

Determining Factors for the Choice of Medical Career among the Final Year Medical Students of a Private University in Nigeria

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Abstract

Background: Medical education worldwide is more expensive compared to other university courses due to the structure of the training into two phases: basic medical sciences and clinical sciences, each with extensive syllabuses and involves an array of professionals in various specialties. The burden of medical education was largely borne by the government in Nigeria until recently when the private sector forayed into the provision of tertiary education including medical education. **Methods:** The study was a cross-sectional survey study. All 94 final year medical students of Afe Babalola University, Ado-Ekiti, a private sector-owned university in South Western Nigeria, were invited to participate in the study. The institutional ethical approval was sought and obtained (ERC/2020/04/07/364A). Structured self-administered questionnaires were used to collect relevant data. Participation in the study was voluntary and confidential. The data obtained were analyzed using SPSS version 20.0 (SPSS Inc., Chicago, IL, USA). **Results:** Eighty-three (88%) final year medical students participated and returned completed questionnaires out of 94 students. Further analyses were on the number of the respondents ($n = 83$). Fifty-seven (68.7%) of the respondents were female, whereas 26 (31.3%) of the respondents were male. The mean standard deviation age was 23 (1.6) years, and the age ranges between 20 and 30 years. Parental influence and personal interest were the two most important factors that influenced the decisions for medical education. Fifty-seven (68.7%) of the respondents prefer to practice outside Nigeria, 25 (30.1%) respondents will like to practice in Nigeria but in urban areas, whereas only 1 (1.2%) of the respondents will prefer to practice in a rural area. **Conclusion:** The choice of medical education and future specialty is multifactorial but the most important factors are personal interest and parental influence. The choice of where to practice is mostly determined during the undergraduate program, and it tends toward continuous emigration of doctors to developed countries.

Keywords: Medical education, medical students, Nigeria, postgraduate specialty, private university

INTRODUCTION

The medical profession is perceived as prestigious and remains so even in most low- and middle-income countries like Nigeria.^[1] The burden of medical education was largely borne by the government in Nigeria until recently when there was a significant proliferation of private universities, many of which have ventured into medical education.

This form of education is more expensive compared to other university courses due to the fact that the training is in two phases, namely basic medical sciences and clinical sciences, each with extensive syllabuses involving an array of professionals in various specialties.^[1] The advances in medical

sciences continue to expand the already elaborate syllabus, thereby ensuring continuous growth in medical education.^[1] This, in turn, poses significant challenges for the prospective medical students who are eager to join the noble profession. The government-owned medical schools are relatively

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How to cite this article: Okunlola AI, Babalola OF, Okunlola CK, Salawu AI, Adeyemo OT, Adebara IO. Determining factors for the choice of medical career among the final year medical students of a private university in Nigeria. Niger J Med 2020;29:308-11.

Submitted: 16-May-2020

Revised: 22-May-2020

Accepted: 28-May-2020

Published: 26-Jun-2020

Access this article online

Quick Response Code:



Website:
www.njmonline.org

DOI:
10.4103/NJM.NJM_79_20

subsidized, entry requirements are highly competitive, and there are inadequate admission slots for the large number of applicants; hence, options of enrolling in either private medical school in Nigeria or exploring medical education outside Nigeria are open to the prospective students. Another challenge in the public medical schools is recurrent industrial disharmony which disrupts training and services in both the university system and the health sector which usually prolong the duration of medical education.

Medical profession is a noble and provides an opportunity to provide health services, while being regarded as a means of a stable and financially rewarding career.^[2] There are different reasons for the choice of medicine as a career.^[3,4] This is quite important in a developing country like Nigeria where there are limited spaces in government-owned medical schools, and private medical schools are quite expensive for an average family.

There are several factors which influence students' decision to study medicine irrespective of financial background.^[3,5] The aim of this study was to document the various factors that influence students' decision to study medicine in a private medical school, future proposed area of specialization, and the choice of location to practice.

METHODS

The study was a cross-sectional survey study. All 94 final year medical students of Afe Babalola University, Ado-Ekiti, a private sector-owned university in South Western Nigeria, were invited to participate in the study. The aim of the study was discussed with the students in their lecture hall. Structured self-administered questionnaires created by the first author were used to collect relevant data such as the demographic profiles of the students, source of sponsorship, and the factors influencing decision-making. Participation in the study was voluntary and confidential. The institutional ethical approval was sought and obtained (ERC/2020/04/07/364A). The data obtained were analyzed using SPSS version 20.0 (SPSS Inc., Chicago, IL, USA).

RESULTS

Eighty-three (88%) final year medical students participated and returned completed questionnaires out of 94 students, and nonresponse rate was 12%. Further analyses were based on the number of the respondents ($n = 83$). Fifty-seven (68.7%) of the respondents were female, whereas 26 (31.3%) of the respondents were male. The mean standard deviation age was 23 (1.6) years, and the age ranges between 20 years and 30 years. The students come from all the geopolitical zones of the country mostly in the economic hub of the country, especially Lagos in the South-West (31, 37.4%), Abuja in the North-Central (24, 28.9%), and Port Harcourt in the South-South (21, 25.3%) [Table 1]. Family is the source of financial support for the respondents.

Personal interest (58, 69.9%) and parental influence (38, 45.8%) were the two most important factors that influenced

the decisions for medical education, followed by the future job opportunities (21, 25.3%) and lifestyle/financial rewards (14, 16.9%) [Table 2]. The choice of postgraduate specialty was mainly influenced by personal interest (65, 78.3%) developed during rotation in the various specialties [Table 3].

Obstetrics and gynecology (15, 18.1%) was the most favorable choice followed by pediatrics (11, 13.3%) [Table 4]. Fifty-seven (68.7%) of the respondents prefer to practice outside Nigeria, 25 (30.1%) respondents will like to practice in Nigeria but in urban areas, whereas only 1 (1.2%) of the respondents will prefer to practice in a rural area [Table 5]. Approximately, only one-third of the students have mentors to guide them during their undergraduate program.

DISCUSSION

Medical profession plays a leading role in the health-care delivery system, and our society views an individual who is privileged to study medicine as a role model and a pride of the family. This is reflected in many developing countries like Nigeria where every family desire to have a medical doctor.^[6] There is competition for medical education which has made entry into medical school challenging for the prospective students. Until recent years, undergraduate medical education is offered only in the government universities across the country which only admit a small fraction of the prospective students. Affluent families are left with the choice of medical education outside Nigeria which is usually expensive. With the recent increase in private universities

Table 1: Distribution of respondents by the sociodemographic characteristics

| Parameter | Classification | Frequency (%) |
|--------------------------------|----------------|---------------|
| Gender | Male | 26 (31.3) |
| | Female | 57 (68.7) |
| | Total | 83 (100.0) |
| Geopolitical zone of residence | South-West | 31 (37.4) |
| | North-Central | 24 (28.9) |
| | South-South | 21 (25.3) |
| | South-East | 4 (04.8) |
| | North-East | 2 (02.4) |
| | North-West | 1 (01.2) |
| | Total | 83 (100) |

Table 2: Factors influencing the choice of bachelor of medicine and bachelor of surgery ($n=83$)

| Factors | Frequency (%) |
|---------------------------------|---------------|
| Personal interest | 58 (69.9) |
| Parents | 38 (45.8) |
| Future job opportunities | 21 (25.3) |
| Lifestyle and financial rewards | 14 (16.9) |
| Family member(s) doctor | 6 (07.2) |
| Influence from a mentor | 5 (06.0) |
| Family member(s) nondoctor | 4 (04.8) |
| Peer influence (friends) | 3 (03.6) |

Table 3: Factors influencing the choice of postgraduate specialization (n=83)

| Factors | Frequency (%) |
|--|---------------|
| Personal interests | 65 (78.3) |
| Family and friends | 23 (27.7) |
| Previous positive clerkship experience | 17 (20.5) |
| Lifestyle and financial rewards | 16 (19.3) |
| Influence from a mentor | 14 (16.9) |
| Future job opportunities in that field | 14 (16.9) |
| Geographical location | 10 (12.0) |

Table 4: Postgraduate specializations

| Programs | Frequency (%) |
|---------------------------|---------------|
| No response | 29 (34.9) |
| Obstetrics and gynecology | 15 (18.1) |
| Pediatrics | 11 (13.3) |
| Neurosurgery | 5 (06.0) |
| General surgery | 5 (06.0) |
| Cardiothoracic surgery | 3 (03.6) |
| Emergency medicine | 3 (03.6) |
| Community medicine | 2 (02.4) |
| Ophthalmology | 2 (02.4) |
| Plastic surgery | 2 (02.4) |
| Anatomic pathology | 1 (01.2) |
| Endocrinology | 1 (01.2) |
| Internal medicine | 1 (01.2) |
| Public health masters | 1 (01.2) |
| Renal medicine | 1 (01.2) |
| Virology | 1 (01.2) |
| Total | 83 (100.0) |

Table 5: Location of future practice

| Classification | Parameter | Frequency (%) |
|--------------------------|---------------------|---------------|
| Future practice location | Outside the country | 57 (68.7) |
| | Urban area | 25 (30.1) |
| | Rural area | 1 (01.2) |
| | Total | 83 (100.0) |

offering the course, the options available have been expanded, bringing relief to many qualified prospective students.

Medical education and therefore, medical profession has been dominated by male gender in Nigeria over the years. This could be as a result of competition for limited available spaces in the government universities across the country. Our findings, however, reveal female gender dominance of our final year medical students which could reflect that more of them are now opportune to gain admission.^[2] This is a positive trend in favor of some previously male-dominated specialties such as obstetrics and gynecology. The increasing requests for female doctors in obstetrics and gynecology are influenced by clients/patients in this field, and other possible factors may include sociocultural reasons.^[7,8] The gender imbalance in the medical profession has been a challenge over the years, but

this new trend will have a positive impact in the health-care delivery system.

The medical students are from all the six geopolitical zones in the country. This reflected that the desire to be a doctor can eliminate tribal difference and promote harmony in the country. Average families can easily support their wards in the government-funded medical schools, but the situation is different in the private sector-owned medical schools.

The source of finance of our medical students in this study is family, and this is reflected in our findings that most of the students are from the economic hubs of each geopolitical zones.^[2] The proliferation of private universities has redirected educational tourism from seeking medical education abroad to private medical schools in the country, thereby improving the local economy.

The choice of future specialty of individual medical students is usually influenced by various factors during their undergraduate program.^[8-12] Mentorship may play a significant role in guiding the undergraduate medical students in their choice, but the percentage of students who have mentors is very low in this study; majority of the students made their choice of future specialty based on personal interest, followed by peer influence.^[3,4,13] Only 8.8% of the students attributed their choice of future specialty to the influence of mentors. This showed that there is a dearth of mentorship influence in our medical institutions; hence, leaders and teachers of the medical profession must revive the old traditions of medical practice that place them as iconic mentorship figures in the minds of the younger generation. Streaming from this, a formal mentorship program for undergraduate medical students would be an icing on the cake in the proper guidance of the choice of future endeavor, thereby ensuring optimal output and a stress-free career.^[14-16]

This review showed obstetrics and gynecology as the most common future destination, followed by pediatrics. General surgery and neurosurgery shared the same percentage. Neurosurgery initially had slow progress due to limited facilities in our country, and medical graduates rarely choose it as their future career, but with the modification of neurosurgical practice, using limited facilities to provide optimal outcome, more medical students may develop interest in the specialty.^[17]

The choice of location for practice has been influenced by remuneration and available facilities all over the world.^[4,15,18] There has been brain drain in the developing countries like Nigeria by massive migration of doctors to developed countries mainly for better remuneration and availability of better and advanced medical facilities.^[11] Most of the respondents planned to practice in developed countries immediately after graduation, whereas those who plan to stay back to practice in Nigeria will rather practice in the urban areas.^[19,20] There is a need for the stakeholders to review factors influencing exodus of doctors most especially with the findings of our study showing that this is being determined right from the medical school.^[21]

CONCLUSION

Students can proceed to medical school where there is vacancy irrespective of the ethnicity and location. There is increasing female gender in the medical profession, and this may soon be a female-dominated profession. There is an urgent need to set up scholarship schemes to assist families and young people with capability to study medicine, but are presently limited by the inadequate funding.

Recommendations

1. There is need for the stakeholders to review factors influencing emigration of doctors
2. Medical institutions should activate an active mentorship program in order to provide a reliable and objective template for career choice
3. Establishment of scholarship schemes to assist the prospective students.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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