources, civic involvement, and constructive grievance channels can help build public confidence in local government. In general, enhanced health services, along with health in other development sectors, will further drive improvements in perceived governance effectiveness, citizen satisfaction and community well-being, and in SDG 3 and SDG 6.

RECOMMENDATIONS:

1. Ensure that essential medicines are regularly and adequately supplied at public health institutions. Regular monitoring of medicine stock should be carried out to reduce shortages and the cost of medicines on households.
2. Priority should be given to the Village Councils where there are limited or no healthcare facilities in place, especially in Baragi, Chando Khel, Dadewala, Paseeni, etc. Where necessary, existing basic health units (BHUs) should be upgraded, and new health centres added where services are lacking.
3. Improve the health services available to mothers, babies, and children, including increasing coverage in VCs. Access to antenatal care, skilled birth attendance, postnatal care, child immunization, and referral services should be improved.
4. Improve ambulance service provision in less well-served areas and create an effective emergency referral system from peripheral health facilities to higher-level hospitals. This could decrease the time that people wait for emergency treatment.
5. Make sure adequate numbers of doctors, nurses, paramedics, and trained health workers are deployed, especially in rural areas that lack adequate services.
6. Staff attendance and retention should also be regularly monitored. Health facilities should have good hygiene, sanitation, waste disposal, handwashing facilities, and infection prevention practices.
7. Periodic inspections of the level of hygiene should be implemented, especially in

places with communities that have poor hygiene standards.

8. Improved water sources, water filtration, regular water quality testing, and adequate water infrastructure maintenance are all crucial for all health facilities to have safe drinking water.

9. The strong relationship between unsafe water/sanitation and health issues identified in the assessment should be reflected in the planning of health and WASH interventions.

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