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SOCIO-ECONOMIC AND POLITICAL FACTORS INFLUENCING HEALTH DELIVERY DURING THE COVID-19 PANDEMIC IN NIGERIA

EMMANUEL MUSA[1]; MUHAMMAD, ABDULLAHI, SABO PhD[2]; KABIRU MUSTAPHA YAKASAI PhD[2]; MOHAMMED ABDULLAHI MOHAMMED[3]; & USMAN MOHAMMED[4]

[1]Department of Public Health, Maryam Abacha American University of Niger Republic. [2]Department of Public Health, Maryam Abacha American University of Nigeria, Kano. [3]Department of Business Administration, Federal University Dutsin-ma, Kastina State. [4]Department of information Technology, Bayero University Kano, Kastina State

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Abstract

This study investigates the socio-economic and political factors influencing healthcare delivery during the COVID-19 pandemic in Kaduna State, Nigeria. Using a mixed-methods design, data were collected from 400 respondents, including healthcare workers, administrators, and community members, through structured questionnaires and interviews. Quantitative data were analyzed using descriptive statistics and t-tests, while qualitative data were thematically analyzed. Findings reveal that socio-economic challenges including income disruption, unemployment, poor housing, and digital exclusion significantly constrained healthcare access during the pandemic ($t = 14.63$, $p < .001$). Political dimensions such as policy inconsistency, weak coordination between federal and local authorities, and low public trust also had a significant impact on healthcare governance ($t = 19.73$, $p < .001$). The results underscore that healthcare outcomes during the

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pandemic were shaped less by clinical capacity than by the socio-political environment in which services were delivered. The study concludes that addressing health inequities in Kaduna State requires comprehensive reforms focused on social protection, decentralized governance, and equitable resource distribution. Policy recommendations include strengthening rural healthcare infrastructure, expanding broadband access to support telemedicine, and institutionalizing transparent governance mechanisms to rebuild public trust and enhance system resilience for future crises.

INTRODUCTION

The COVID-19 pandemic, which emerged in late 2019, was a significant global health crisis that challenged the resilience, adaptation, and inclusivity of health systems globally. The epidemic transcended its biological and epidemiological aspects, revealing a multifaceted crisis that highlighted deep-rooted socio-economic disparities, weaknesses in governance, and institutional shortcomings in healthcare provision. Nations, ranging from highly industrialized to emerging economies, faced collapsed hospital facilities, disrupted supply chains, and inequitable distribution of vaccinations and treatments (Assefa et al., 2022). The crisis exacerbated existing inequalities in healthcare access, demonstrating that health outcomes are influenced not only by clinical interventions but also by socioeconomic determinants, political commitment, and institutional strength (Boro & Stoll, 2022).

Approximately fifty percent of the global population remains without access to fundamental healthcare services (WHO, 2023). The pandemic's effects were disproportionately harsh on lower-income populations, which already encountered structural disadvantages, including unstable housing, low educational attainment, and informal employment that restricted their ability to follow preventive measures or access medical care (Hill-Briggs et al., 2020; Gobburi et al., 2025). The swift digitalization of healthcare, however celebrated as an advancement, concurrently solidified inequality, as access to digital health was divided by income and geographic factors (Mahmood et al., 2020). As a result, the potential of telemedicine and virtual consultations predominantly overlooked those lacking digital access, especially in rural and disadvantaged regions.

Political governance emerged as a pivotal factor in influencing pandemic outcomes. Countries that implemented science-based leadership and transparent communication, like as South Korea and New Zealand, exhibited superior containment and healthcare delivery results. Conversely, some experienced deception, protracted decision-making, and the politicization of health measures, which undermined public trust (Malik & Garcia Elorrio, 2023). The occurrence of "vaccine nationalism" highlighted the geopolitical

disparities influencing health equity, as affluent nations amassed vaccine reserves far surpassing their domestic requirements, hence postponing access for low- and middle-income countries (Setiati & Razi, 2025). These differences highlighted that global health security is fundamentally linked to the dynamics of political economics and international collaboration.

The pandemic highlighted pre-existing vulnerabilities in the underfunded and fragmented health systems of sub-Saharan Africa, especially in Nigeria. Persistent personnel shortages, restricted ICU capacity, and inadequate surveillance systems impeded effective response (Phua et al., 2020; Endalew et al., 2022). Nigeria's healthcare expenditure, averaging around 5% of the national budget and much below the 15% target established by the Abuja Declaration, has proven insufficient to withstand the demands of the pandemic (Odularu & Onyekwena, 2020). The outcome was a disparate health response, with urban areas like Lagos enjoying enhanced facilities, whereas rural regions, including significant parts of Kaduna State, were inadequately served (Isaac & Sadanandan, 2020).

The socioeconomic consequences were similarly grave. Lockdowns damaged livelihoods, escalated poverty rates, and exacerbated food insecurity, resulting in an estimated 29 million Africans being thrust into extreme poverty (Anyanwu & Salami, 2021). In Kaduna State, where a substantial segment of the population relies on informal work, such restrictions intensified vulnerabilities and diminished healthcare consumption. Primary health centers, as the initial point of care for the majority of inhabitants, faced challenges such as insufficient testing kits, low staff enthusiasm, and inconsistent service delivery (Bracken, 2024). The crisis also incited social resistance, fueled by distrust, misinformation, and poor communication between federal and state authorities (Panjaitan et al., 2023).

PROBLEM STATEMENT

Although Nigeria has previously managed infectious disease outbreaks like Ebola and Lassa fever, the COVID-19 pandemic revealed persistent deficiencies in health system resilience and governance cooperation. The nation's disjointed administrative framework and political policy execution hindered efficient crisis management. In Kaduna State, a representative microcosm of Nigeria's socio-political diversity, COVID-19 highlighted the convergence of poverty, governance, and healthcare injustice. Healthcare professionals encountered resource deficiencies, irregular hazard compensation, and inadequate protection, leading to strikes and absenteeism (Craveiro et al., 2020). The lack of decentralized decision-making constrained local governments' ability to customize interventions to community needs.

Socioeconomic differences exacerbated healthcare inequalities between urban and rural populations, resulting in significantly unequal access to quality care, testing, and immunizations. Political contradictions and restricted fiscal autonomy further eroded confidence in public health organizations. Thus, the Kaduna experience reflects a wider continental challenge: the efficacy of pandemic response is not merely dependent on medical readiness but also on the socio-political environment in which health services function.

Rectifying these systemic inadequacies necessitates more than transient emergency interventions. It necessitates a systematic reorganization of health governance to guarantee fair resource allocation, transparency, and ongoing investment in public health infrastructure. Comprehending the influence of socio-economic and political determinants on health delivery during COVID-19 in Kaduna State is crucial for developing responsive, resilient, and inclusive systems that can address future health crises.

OBJECTIVES OF THE STUDY

The main aim of the study is to assess the Socio economic and political factors of covid 19 on effective health delivery in Kaduna

1- To examine the socio-economic factors of COVID-19 on healthcare delivery in Kaduna State.
2- To assess the political factors on COVID-19 on healthcare governance and policy implementation in Kaduna state.

RESEARCH QUESTIONS

1- What are the socio-economic factors of COVID-19 affecting healthcare delivery in Kaduna State?
2- How does the political factors of COVID-19 on healthcare impact on governance policy implementation in Kaduna state?

HYPOTHESIS

1- The socio-economic factors of COVID-19 on healthcare delivery in Kaduna State will not be significantly high.
2- The political effect of COVID-19 on healthcare governance will not be significantly high.

LITERATURE REVIEW

The COVID-19 pandemic revealed significant vulnerabilities in global health systems, with particularly severe consequences in low- and middle-income regions like Nigeria. Kaduna

State, situated in northern Nigeria, exemplifies the complex issues of healthcare provision under socioeconomic instability and political disunity. The pandemic represented a global biological threat, while its repercussions were influenced by societal and political factors. The effectiveness of Kaduna's healthcare response demonstrated enduring disparities in funding, governance, and accessibility, alongside the degree of confidence between the populace and governmental entities. This literature review critically analyzes existing research on the socio-economic and political determinants affecting health service during the COVID-19 epidemic in Nigeria, focusing on Kaduna State. The conversation is structured around four principal themes: (1) socio-economic drivers of healthcare access, (2) political governance and policy execution, (3) discrepancies between urban and rural healthcare systems, and (4) government interventions and resilience tactics.

Socio-Economic Determinants of Healthcare Delivery

Socio-economic disparities have persistently influenced health outcomes in Nigeria, and the epidemic exacerbated these inequalities. Researchers assert that income, education, occupation, and housing conditions significantly impacted access to health services during COVID-19 (Banda Chitsamatanga & Malinga, 2021). In Kaduna State, where the poverty rate above 40%, numerous households had conflicting pressures between generating daily income and complying with lockdown regulations (Nyabeze & Chikoko, 2024). The informal sector, which supports most urban residents, lacks social protection, compelling individuals to avoid medical appointments or acquire unregulated medications from informal sellers (Nahar et al., 2020).

Education served as a social buffer, influencing both health literacy and adherence to public health interventions. Estrada (2024) indicates that persons with greater educational attainment were markedly more inclined to engage in preventive behaviors, such as mask-wearing and vaccine acceptance. In contrast, inadequate literacy levels and disinformation fueled vaccine hesitancy throughout northern Nigeria (Kessy et al., 2025). The issues were exacerbated by housing and population density; congested informal settlements in Kaduna's urban regions obstructed social separation and isolation (Okeke et al., 2022).

Furthermore, socio-economic instability impacted healthcare professionals directly. A multitude of front-line personnel encountered salary deferrals, insufficient protection gear, and psychological exhaustion (Liu et al., 2020). These structural constraints illustrate a wider "syndemic" phenomenon, wherein health crises converge with poverty, unemployment, and inadequate social policies (Renzaho, 2020). Empirical evidence from Kaduna indicates that economic disruptions due to lockdowns diminished outpatient visits and immunization rates, especially among mothers and children (Otekunrin et al.,

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2024). Such outcomes highlight that socio-economic aspects are not ancillary but fundamental to the robustness of healthcare systems.

Political Governance and Health Policy Implementation

The performance of health systems during COVID-19 was equally a political phenomenon as an epidemiological one. Research throughout Africa indicates that the quality of governance and political alignment significantly impacted pandemic management (Baum et al., 2024; Malik & Garcia Elorrio, 2023). The federal arrangement in Nigeria has resulted in jurisdictional overlaps and uneven communication between the national and state governments. The local government areas (LGAs) of Kaduna State lacked economic autonomy and depended on federal allocations for emergency response, hence constraining their capacity to execute localized initiatives (Obani & Onu, 2022).

Renzaho (2020) contended that Nigeria's pandemic response inadequately included socio-cultural variables, leading to public skepticism and diminished compliance. Alabi et al. (2023) similarly noted that inconsistent political commitment among states resulted in fragmented outcomes, with northern states, including Kaduna, exhibiting the least constancy in routine health services. Political fragmentation was exacerbated by inconsistent risk communication; conflicting orders from federal and state authorities undermined public confidence and impeded the enforcement of preventive measures (Panjaitan et al., 2023).

Simultaneously, the presence of local political will was important where it was available. Bello et al. (2024) reported that proactive jurisdictions that emphasized health funding, community involvement, and maternal health services during lockdowns exhibited superior service continuity. However, Kaduna's experience demonstrated the constraints of decentralization without institutional coordination. Theoretical frameworks like the Political Economy of Health and Policy Implementation Theory (Grindle & Thomas) effectively elucidate these dynamics: political elites influenced policy outcomes through resource control and patronage networks rather than through evidence-based planning. Bureaucratic impediments and elite appropriation of vaccination distribution compromised both equity and efficiency (Odeh et al., 2023).

Urban-Rural Disparities and Access Gaps

Nigeria's healthcare system exhibits strong urban-rural inequities, a phenomenon seen in Kaduna State. Urban hospitals enjoyed superior infrastructure and availability to personal protective equipment, but rural primary health centers saw shortages of manpower, diagnostic kits, and vital medications (Phua et al., 2020). Lockdowns and transportation

restrictions exacerbated the isolation of rural populations, hindering patients' access to referral hospitals (Anwar et al., 2025).

The digital divide exacerbated these disparities. While urban inhabitants had limited access to telemedicine, inadequate broadband coverage and insufficient digital literacy made virtual consultations nearly unfeasible in rural Kaduna (Marciano, 2024). Moreover, gendered aspects of inequality became distinctly evident. Kapiriri et al. (2022) discovered that women, particularly in northern Nigeria, faced diminished access to prenatal and reproductive treatments as a result of clinic closures and transportation constraints. These disparities exemplify structural violence, in which socio-political frameworks routinely inflict harm on vulnerable groups (Onyishi & Ejike-Alieji, 2021).

Notwithstanding these limitations, certain community-driven solutions provided insights for resilience. Locally coordinated health outreach initiatives and partnerships between traditional leaders and public health professionals enhanced information distribution and increased vaccine uptake in specific Kaduna LGAs. These instances illustrate the significance of community ownership and culturally attuned governing structures.

Government Interventions and Systemic Resilience

Government actions during the pandemic included emergency finance and digital health innovations; nevertheless, their efficacy in Kaduna was limited by structural deficiencies. Health expenditure in Nigeria consistently fell short of the Abuja Declaration's aim of 15% of total expenditures, with an allocation of under 5% prior to the pandemic (Odularu & Onyekwena, 2020). Although federal emergency funding and donor assistance offered temporary alleviation, distribution inefficiencies and corruption constrained their effectiveness (Ozili, 2022).

In Kaduna, the Nigeria Centre for Disease Control (NCDC) managed monitoring and testing; however, insufficient laboratory capacity impeded containment efforts (Adewumi, 2025). Strikes by health workers, disruptions in the supply chain, and erratic data reporting exacerbated the problem (Craveiro et al., 2020). Nevertheless, specific policy changes, including the use of digital reporting tools and mobile immunization initiatives, signified gradual advancement. Global comparative data indicates that decentralization and intersectoral collaboration improve system resilience (Hamood Alsamhi et al., 2023; Ezzati et al., 2023).

Theoretical frameworks like the Social Determinants of Health and Systems Theory clarify the reasons behind Kaduna's health system's difficulties during pandemic-induced stress. Inadequate financial resources, interrupted service procedures, and ineffective feedback mechanisms resulted in a series of failures throughout the referral and immunization subsystems (Uzoh, 2020). Enhancing resilience necessitates the institutionalization of

preventative care, the integration of digital health infrastructure, and the incorporation of equitable considerations in budgeting. Post-pandemic recovery must progress from temporary assistance to structural transformation via universal health care, local budgetary empowerment, and workforce protection.

RESEARCH METHODOLOGY

This chapter delineates the analytical technique employed in a study examining the socio-economic and political effects of COVID-19 on healthcare delivery in Kaduna State, Nigeria. The research is grounded on a positivist philosophical framework, highlighting the objectivity and quantifiability of reality, and utilizes empirical data for statistical analysis to investigate the relationships among numerous factors affecting healthcare delivery during the pandemic. The research design utilizes a mixed methods approach, combining quantitative and qualitative data collection methodologies.

A descriptive survey approach was employed, focusing on healthcare professionals, public health administrators, and community residents, specifically sampling doctors, nurses, community health extension workers, and officials from the Kaduna State Ministry of Health. Approximately 18,200 licensed health professionals cater to 2.6 million residents, underscoring the crucial state of healthcare services in the area. To obtain a representative sample, a multi-stage sampling technique segmented Kaduna State into three senatorial zones, selecting one urban and one rural Local Government Area from each zone. The final sample consisted of 400 respondents: 200 healthcare professionals, 150 community residents, and 50 health administrators and policy leaders.

The data collection utilized structured questionnaires and semi-structured interviews to gather information on demographics, socio-economic impacts, and political variables via a 5-point Likert scale. Content and construct validity were confirmed via expert evaluations and correspondence with theoretical frameworks, including the Social Determinants of Health and the Political Economy of Health. A preliminary investigation demonstrated robust internal consistency, evidenced by a Cronbach's alpha of 0.86. Data collection utilized qualified research assistants to comply with ethical norms, while secondary data was obtained from credible sources, including government papers and academic literature.

Quantitative data analysis employed SPSS for descriptive and inferential statistics, whilst qualitative data was subjected to thematic analysis via NVivo software, adhering to established protocols to discern governance and socio-economic trends. Ethical considerations encompassed obtaining approval from the Kaduna State Ministry of Health Research Ethics Committee, guaranteeing voluntary participation, maintaining

anonymity, and safeguarding data. Informed consent was acquired before data collection, ensuring participant rights and anonymity during the research procedure.

Response Rate

A response rate was calculated based on the number of copies of the questionnaire collected out of the total number administered. A total of 420 copies of the questionnaire were distributed among respondents. A total of four hundred (400) duly completed and verified questionnaires, representing 95% of the total number distributed, collected and used for data analysis.

According to Duramany-Lakkoh, (2021) in descriptive research of this nature, a response rate of above 50% is adequate for analysis. Lending support to this assertion Osemene et al. (2021) also averred that a 50% response rate is adequate, 60% and above is good, and 70% is very good and 80% and above excellent. Momanyi et al. (2020) further concord with this argument and said that responses between 60-70% are considered adequate while anything above 70% is considered an excellent response rate. It is based on this that Schulenberg et al. (2021) asserted that for a social study, responses yielding over 60% response rate are adequate for making significant result conclusions.

Demographic Characteristics of Respondents

This section presents the demographic features of the respondents, including gender, age, religion, and parents' educational background.

Demographic Characteristics of the respondents

The demographic analysis of the 400 survey participants offers crucial context for understanding following results. The sex distribution was fairly even, with 216 males (54%) and 184 females (46%), reflecting gender inclusivity albeit with a small male predominance. Regarding the cadre, 256 respondents (64%) were senior staff and 144 (36%) were junior staff, indicating a higher propensity or readiness among senior individuals to engage. Data on marital status indicated that 288 (72%) were married, 80 (20%) single, 24 (6%) divorced, and 8 (2%) widowed, illustrating a population predominantly comprised of individuals with familial obligations, potentially influencing their viewpoints.

The respondents exhibited a high level of education: 2% possessed just primary certificates, 4% secondary certificates, 48% OND/Diploma, 34% HND/Bachelor's degrees, and 12% held Master's degrees or higher, indicating that 94% had post-secondary qualifications. The age distribution indicated that 22% were aged 21–30, 38% were between 31–40, 26% were between 41–50, and 14% were over 50, demonstrating a

concentration of 64% within the prime working years. Monthly income distribution revealed that 12% earned below ₦30,000, 36% earned between ₦30,000 and ₦60,000, 26% earned between ₦61,000 and ₦100,000, and 26% earned above ₦100,000, indicating a moderate to high earning capacity for the majority of respondents.

The geographical representation encompassed nine Local Government Areas (LGAs) in Kaduna State: Kaduna South, Kaduna North, Chikun, Kagarko, Zango, Sanga, Kudan, Sabon Gari, and Ikara, thereby incorporating both urban and rural viewpoints. The sample was diverse, well-educated, and predominantly comprised individuals within the economically active age group, establishing a solid basis for valid examination of perceptions and behaviors in the study.

Research Question One: What are the socio-economic factors of COVID-19 affecting healthcare delivery in Kaduna State?

Table 1: Responses on the socio-economic factors of COVID-19 affecting healthcare delivery in Kaduna State

S/No	Socio-economic factors of COVID-19 affecting healthcare delivery	Mean	SD	Decision
1	COVID-19 increased the cost of accessing healthcare services in my community.	3.08	0.914	Agreed
2	Unemployment during the pandemic negatively affected my ability to seek medical care.	2.92	0.936	Agreed
3	I experienced delays in receiving healthcare due to overwhelmed medical facilities during COVID-19.	2.98	0.813	Agreed
4	Travel restrictions during COVID-19 made it difficult for me to reach healthcare centers.	2.45	1.188	Disagreed
5	Healthcare services were less available in low-income areas during the COVID-19 pandemic.	3.24	0.737	Agreed
6	My household income affected the quality of healthcare I received during COVID-19.	2.72	1.06	Agreed
7	COVID-19 worsened existing inequalities in healthcare access in my community.	2.92	0.846	Agreed
8	Public healthcare facilities were better equipped to serve during the pandemic than private ones.	2.94	0.786	Agreed
	Grand Mean	**2.90**	**0.91**	**Agreed**

Source: Field work, 2024

Table 1 shows the Responses on the socio-economic factors of COVID-19 affecting healthcare delivery in Kaduna State. It is found that the grand mean of 2.90 and SD (0.91)

is greater that the cut-off points of 2.50, implying that the respondents generally agreed with the items assessing the socio-economic factors of COVID-19 affecting healthcare delivery in Kaduna State. Item-by-item analysis indicates that they agreed with all the items. Except item 4 with mean with 2.45. The conclusion is that majority of the respondents who are benefiting and seeking the socio-economic factors of COVID-19 affecting healthcare delivery in Kaduna State.

Research Question Two: How does the political factors of COVID-19 on healthcare impact on governance policy implementation in Kaduna state?

Table 2: Responses on the political factors of COVID-19 on healthcare impact on governance policy implementation in Kaduna state

S/No	Political factors of COVID-19 on healthcare impact on governance policy implementation	Mean	SD	Decision
1	Government response to COVID-19 was timely and effective in guiding healthcare policy.	2.74	1.215	Agreed
2	Political interests influenced how healthcare policies were implemented during the pandemic.	2.9	0.855	Agreed
3	COVID-19 exposed weaknesses in the national healthcare governance system.	2.86	0.939	Agreed
4	There was adequate coordination between federal and local governments in managing COVID-19.	3.34	0.652	Agreed
5	Healthcare policies during the pandemic were communicated clearly and transparently by political leaders.	3.24	0.681	Agreed
6	Public trust in government healthcare decisions declined during the COVID-19 pandemic.	3	0.873	Agreed
7	Political instability delayed the implementation of critical healthcare policies during COVID-19.	2.43	1.053	Disagreed
8	COVID-19 policies were influenced more by political agendas than scientific evidence.	2.9	0.807	Agreed
	Grand Mean	**2.92**	**0.88**	**Agreed**

Source: Field work, 2024

Empirical data presented in Table 2 shows the responses on Political factors of COVID-19 on healthcare impact on governance policy implementation in Kaduna state. It is shown that the grand mean of 2.92 and SD (0.88) is less that the cut-off points of 2.50, implying that the respondents generally did not agree with the items No 7 with corresponding

mean of 2.43. The conclusion is that majority of the respondents agreed with the Political factors of COVID-19 on healthcare impact on governance policy implementation in Kaduna state.

Hypothesis One: The socio-economic factors of COVID-19 on healthcare delivery in Kaduna State will not be significantly high.

In testing the first null hypothesis, the variable of interest is the socio-economic factors of COVID-19 on healthcare delivery in Kaduna State, measured by 8 items. The respondents' scores on the scale were summed-up. For the socio-economic factors of COVID-19 on healthcare delivery to be considered significantly high among the respondents, the scores made on the whole scale should be significantly higher/greater that 20 (which is the midpoint between strongly agree and strongly disagree). This implies 2.5 X 8, the number of items measuring the construct. This null hypothesis was tested with a one-sample t-test) otherwise called population t-test). The results are presented in Table 4.3.

Table 3: Population t-test analysis of whether the socio-economic factors of COVID-19 on healthcare delivery in Kaduna will not be significantly high

Variable	Sample Mean	Sample SD	Ref. Mean	T	Sig	Remark
The socio-economic factors of COVID-19 on healthcare delivery	23.25	4.44	20	14.63	< .001	Sig.

Source: Field work, 2024

A look at the results indicated a statistically significant the socio-economic factors of COVID-19 on healthcare delivery in Kaduna. (M=23.25, SD=4.44), t (399) = 14.63, P <.001. The magnitude of difference in the mean (mean difference =3.25), 95% CL: 2.81 to 3.68) was large (eta squared = 0.64). With these results the first null hypothesis is hereby not supported and hence rejected for the alternative. This implies that the socio-economic factors of COVID-19 on healthcare delivery in Kaduna was significantly high.

Hypothesis Two: The political effect of COVID-19 on healthcare governance in Kaduna state will not be significantly high.

In testing the second null hypothesis, the variable of interest is the political effect of COVID-19 on healthcare governance in Kaduna state, measured by 8 items. The respondents' scores on the scale were summed-up. For the political effect of COVID-19 on healthcare governance in Kaduna state will not be significantly high., the scores made on the whole scale should be significantly higher/greater that 20 (which is the midpoint

between strongly agree and strongly disagree). This implies 2.5 X 8, the number of items measuring the construct. This null hypothesis was tested with a one-sample t-test) otherwise called population t-test). The results are presented in Table 4.4

Table 4: Population t-test analysis of political effect of COVID-19 on healthcare governance in Kaduna state will not be significantly high.

Variable	Sample Mean	Sample SD	Ref. Mean	T	Sig	Remark
Political effect of COVID-19 on healthcare governance	23.41	3.46	20	19.727	< .001	Sig.

Source: Field work, 2024

A critical look at the results indicated a statistically significant high political effect of COVID-19 on healthcare governance in Kaduna state, Nigeria (M=23.41, SD=3.46), *t* (399) = 19.727, P =.001. The magnitude of difference in the mean (mean difference =3.41), 95% CL: 3.07 to 3.74) was very small (eta squared = 0.02). With these results the second null hypothesis is hereby not supported and hence rejected for the alternative. This implies that the political effect of COVID-19 on healthcare governance in Kaduna State, Nigeria was significantly high.

The Socio-Economic Factors of COVID-19 on Healthcare Delivery

The COVID-19 pandemic, declared by the World Health Organization (WHO, 2020), exposed deep-seated socio-economic inequities shaping healthcare delivery worldwide. While biologically universal, the virus's impact was profoundly unequal, mediated by factors such as income, education, occupation, housing, and digital access. Individuals in lower socio-economic strata particularly ethnic minorities, migrants, and low-income workers faced significant barriers to healthcare access, leading to disproportionate infection and mortality rates (Rivas et al., 2025; Joseph et al., 2024).

Socio-economic disparities also disrupted essential health services. In Tamil Nadu, India, maternal and child healthcare declined sharply as resources were diverted to COVID-19 response (Palanivel, 2025), while in South Africa, structural inequalities and chronic underfunding undermined both pandemic management and HIV/TB care (Kajiita & Kang'ethe, 2024). The rapid shift toward telemedicine further magnified the digital divide, excluding populations lacking internet access or digital literacy (Marciano, 2024; Pervin, 2024).

Healthcare workers, particularly women and those from lower socio-economic backgrounds, bore severe burdens including long hours, inadequate PPE, and mental

exhaustion (Evans et al., 2024; Milovanovic & Coetzee, 2024). Migrant and informal workers were similarly marginalized by barriers to insurance, documentation, and inclusion in public health schemes (Rivas et al., 2025). In resource-limited countries, fiscal constraints and donor reprioritization crippled essential programs (Chavula et al., 2024; Butala et al., 2024).

The pandemic ultimately revealed that equitable healthcare cannot exist without addressing broader social determinants. Achieving Universal Health Coverage requires integrating social justice principles through inclusive policy, community engagement, and cross-sector reforms in education, housing, and employment to build resilient, equitable health systems (Ramani et al., 2025).

The Political Effect of COVID-19 on Healthcare Governance

Political leadership profoundly shaped national responses to COVID-19. Centralized, evidence-based governance, as seen in New Zealand, enabled rapid, coordinated interventions that curbed mortality and economic loss (Kirwan, 2024). In contrast, politicized leadership changes and weak technical capacity in Ecuador hampered crisis management (Ortiz-Prado et al., 2025). Leadership style also mattered: authoritarian regimes enacted swift lockdowns, while democratic systems like Italy and the U.S. navigated prolonged negotiations (Wang & Qu, 2024; Dong et al., 2025).

Institutional capacity further determined outcomes. Germany and South Korea's robust bureaucracies ensured efficient testing and tracing, whereas fragmented governance in the Philippines and Latin America undermined policy execution (Santiago & Duggan, 2025; Antonio et al., 2025; Bispo-Júnior & Serapioni, 2025). In the U.S., federal-state tensions yielded inconsistent health mandates and vaccine distribution (Dong et al., 2025). Political will in resource allocation also proved decisive: proactive governments expanded hospital capacity and social safety nets, while indecisive or polarized legislatures delayed critical interventions (Edelman et al., 2025).

Populism and partisanship deepened mistrust. In Brazil and the U.S., politicization of science eroded compliance and worsened mortality (Malicse, 2024; Bispo-Júnior & Serapioni, 2025). Transparency emerged as a key determinant Nordic countries with high institutional trust achieved stronger adherence, unlike regions where censorship and misinformation flourished (Kabir, 2024; Hussain et al., 2024; Hansl & Paul, 2025).

Globally, vaccine diplomacy revealed geopolitical rivalries as nations used vaccine supply to advance strategic influence (Santiago & Duggan, 2025). Within regional blocs, nationalism disrupted solidarity, exemplified by the EU's vaccine procurement disputes (Wang & Qu, 2024). Emergency powers in several states curtailed civil liberties, exposing tensions between public health and human rights (Kabir, 2024; Hussain et al., 2024).

Political transitions, such as in the Philippines, further destabilized health governance (Encinas-Franco & Arugay, 2024).

To strengthen future resilience, governments must depoliticize health institutions, ensure merit-based leadership, and uphold transparency. Internationally, revitalizing equitable and coordinated global health governance especially through the WHO remains imperative (Ortiz-Prado et al., 2025; Edelman et al., 2025).

CONCLUSION

The study suggests that the COVID-19 pandemic exacerbated enduring socio-economic and political inequalities that hindered efficient healthcare provision in Kaduna State, Nigeria. Socio-economic constraints, including poverty, unemployment, and substandard living circumstances, severely limited access to basic health care, especially for low-income and rural communities. The digital divide exacerbated inequality, hindering the adoption of telehealth solutions that could have alleviated service disruptions. Fragmented governance systems, little coordination between federal and state agencies, and political decision-making undermined the overall response, diminished public trust, and decreased policy efficiency. This study's empirical evidence reveals that socio-economic vulnerability and weak governance were statistically significant drivers of healthcare delivery results during the pandemic.

The research advocates for a transition in Nigerian health policy from reactive containment to proactive resilience-building, emphasizing multi-sectoral investment in health infrastructure, universal broadband access, and social welfare protection for sustained post-pandemic recovery. Decentralized decision-making, transparent budgeting, and meritocratic leadership appointments are essential for reinstating institutional credibility and ensuring equitable and effective management of future public health catastrophes. By merging socio-economic justice with political accountability, Kaduna State and Nigeria as a whole may establish a more inclusive, flexible, and sustainable healthcare system that can endure future global health issues.

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