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Expert Opinion

North-South Divide in the Distribution of Medical Schools in Nigeria: A Tale of Internal Inequity

***Joshua Adejo Okpanachi[1,2], Paul Tunde KingPriest[1,2], Moses Ahangba Adamgbe[3], Yongmi Nathaniel Dana'an[4], Enoch Olaoluwa Olatoye[3], Barnabas Tobi Alayande[4,5]**

[1]Global Health Research Lab, Jos, Nigeria, [2]Surgical Equity and Research Hub, Jos, Nigeria, [3] R-Jolad Hospital, Lagos, Nigeria, [4]University of Jos, Jos, Nigeria, [5]University of Global Health Equity, Kigali, Rwanda

Abstract

Background: Nigeria, the most populous country in Africa, is broadly divided into Northern and Southern geopolitical regions based on a historical, geographic, and political divide. While this division is predominantly geopolitical, it also aligns with deep-rooted disparities in socioeconomic development, educational attainment, infrastructure, and healthcare access.

Methodology: This opinion paper sheds light on the inequitable distribution of the 65 Medical and Dental Council of Nigeria-approved medical schools (as at July 2025) between Northern and Southern Nigeria.

Results: The inequitable distribution of accredited medical schools between Northern and Southern Nigeria is in a ratio of 1:3. Six states in the North do not have any fully accredited medical schools. The North's 13 fully accredited schools have the capacity to graduate a little above 1,700 medical students, whereas the South's 32 fully accredited schools have the potential to graduate almost 4,000 medical doctors in every given academic calendar.

Factors including historical educational disadvantage, economic constraints, sociocultural factors, and insecurity were major contributory factors to this disparity.

Conclusion: Strengthening political will, using public-private partnerships and innovative funding mechanisms, and encouraging inter-regional migration of health workers are key to a multipronged approach to addressing this inequity.

***Correspondence:** Joshua Adejo Okpanachi, joshuaokpanach97@gmail.com

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Introduction

Nigeria, the most populous country in Africa, is home to over 200 million people spread across diverse ethnic, religious, and socio-cultural groups.[1] A commonly used framework for understanding the country's regional dynamics is the division into two broad regions: Northern and Southern Nigeria. Each region comprises three geopolitical zones, making up a total of six zones, namely, North-West, North-East, and North-Central in the North, and South-West, South-East, and South-South in the South (Figure 1).[2] While this division is predominantly geopolitical, it also connotes deep-rooted disparities in socioeconomic development, educational attainment, infrastructure, and healthcare access.[3,4]

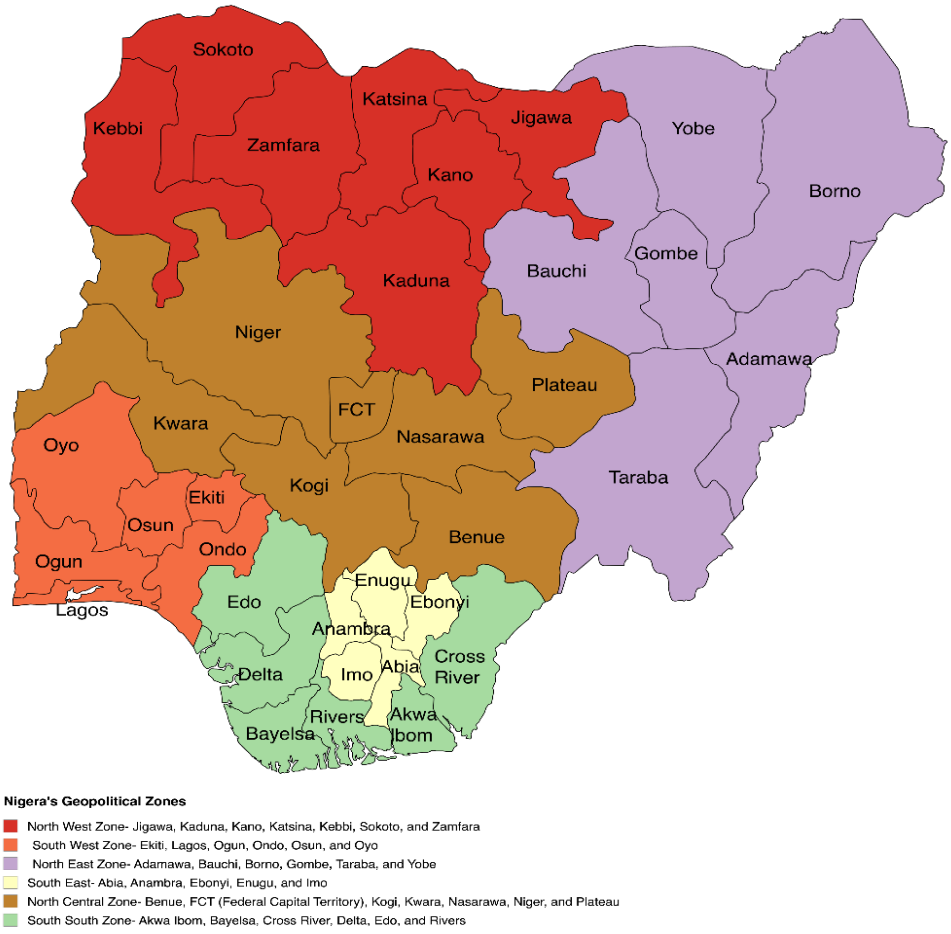

Figure 1: Nigeria's Geopolitical Zones

The Northern region, with an estimated population of 107 million and 19 states including the Federal Capital Territory (Figure 1), is characterised by predominantly agrarian economies, lower literacy rates, entrenched poverty, and more conservative socio-cultural practices.[5] Compounded by ongoing insecurity, particularly in the North-East, and underinvestment in social services, the region continues to face significant barriers to accessing quality healthcare as health indicators in the North remain concerning, with higher maternal and child mortality rates, limited access to health facilities, and a persistent shortage of skilled health workers.[3,4,6–8]

In contrast, the Southern region, with approximately 97 million inhabitants and 17 states (Figure 1), is generally more urbanised, with stronger health and education systems, higher literacy levels, and greater investment in human capital development.[5]It also boasts a larger concentration of tertiary institutions, including medical schools, and a comparatively stronger healthcare workforce. Cities such as Lagos,

Ibadan, Benin, and Enugu have become centres for medical training and health service delivery, reinforcing regional imbalances in healthcare development.[7,9]

Table 1. Key Indicators to Assess the Health and EducationalSectors Between Northern and Southern Nigeria. [6,10–12]

Health Indicators	**North**	**South**
Maternal Mortality(per 100,000 livebirths)	709	365
Neonatal Mortality(per 1,000 livebirths)	39	27
Infant Mortality (per 1,000 livebirths)	61	39
Under 5 deaths (per 1,000 livebirths)	111	54
Toddlers fully vaccinated against basic antigens (%)	33.9	55.7
Toddlers fully vaccinated according to the national schedule (%)	15.2	34.8
Educational Indicators	**North**	**South**
Average Educational Attainment (years)	3.5	7.1
Literacy Rate for Males 15-24 years(%)	62.3	94.3
Literacy Rate for Females 15-24 years(%)	47.3	94.3

This perspective paper examines the disproportionate distribution of medical schools across Nigeria's six geopolitical zones (Figure 1), with a specific focus on the regional imbalance between North and South. It explores the underlying factors responsible for this inequity, its consequences for the health system, and proposes strategies for promoting a more equitable spread of medical education. (Table 1) Addressing this imbalance is essential for strengthening health systems, improving health outcomes, and advancing health equity across the country.

Current Situation

According to the Medical and Dental Council of Nigeria (MDCN), the body responsible for accrediting medical training institutions in Nigeria,as of January 2025, there were 62undergraduate degree-awarding medical institutions in Nigeria.[13]Forty-five of these were fully accredited, and 17 were partially accredited. Of which the North has 18 medical schools, with the South having 44. (Table 2) These institutions graduate an average of 3,500 doctors annually.[14]

The distribution of medical schools in Nigeria reveals a stark regional disparity. The majority of accredited institutions offering undergraduate medical education are concentrated in the South, while the North remains significantly underserved.[13] The limited availability of such institutions in the North reduces access to medical education for aspiring students in the region and contributes to the persistent shortage of doctors and other health professionals, particularly in rural and underserved communities.

Figure 2demonstrates the disproportionate distribution of these institutions with heavy concentration in the Southern part of the country.[13]This regional imbalance in medical education is not merely a reflection of geography; it is deeply rooted in historical, socio-political, and economic inequities.[8,15]In the North, school enrollment from primary to secondary institutions is lower when compared with the South,resulting in more out-of-school children.[8] This highlights a cultural basis for the underutilisation of educational facilities. Poverty also made a major contribution to the decline in school attendance for children across educational levels.[16]It perpetuates a cycle where regions with the greatest need for healthcare services are least equipped to produce and retain the necessary workforce.[8]

The North's 13 fully accredited schools have the capacity to graduate a little above 1,700 medical students, whereas the South has 32 fully accredited schools and has the potential to graduate almost 4,000 medical doctors in an academic calendar. (Table 2) There is also a clear discrepancy in terms of institutions with partial accreditation, with the North having five, against the South, which has 12(Table 2).

There is at least one medical school in every southern state; however, out of 19 northern states (and the Federal Capital Territory, FCT), five are yet to have a medical school regardless of accreditation status. (Fig 2).

The most recent documentation showed that more than 450,000 candidates applied for medical courses in the 2023 edition of the Unified Tertiary Matriculation Examination.[17] It also suggested that medicine was one of the most preferred courses chosen by prospective students applying for tertiary education across the country. However, there is inadequate infrastructure and medical education system-level capacity to accommodate this legion of prospective students based on the allocated quota for medical schools by the Medical and Dental Council of Nigeria.[13]

Table 2. Number of Medical Schools with Medical and Dental Council of Nigeria Accreditation Based on Region and Sector as at July 2025.[13]

Characteristic	**Full Accreditation n=45, (%)**	**Partial Accreditation n=20, (%)**	**Total n=65 (%)**
Zone (number of states)			
North	**13 (28.9)**	**8 (40.0)**	**21 (32.3)**
North West (7)	4 (8.9)	3 (15.0)	7 (10.8)
North East (6)	3 (6.7)	3 (15.0)	6 (9.2)
North Central (6 + FCT)	6 (13.3)	2 (10.0)	8 (12.3)
South	**32 (71.1)**	**12 (60.0)**	**44 (67.7)**
South West (6)	12 (26.7)	2 (10.0)	14 (21.5)

South East (5)	8 (17.7)	7 (35.0)	15 (23.1)
South-South (6)	12 (26.7)	3 (15.0)	15 (23.1)
Sector			
Federal	19 (42.2)	7 (35.0)	26 (40.0)
State	16 (35.6)	5 (25.0)	21 (32.3)
Private	10 (22.2)	8 (40.0)	18 (27.7)
Explanatory Note: FCT – Federal Capital Territory			

*Average number of medical schools per geopolitical zone, regardless of accreditation type, is 10.8; fully accredited is 7.5; partially accredited is 3.6.

The North had 13 fully accredited medical schools and 8 schools with partial accreditation. Whereas the South had 32 fully accredited schools and 12 with partial accreditation.

Federal-owned schools make up the bulk of all accredited schools (40.0). Privately-owned schools account for the least (27.7%).

Every zone in the southern region has more fully accredited schools than the average per zone, whereas none of the zones in the North were able to attain the average per zone.

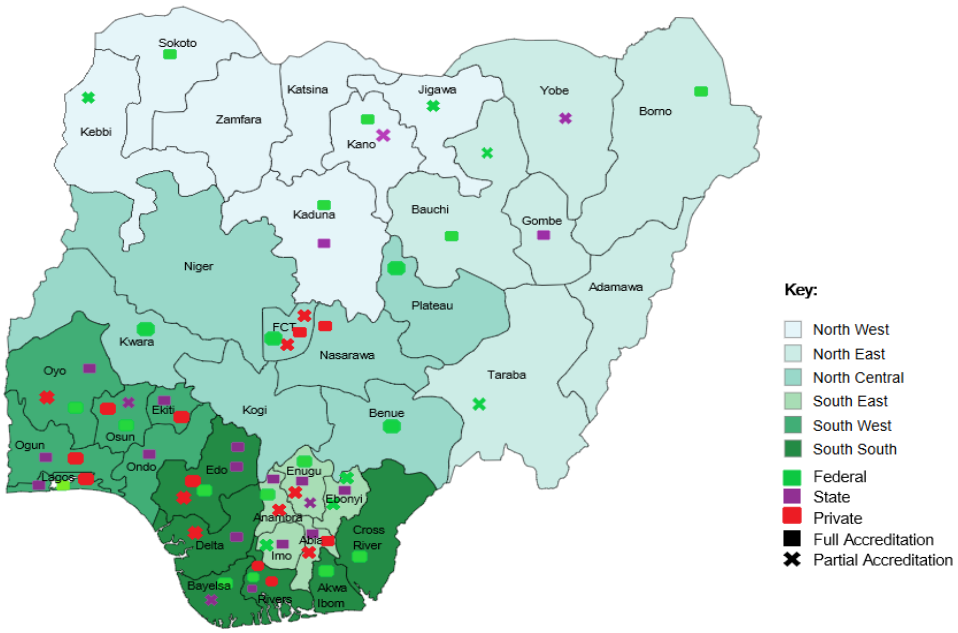

Figure 2. Distribution of Accredited Medical Schools Based on Region and Sector as of July 2025.[13]

Table 3. Distribution of Medical Student Quota Allocation for Medical Schools Based on Region

Region (number of states)	**Full Accreditation n=5645**	**Partial Accreditation n=1750**	**Total n=7395 (%)**
North	**1735 (30.7)**	**575 (32.9)**	**2310 (31.2)**
North West (7)	600	200	800 (10.8)
North East (6)	310	200	510 (6.9)
North Central (6 + FCT)	825	175	1000 (13.5)
South	**3910 (69.3)**	**1175 (67.1)**	**5085 (68.8)**
South West (6)	1370	175	1545 (20.9)
South East (5)	940	775	1715 (23.2)
South South (6)	1600	225	1825 (24.7)

Northern Schools accounted for 31% of the allocated quota for medical schools in Nigeria, whereas schools in the South accounted for 69%. Approximately 69% of all medical students in fully-accredited Nigerian medical schools are in the South. The picture is not different for partially accredited schools, as the quota for the southern medical schools is 67%. This implies thatout of 10 medical students, only 3 in Nigeria receive their education from institutions in the North. This may not be the case in reality, as most schools are known to hyper-inflate their admission process, admitting more students than the accepted quota given to their institution.[18]

Over the last decade, there has been an increase in the number of fully accredited medical schools from 32 to 47.[13,19] However, there has been more investment in medical education in the South than in the North. The partially accredited medical schools, which largely represent emerging medical schools, are predominantly privately-owned and are concentrated in the South. (Figure 2). This shows the tendency of private individuals and organisations to direct their investment in medical education to the South.

Factors Responsible for Inequities in Medical School Distribution

The uneven distribution of tertiary medical institutions across these two major regions is not a new phenomenon and has been described previously.[8] Historically, the colonial era left a legacy of educational disparities, with the South receiving more attention in terms of infrastructural development, including the establishment of universities and medical schools. The Northern region, with its predominantly agrarian population, was less developed in terms of educational institutions during this period.[8,20] Political decisions and policies have historically favoured the Southern regions in terms of educational investments. Additionally, there has been a lack of prioritisation of the Northern region's

educational needs, thereby widening the gap in access to medical education.[7]On a general note, the percentage of the budget allocated to education in the North tends to be lower than in the South.[21]

Establishing and maintaining medical schools is an expensive venture, and the Northern states, facing economic constraints and competing developmental priorities, may find it more difficult to invest in the establishment of new medical institutions. Most of these existing schools were originally established as a faculty under pre-existing universities and colleges in the South. This economic divide contributes to the continued lack of sufficient medical schools in the North.[3,8] Candidates from affluent homes in the North tend to journey to the South for their medical education owing to how that region serves as a more attractive location for private-sector investment opportunities.[3]

In some Northern states, socio-cultural factors, including lower female educational enrolment rates and preference for certain fields of study, influence the demand for medical education. This, in turn, affects the perceived need for more medical schools in the region.[3] Incessant insecurity that has ravaged the North for some time has also contributed to the decreased investment in all sectors, not just the education sector.[3,14,22]

The establishment and qualification of a medical school requires it to be affiliated with a standard, well-staffed Teaching Hospital, which will serve as an environment for learning and application of clinical skills.[23] These hospitals are more in the South than the North, which promotes the comparative advancement of medical education in the South.[24]

Implications of this Distribution and the Way Forward

As earlier stated, Northern Nigeria has a higher population than the South [5],and the North-west is the geopolitical zone with the highest population of 46 million.[14]Currently, Nigeria is grappling with an alarming doctor-to-patient ratio, estimated at 1:2,500, which is far from the recommended 1:600.[15]This disproportionate situation shows the bleak consequences for the future of the already overburdened healthcare workforce in the North that has fewer accredited institutions to train medical doctors.

If the rate of graduating qualified medical doctors does not correspond with this growing population, it is not out of place to anticipate the lack of access to quality healthcare that a huge population in Nigeria will face. This will further dampen any attempt to achieve Universal Health Coverage, thus leaving a large group of the nation's population to the detriment of poorly trained medical doctors in the future.

Looking at the long-term implications, the scarcity of teaching hospitals and qualified medical doctors also translates into an impending lack of experienced teachers in the medical field. This will further create a scenario with a decreasing number of doctors in subsequent generations. Not forgetting that in all of this, Nigeria has a growing population.[25]

Mitigating these factors would require a cross-sectoral collaboration between the government and the private sector.[4,26,27]An important starting point would be the government's political will. Leaders in education, including federal and state ministries of health and education, must realise the acute need for doctors in the North and prioritise building and equipping medical schools. In the short term, this much-needed increase could come from the expansion and re-equipping of already established schools, while lobbying for an increase in the assigned quotas to maximise the capacity of medical schools in the region, therebyincreasing the qualified institutions in this region.[8]As achievable as this may sound, varying priorities between the parties involved may dampen it's actualization,with support for medical education getting the shortend of the stick.

On a national level, pro-educational policies that ensure equitable distribution of medical schools and other educational resources across Nigeria must be introduced to provide equal opportunity to medical students between the North and South regions. Policy direction must be carefully crafted to avoid hindering the current rise of medical schools in the South while encouraging the Northern states to establish state-owned medical schools. It is also imperative that underserved areas, especially states that do not currently have a training institution, are given priority in national education planning. This, however, will be subject to the decision of relevant stakeholders in these regions when they identify this as a challenge and collectively agree on the need to proceed with the propagation of qualified medical institutions.

Public-private partnerships should be explored to fund the establishment of new medical schools, particularly in the North. In cases where the state government is unable to fund or maintain a medical school, a public-private partnership could be sought to acquire these schools and expand their capacity. These steps will ultimately result in an improved doctor-to-patient ratio by easing the potential burden that low medical education posesto cause on an already strained healthcare system. Other funding sources, such as foreign investments, grants, and philanthropic donations, should be explored. However, the North must not rely solely on private sector funding for these medical schools, or it may risk having high-quality schools that its citizens cannot afford to attend.

Lastly, inter-regional migration of qualified healthcare workers, where trained doctors from schools in the South can migrate northwards, should be encouraged. This would increase the pool of qualified doctors in the regions that lack them. An increasing number of trainers will be met with a quicker path towards accreditation for the institution. This would be helpful in developing more accredited schools for medical education, especially in the North. The North must prove itself to be the more attractive region for medical professionals with incentives which include increased reimbursements for doctors practising in these regions, an accelerated career path, a more flexible practice, increased quality of life, and a safer security environment. This will enable inter-regional migration amidst the challenges associated with the vast differences in their social landscape.

Table 4. Summary of the Recommendations to Achieve Inter-Regional Equity in Medical Distribution in Nigeria

S/No	Identified Challenges	Recommendations
1	Weak Political Will	• Acknowledging regional gaps and the urgent need to invest inthe future of healthcare in the region.
		• Making education a top priority
		• Setting up policies that accommodate academic expansion.
2	Financial limitations	• Budgetary allocations made at the national and state levels of government to encourage the establishment of new medical institutions
		• Public-Private partnerships enable individuals and groups of philanthropists to expand medical education.
3	Insufficient Man-power	• Inter-regional migration of health workers, particularly trained doctors, to train in the newly established institutions

Conclusion

To achieve universal health coverage, it is important that the expansion of medical training institutions is equitable among all geopolitical regions.

By addressing the factors responsible for the North-South divide in medical education, Nigeria can take a crucial step toward achieving a more equitable and effective healthcare system. Reducing regional disparities in medical education will help ensure that healthcare professionals are better distributed across the country, ultimately improving health outcomes for all Nigerians.

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