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COMPARATIVE ANALYSIS OF MIGRATION INTENTIONS VERSUS STAYING AMONG MEDICAL STUDENTS IN THE NEXT SIX YEARS: EVIDENCE FROM THE UNIVERSITY OF ABUJA COLLEGE OF HEALTH SCIENCES, NIGERIA

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Abstract

Physician retention is a global workforce challenge, but the crisis is more severe in low- and middle-income countries, where medical migration begins as early as undergraduate training. In Nigeria, the anticipated loss of a large proportion of newly trained doctors threatens healthcare system sustainability. To compare the proportion of medical students at the University of Abuja intending to leave Nigeria with those planning to remain over the next six years, and to assess the relationship between migration intention and planned sector retention. A cross-sectional descriptive survey was administered to 236 medical students across all levels of study using stratified random sampling. Data collection utilized a structured interviewer-administered questionnaire, exploring migration intentions, timing, reasons, and sector retention plans. Analysis was performed using SPSS v26, with findings presented as frequencies and percentages. Overall, 73.7% of respondents planned to leave Nigeria after graduation, compared to 23.7% intending to stay. Migration intentions exceeded 60% at every study level, peaking at 81.5% among 300-level students. About 62.7% intended to leave Nigeria but remain in the health sector, while 8.0% planned to leave both the health sector and the country. The majority of medical students surveyed intend to migrate within six years, suggesting a severe future workforce deficit if these plans are actualized. Strategies to improve working conditions, offer career incentives, and strengthen early-career retention policies are urgently needed.

Keywords: Medical migration, brain drain, healthcare workforce, Nigeria, medical students.

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Introduction

Global health systems face uneven distribution of medical personnel, with LMICs shouldering the dual burden of workforce shortages and outbound migration of skilled professionals [1,2]. The World Health Organization (WHO) identifies health workforce retention as a critical determinant of healthcare accessibility in sub-Saharan Africa [3].

Nigeria's physician-to-population ratio is far below the WHO-recommended standard of 1 doctor per 1,000 people [4]. Current estimates suggest that Nigeria loses dozens of doctors weekly to countries such as the UK, USA, Canada, and Australia [5, 6]. This continuous outflow-commonly referred to as "brain drain"-reduces the already limited human resource capacity for health and undermines the long-term stability of the health system.

While studies have documented migration among practicing physicians, fewer have examined the intentions of medical students, who represent the incoming healthcare workforce [7-9]. Understanding when during training migration intentions form, and how these intentions relate to staying within or leaving the health sector, is crucial for effective retention policy design.

This study compares the percentage of students intending to leave Nigeria within six years to those intending to remain, and explores the link between national retention and sectoral retention.

METHODS

Study Design and Setting

The study used a cross-sectional descriptive design conducted at the University of Abuja College of Health Sciences, a federal medical training institution with a six-year MBBS programme.

Population and Sampling

The study population included all medical students in the 100–600 levels during the study period. Stratified sampling by academic level ensured proportional representation, followed by simple random selection within each stratum.

Sample Size

A minimum sample size of 226 was calculated using the Leslie–Kish formula, adjusted for a 10% non-response rate, based on an estimated 84% prevalence of migration intention from a Romanian study. [10]

Data Collection

A structured interviewer-administered questionnaire collected socio-demographic data, migration intentions, timing, preferred destinations, reasons for leaving or staying, and health sector retention intentions.

Ethical Approval

Ethical clearance was obtained from the University of Abuja Teaching Hospital Ethics Review Committee. Participation was voluntary, with informed consent obtained from all respondents.

Data Analysis

Data were coded and analyzed using SPSS v26. Categorical variables were summarized as frequencies and percentages and displayed in tables.

Results

Comparison by Academic Level

Table 1 show that migration intention was high across all academic levels, ranging from 63.4% (200-level) to 81.5% (300-level). The p-value of 0.639 indicates no statistically significant difference across levels.

Table 1. Comparing percentage of medical students intending to leave Nigeria post-graduation to those intending to remain in Nigeria.

Level of study	Leaving Nigeria	Remaining in Nigeria	p – value
100level	25(75.8%)	7(21.2%)	
200level	20(63.4%)	13(31.7%)	
300level	22(81.5%)	5(18.5%)	
400level	63(80.8%)	14(17.9)	
500level	16(69.6)	6(26.1%)	
600level	22(64.7%)	11(32.4%)	0.639

Relationship between National Retention and Sector Retention

Table 2 demonstrates that while 62.7% planned to leave Nigeria but remain in the health sector, 8.0% intended to leave both. A small proportion (1.7%) intended to remain in Nigeria but leave the health sector, while 19.5% planned to remain in both Nigeria and the sector.

Table 2. Comparing percentage of medical students intending to remain in Nigeria but leaving the health sector

		Intention to leave the health sector	
	Intention to leave Nigeria	Leaving Health Sector	Remaining in the Health sector
	Leaving Nigeria	19(8.0%)	148(62.7%)
	Remaining in Nigeria	4(1.7%)	46(19.5%)

Discussion

The findings demonstrate a pervasive intention to migrate among medical students in Nigeria, consistent with other African studies [11–13]. That migration intention is already above 60% in first-year students suggests these plans form early, possibly influenced by media, peer networks, and family experiences with migration [12]. The absence of a

significant difference between study levels indicates that retention interventions cannot be delayed until internship or early career; they must begin in the first year of medical school. This aligns with Ugandan data showing that early educational experiences influence migration decisions as much as professional factors [8, 9]. The high percentage of students planning to remain in the health sector but work abroad represents a loss not only of human capital but also of the investment made in medical education by the Nigerian state. A smaller but important fraction intends to leave medicine entirely, often citing burnout, low prestige, or better opportunities elsewhere [13].

Retention strategies should therefore address both national and sectoral attrition risks. For national retention, improved remuneration, workplace safety, and equipment availability are key. For sectoral retention, fostering professional identity, mentorship, and postgraduate training opportunities within Nigeria may reduce the shift to non-health sectors.

Conclusion

Over seven in ten medical students at the University of Abuja plan to leave Nigeria within six years of graduation, with no significant variation across academic levels. Most plan to remain in healthcare abroad, but nearly 10% intend to exit the health sector entirely. Without targeted retention measures, Nigeria risks losing more doctors than it produces in the coming decade.

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Ethical Approval

Ethical clearance has been obtained from the University of Abuja Teaching Hospital.

Inform Consent

Taken from Study Participants.

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Author Contribution

Both Authors contributed equally

Conflict of Interest

None Declared

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