

## Original Article

# Emigration Plans after Graduation of Clinical Medical Students of Ebonyi State University Abakaliki, Nigeria: Implications for Policy

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### ABSTRACT

**Objective:** To determine the emigration plans after graduation of clinical medical students of Ebonyi State University Abakaliki, Nigeria. **Methods:** A descriptive cross-sectional study design was used. All clinical medical students of the University willing to participate were included. Information was obtained using a pre-tested self-administered questionnaire. Outcome measure included proportion of students willing to emigrate and those willing to practice in rural areas after graduation. **Results:** A total of 285 students participated in the study, (response rate, 92.5%). Majority, 93.3% intend to pursue specialist training after graduation. Minor proportion, 13.9% intend to specialize in Nigeria, whereas 74.4% prefer to specialize outside Nigeria. Major reasons for preferring specialist training abroad included good equipment/facilities, 33.8%, better remuneration/quality of life, 27.8%; and improved skills, 18.7%. Countries of interest for training outside Nigeria included Canada, 28.3%; United Kingdom, 23.2%; and the United States of America, 18.2%. Minor proportion, 17.2% intend to practice in rural area after graduation. Predictors of willingness to emigrate included being in 400 level class, (adjusted odds ratio (AOR) =2.0, 95% CI = 1.1–4.1), being single, AOR = 4.0, 95% CI = 1.2–13.3) and having decided on specialty of choice, (AOR = 2.6, 95% CI = 1.5–4.5). Predictors of willingness to serve in rural area included family residence in urban area, (AOR = 0.2, 95% CI = 0.2–0.8) and intention to specialize in Nigeria, (AOR = 3.7, 95% CI = 1.6–8.5). **Conclusions:** Majority of students intend to pursue specialist training and prefer training abroad. Minor proportions were willing to specialize in Nigeria and serve in rural areas. The students may have perceived medical practice in Nigeria as serving in rural areas hence students willing to work in rural areas were more likely to specialize in Nigeria. This may adversely affect health service delivery in Nigeria if left unchecked. Nigerian authorities should ensure that medical graduates willing to practice in Nigeria are not deterred. Also, plans to encourage doctors to practice in Nigeria should receive desired attention.

**KEYWORDS:** Abakaliki, Ebonyi state, emigration, medical students, Nigeria, rural medical practice

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## BACKGROUND

In 2017, about a quarter of medical doctors practicing in the United States of America obtained their medical degrees outside the United States and majority were not citizens of that country.<sup>[1]</sup> It has been found that these foreign trained physicians are more likely than those trained in the United States to practice in disadvantaged

communities and the areas of lower income thus establishing their relevance to the practice of Medicine in that country.<sup>[1]</sup> There is evidence that the inflow of foreign

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trained doctors into the United States will continue. For example, the Association of American Medical Colleges has projected that the demand for doctors will continue to be higher than supply with an expected shortfall of between 46,100 and 90,400 doctors by 2025.<sup>[2]</sup>

Furthermore, demand for doctors is expected to continue to increase in developed countries.<sup>[3,4]</sup> Migration of doctors has been of increasing concern in recent times because of the large number of physicians involved and those intending to migrate.<sup>[5]</sup> For example, a survey among medical doctors practicing in Nigeria, revealed that majority, 88% were in search of job opportunities outside Nigeria.<sup>[6]</sup> Unfortunately, the doctor population ratio in Nigeria is 3.78 per 10,000 population based on estimates by World Health Organization and this is lower than that for all developed countries.<sup>[7]</sup> Thus, countries in Africa have been identified as having critical shortage for health workers. For example, even though the African continent bears 24% of global disease burden it could only account for 2% of the global health workforce.<sup>[8]</sup> Consequently, this continued migration of doctors have been identified as capable of affecting the delivery of health services in affected countries.<sup>[9]</sup>

With 41 accredited medical schools in Nigeria at present,<sup>[10]</sup> not all the graduating medical doctors will practice in the country. Thus, Nigeria by disposition and attitude is indirectly preparing many of its graduating doctors for medical practice abroad. Moreover, the major reasons why doctors leave Nigeria to practice Medicine abroad,<sup>[6]</sup> may not change soon. It has been observed that medical services in Nigeria are poorly planned.<sup>[11]</sup> For instance, even though medical education in Nigeria is highly subsidized by government,<sup>[6]</sup> several doctors spend years searching for spaces for internship, residency training, and formal employment after training. Thus, there has been calls for increased placements for postgraduate medical training in Nigeria,<sup>[11,12]</sup> and also for plans to retain the doctors after training.<sup>[13]</sup> If this is not established, it is expected that even the doctors who intended to practice in Nigeria may be forced to go abroad where they are convinced opportunities are better. It has been postulated that the attitude of medical students during their stay in medical school towards training and medical practice could influence their practice after graduation.<sup>[14]</sup> This study was designed to determine the emigration plans of clinical medical students of Ebonyi State University Abakaliki, Nigeria after graduation.

## MATERIALS AND METHODS

### Setting

Ebonyi State University Abakaliki, Nigeria was established in 1999 and the medical school started in the

same year. In Nigeria, the training of medical doctors is for a period of 6 years with each of the years regarded as levels. The first year, (100 level) is the preliminary year, the second (200 level) and third (300 level) years are pre-clinical years, and the fourth to sixth years (400 level to 600 level) are regarded as clinical period of training. The university admits an average of 100 students each year.

### Study design and participants

This was a descriptive cross-sectional study. The study population were all clinical medical students of the university who gave consent to participate in the study. A total of 285 students participated representing a response rate of 92.5%.

### Study instrument

The study instrument was a pre tested, semi-structured questionnaire, which was developed by the researchers using English language, which is the language used for teaching in medical schools in Nigeria. The questionnaire was self-administered.

### Data analysis

Data entry and analysis were done using Statistical Package for Social Sciences (SPSS) version 22. Frequency tables and cross tabulations were generated. Chi square test of statistical significance and multivariate analysis using binary logistic regression

**Table 1: Socio-demographic characteristics of respondents**

Variable	Frequency (n=285)	Percent (%)
Age		
Mean (SD)	25.4±3.0	
Age of respondents in groups		
<25 years	119	41.8
25-29 years	149	52.3
≥30 years	17	6.0
Academic level		
400 level	101	35.4
500 level	94	33.0
600 level	90	31.6
Gender		
Male	165	57.9
Female	120	42.1
Ethnicity		
Igbo	280	98.2
Ethnic minorities	4	1.4
Foreign national	1	0.4
Marital status		
Single	272	95.4
Married	13	4.6
Religion		
Christianity	281	98.6
Traditional religion	4	1.4

were used in the analysis and the level of statistical significance was determined by a *P* value of <0.05. Outcome measure of the study included proportion of students willing to emigrate and those willing to practice in rural areas after graduation. In determining the predictors of willingness to emigrate and intention to practice in rural area, variables that had a *P* value of ≤0.2 on bivariate analysis were entered into the logistic regression model. The results were reported using adjusted odds ratios (AOR) and 95% confidence interval.

## RESULTS

Table 1 shows the socio-demographic characteristics of respondents. The mean age of respondents was 25.4 ± 3.0 years and majority, 52.3% were in age group, 25–29 years. Majority, 59.7% were males and a higher proportion, 95.4% were single.

Table 2 shows major reason for studying Medicine and willingness to practice in rural areas after graduation. The major reason for studying Medicine among the respondents was to save lives/serve humanity,

Variable	Frequency (n=285)	Percent (%)
Either/both parents a doctor		
Yes	23	8.1
No	262	91.9
Place of family residence		
Urban	223	78.2
Rural	62	21.8
Location of secondary school		
Urban	216	75.8
Rural	69	24.2
Payment of school fees		
Parents	233	81.8
Siblings	26	9.1
Family members	10	3.5
Husband	9	3.2
Self-sponsorship	5	1.8
Scholarship	2	0.7
Major reason for studying Medicine		
Save lives/serve humanity	173	60.7
Personal interest	47	16.5
Childhood dream	37	13.0
Prestige/finance	19	6.7
Influenced by others	9	3.2
Practice Medicine in rural area after graduation		
Yes	49	17.2
No	136	82.8

**Table 3: Choice of specialty and country of interest for specialist training**

Variable	Frequency (n=285)	Percent (%)
Intend to pursue specialist medical training		
Yes	266	93.3
No	13	4.6
Don't know	6	2.1
Specialty of choice		
Surgery	39	14.7
Pediatrics	35	13.2
Obstetrics and Gynecology	35	13.2
Medicine	24	9.0
Community Medicine	20	7.5
Ophthalmology	7	2.6
Psychiatry	4	1.5
Family Medicine	2	0.8
Pathology	2	0.8
Radiology	2	0.8
Undecided	96	36.1
Country of interest (n=264)		
Nigeria	37	13.9
Outside Nigeria	198	74.4
Don't know	31	11.7
Country outside Nigeria (n=198)		
Canada	56	28.3
United kingdom	46	23.2
United States of America	38	19.2
Australia	17	8.6
Germany	7	3.5
Ireland	6	3.0
India	2	1.0
Netherlands	2	1.0
Saudi Arabia	2	1.0
China	2	1.0
Belgium	1	0.5
France	1	0.5
Luxemburg	1	0.5
Singapore	1	0.5
Japan	1	0.5
Switzerland	1	0.5
Undecided	14	7.1
Reason for going abroad for Specialist medical training		
Good equipment/facilities	67	33.8
Improved remuneration/quality of life	55	27.8
Improved skills	37	18.7
Better working /career opportunities	21	10.6
Personal reason	7	2.5
No specific reason	11	5.6
When to return to Nigeria		
Immediately after training	11	5.6
Work <5 years and return	19	9.7
Work 5-10 years and return	50	25.5
Work >5 years and return	65	33.2
Never return to practice Medicine in Nigeria	51	26.0

**Table 4: Willingness to practice Medicine abroad after specializing in Nigeria**

Variable	Frequency (n=37)	Percent (%)
After specializing in Nigeria, intend to practice Medicine abroad		
Yes	22	59.5
No	10	27.0
Don't know	5	13.5
Country of interest (n=22)		
Canada	7	31.8
United Kingdom	5	22.7
Ghana	1	4.5
Australia	1	4.5
India	1	4.5
Mexico	1	4.5
Poland	1	4.5
Saudi Arabia	1	4.5
Mexico	1	4.5
Undecided	3	13.6

60.7%. Less than one fifth of the respondents, 17.2% were willing to practice Medicine in rural area after graduation.

Table 3 shows the choice of specialty and the country of interest for specialist training. Majority, 93.3% intend to pursue specialist medical training after graduation. The major specialties of choice include Surgery, 14.7%; Pediatrics, 13.2% and Obstetrics and Gynecology, 13.2%. A minor proportion, 13.9% intend to pursue specialist medical training in Nigeria, whereas 74.4% prefer to specialize abroad. The highest proportion, 28.3% intend to specialize in Canada.

Table 4 shows willingness to practice Medicine abroad after specializing in Nigeria. Majority, 59.5% intend to practice Medicine abroad after specializing in Nigeria. The highest proportion, 31.8% intend to practice in Canada.

**Table 5: Factors associated with emigration to practice Medicine abroad after graduation**

Variable	Practice Medicine abroad after graduation (n=285)		P value on bivariate analysis	Adjusted odds ratio, 95% confidence interval
	Yes (n %)	No (n %)		
Age of respondents				
<27 years	145 (72.9)	54 (27.1)	0.059	1.3(0.7- 2.4)
≥27 years	53 (61.9)	33 (38.4)		1
Gender				
Male	114 (69.1)	51 (30.9)	0.869	NA
Female	84 (70.0)	36 (30.0)		
Academic level of respondent				
400 level	78 (77.2)	23 (22.8)	0.054	2.0(1.1- 4.1)
500 level	65 (69.1)	29 (30.9)		1.2(0.6-2.5)
600 level	55 (61.1)	35 (38.9)		1
Marital status				
Single	193 (71.0)	79 (29.0)	0.013	4.0(1.2-13.3)
Married	5 (38.5)	8 (61.5)		1
Either/both parent a Doctor				
Yes	15 (65.2)	8 (34.8)	0.644	NA
No	183 (69.8)	79 (30.2)		
Place of family residence				
Urban	154 (69.1)	69 (30.9)	0.773	NA
Rural	44 (71.0)	18 (29.0)		
Location of secondary school				
Urban	149 (69.0)	67 (31.0)	0.750	NA
Rural	49 (71.0)	20 (29.0)		
Current perceived feelings for studying Medicine				
Good	127 (73.0)	47 (27.0)	0.107	1.2(0.7- 2.2)
Poor	71 (64.0)	40 (36.0)		1
Practice in rural area after graduation				
Yes	31 (63.3)	18 (36.7)	0.300	NA
No	167 (70.8)	69 (29.2)		
Has decided on specialty of interest				
Yes	131 (77.1)	39 (32.9)	0.001	2.6(1.5-4.5)
No	67 (58.3)	48 (41.7)		1

NA Not applicable

**Table 6: Factors associated with willingness to practice in rural area after graduation**

Variable	Practice in rural area after graduation (n=285)		P value on bivariate analysis	Adjusted odds ratio, 95% confidence interval
	Yes (n %)	No (n %)		
Age of respondents				
<27 years	27 (13.6)	172 (86.4)	0.014	0.6(0.3- 1.3)
≥27 years	22 (25.6)	64 (74.4)		1
Gender				
Male	32 (19.4)	133 (80.6)	0.248	NA
Female	17 (14.2)	103 (85.8)		
Academic level of respondent				
400 level	16 (15.8)	85 (84.2)	0.149	0.6(0.3- 1.4)
500 level	12 (12.8)	82 (87.2)		0.4 (0.2- 0.9)
600 level	21 (23.3)	69 (76.7)		1
Marital status				
Single	47 (17.3)	225 (82.7)	0.860	NA
Married	2 (15.4)	11 (84.6)		
Either/both parent a Doctor				
Yes	2 (8.7)	21 (91.3)	0.260	NA
No	47 (17.9)	215 (82.1)		
Place of family residence				
Urban	31 (13.9)	192 (86.1)	0.005	0.4(0.2- 0.8)
Rural	18 (29.0)	44 (71.0)		1
Location of secondary school				
Urban	34 (15.7)	182 (84.3)	0.250	NA
Rural	15 (21.7)	54 (78.3)		
Current perceived feelings for studying Medicine				
Good	38 (21.8)	136 (78.2)	0.009	2.6(1.2- 5.7)
Poor	11 (9.9)	100 (90.1)		1
Emigrate and practice Medicine abroad				
Yes	31 (15.7)	167 (84.3)	0.300	NA
No	18 (20.7)	69 (79.3)		
Has decided on specialty of interest				
Yes	35 (20.6)	135 (79.4)	0.065	1.5(0.7- 3.1)
No	14 (12.2)	101 (87.8)		1
Intention to specialize in Nigeria				
Yes	14 (37.8)	23 (62.2)	<0.001	3.7(1.6- 8.5)
No	35 (14.1)	213 (85.9)		1

NA Not applicable

Table 5 shows factors associated with emigration to practice Medicine abroad after graduation. The respondents who were single were four times more likely to emigrate and practice abroad when compared with those who were married. (AOR = 4.0, 95% CI: 1.1–4.1). The respondents who have decided on specialty of interest were 2.6 times more likely to emigrate and practice abroad when compared with those who have not decided. (AOR = 2.6, 95% CI: 1.5–4.5).

Table 6 shows factors associated with willingness to practice in rural area after graduation. The respondents whose families reside in urban areas were 2.5 times less likely to practice in rural area when compared with those whose families resided

in rural areas. (AOR = 0.4, 95% CI: 0.2–0.8). The respondents who have good feelings about studying Medicine were about 2.6 times more likely to practice in rural area when compared with those whose current feelings are poor. (AOR = 2.6, 95%:1.2–5.7). Similarly, the respondents who intend to specialize in Nigeria were 3.7 times more likely to practice in rural area when compared with those who did not. (AOR = 3.7, 95% CI: 1.6–8.5).

## DISCUSSION

The major reason for studying Medicine among the respondents was to save lives/serve humanity, 60.7%. This was similar to what was found in a study in

southeast Nigeria.<sup>[11]</sup> It is however different from what was obtained in South Africa, where the major reason was personal interest,<sup>[15]</sup> and India where it was because Medicine is considered a prestigious/secure profession.<sup>[16]</sup> Being that the major reason for studying Medicine in Nigeria has been centered more on service to humanity, this goodwill on part of the students could be maximized for the good health of Nigerian people.

Majority, 93.3% intend to pursue specialist medical training after graduation. This has been observed to be the trend in Nigeria,<sup>[11,17]</sup> and other African countries.<sup>[18,19]</sup> This interest in pursuing specialist training among doctors has been partly attributed to improved remunerations and work conditions in public tertiary health institutions in Nigeria.<sup>[17]</sup> This is of credit to the Government of Nigeria. Also, this quest for postgraduate training among doctors has improved health service delivery in Nigeria. Presently, almost all states in the country has full complement of specialist doctors even though they are concentrated in urban areas with little or no presence in rural areas. In effect, the inhabitants of rural areas may not be receiving optimal health service delivery. This observation has prompted a call for policies and plans to attract and retain health workers in rural areas.<sup>[20]</sup> Also, majority of students, 50.1% prefer to specialize in the core clinical specialties of Surgery, Pediatrics, Internal Medicine, and Obstetrics and Gynecology. This is similar to findings from studies in different parts of Nigeria.<sup>[11,17,21,22]</sup>

Majority, 74.4% were willing to pursue postgraduate medical training outside Nigeria. This proportion is higher than that obtained from studies in different parts of Africa.<sup>[18,23,24]</sup> and among medical and nursing students in Asia and Africa.<sup>[25]</sup> It is also higher than that from other countries outside Africa.<sup>[9,16,26,27]</sup> There is also a difference in the proportion of students willing to return to Nigeria immediately after training when compared with that from a study in Lebanon.<sup>[28]</sup> That the emigration of medical doctors should be of concern is pronounced by the result of a study in Lebanon where 95.5% of medical students preferred to pursue postgraduate medical training abroad.<sup>[28]</sup> Also, in Romania, 84.7% of medical students preferred to pursue employment abroad after graduation.<sup>[29]</sup>

That majority of students prefer to specialize abroad could suggest that the several local factors that support emigration of doctors seem not to be improving while the pull factors are continually strengthened. For instance, a previous study in southeast Nigeria revealed only 37% of medical students preferred to pursue specialist training outside Nigeria.<sup>[13]</sup> Another study in south-south Nigeria, found that 24.5% of medical students were willing to

practice abroad after graduation.<sup>[30]</sup> This increased quest among medical students to emigrate after graduation should evoke quick responses from Nigerian authorities as was the case in Sri Lanka where there was a call to address the major reasons doctors preferred medical practice abroad when 23.8% of students indicated their intention to migrate after graduation.<sup>[31]</sup> This continued migration has been identified as capable of adversely affecting health service delivery in countries supplying the doctors.<sup>[9]</sup>

Among the respondents willing to emigrate, the highest proportion, 28.3% preferred to specialize in Canada. In a study in southeast Nigeria, the highest proportion of students preferred the United States of America for specialist medical training.<sup>[13]</sup> Similar results were obtained from studies in Ethiopia,<sup>[24]</sup> Lebanon,<sup>[28]</sup> and Pakistan.<sup>[9]</sup> However, in Croatia, the highest proportion of students intended to migrate to Germany for postgraduate medical training.<sup>[27]</sup> This preference for Canada among the students could be an indication that there have been new developments in matters related to emigration to Canada and medical practice in that country. However, in a study among International Medical Graduates in Canada, the major reasons why the doctors preferred to emigrate from their home countries to Canada included socio-economic or political situations in their home countries, better education for children and concern about where to raise children.<sup>[32]</sup>

The reasons by the students for intending to go abroad for specialist medical training included good equipment/facilities, 33.8%; improved remuneration/quality of life, 27.8%; and improved skills, 18.7%. The reasons are similar to findings in a study in six sub-Saharan African countries,<sup>[18]</sup> Pakistan,<sup>[9]</sup> and Sri Lanka.<sup>[31]</sup> Incidentally they are almost the same reasons that made medical students decline to serve in rural areas of Nigeria after graduation.<sup>[33]</sup>

From the results of this study, the students who were single were four times more likely to emigrate when compared with those who were married. This is similar to what was obtained in Lebanon.<sup>[28]</sup> This is expected as it has been found that married people are less likely to migrate.<sup>[34]</sup> They are also more likely to return home earlier than those not married.<sup>[34]</sup> Also, the students who have decided on specialty of choice were 2.6 times more likely to emigrate after graduation when compared with those who were yet to make such decisions. This could be that the students who are eager to emigrate commence planning for that purpose while in medical school by deciding on specialty of choice.

A minor proportion, 17.2% were willing to work in rural areas after graduation. Surprisingly, this proportion

is higher than those who intend to pursue specialist training in Nigeria, 13.9%. Also, the proportion is higher than that obtained in southeast Nigeria,<sup>[33]</sup> and in six sub-Saharan African countries.<sup>[18]</sup> This portrays a continual decline in interest to serve in rural areas among newly graduating doctors. The proportion is however lower than that obtained in studies in Ghana,<sup>[23]</sup> Ethiopia,<sup>[24]</sup> and India.<sup>[16]</sup> This may be an indication that perception about working in rural areas among medical students differs from country to country with the result from Nigeria revealing the least proportion of students willing to serve in rural area when compared with that from other countries.

From the results of this study, the students whose families reside in rural areas were 2.5 times more likely to practice in rural area after graduation when compared with those whose families reside in urban areas. This is similar to what was obtained among medical students in medical schools in southeast Nigeria,<sup>[33]</sup> and other African countries.<sup>[23,24,35]</sup> In a study among medical and nursing students in Asia and Africa, it was found that time spent in rural areas before commencement of studies predicted preference for a rural career and against practicing Medicine abroad.<sup>[25]</sup> This necessitated a postulation that admission policy into medical schools in that country should take into consideration years spent in rural areas.<sup>[25]</sup>

Aware of the need for medical graduates to practice in rural areas, a study in Ghana suggested the need to expose students to rural community experience while in medical school.<sup>[23]</sup> Interestingly, in Nigeria, rural community posting is an important aspect of medical curriculum and it is a prerequisite for the accreditation and re-accreditation of any medical school.<sup>[36]</sup> A study revealed that satisfaction with this posting has been associated with the increased likelihood of practice in rural area after graduation.<sup>[33]</sup> This prompted the suggestion to embrace adequate community exposure of medical students during the rural community posting as a way of changing the perception of medical students to rural medical practice after graduation.<sup>[33]</sup>

Similarly, the students who had the intention to specialize in Nigeria were 3.7 times more likely to practice in rural area when compared with those who did not have such intention. From this result, it could be that based on the concept of the world as a global village, the students now equate medical practice in Nigeria to rural medical practice. It has already been observed that training abroad increases the possibility of a student preferring to practice abroad after graduation.<sup>[35]</sup> Also, medical students who desire temporary training abroad have been found to be more likely to engage in permanent

emigration after graduation.<sup>[27]</sup> A study in Croatia found that one third of final year students would consider emigration if they failed to get their desired specialty for postgraduate training.<sup>[37]</sup> This observation may have prompted suggestions for increased placements for doctors for postgraduate training in Nigeria.<sup>[11,12]</sup> This is of relevance as majority of respondents who intend to specialize in Nigeria, 59.5% still has plans for medical practice abroad. The emigration plans of these students are also similar to those who intend to specialize outside Nigeria.

Similarly, the students whose current feelings towards studying Medicine were good were 2.6 times more likely to practice in rural area when compared with those whose feelings were poor. This may indicate that the intention to emigrate may be related to dissatisfaction with state of affairs with medical practice in Nigeria. This could be closely related to satisfaction with rural community posting which is associated with intention to practice in rural area after graduation.<sup>[36]</sup> The importance of the rural community posting prompted a suggestion for the creation of rural medical schools in Nigeria.<sup>[33]</sup> Based on current evidence, this may no longer be necessary. However the 41 medical schools in Nigeria and the new ones to come should be viewed as one big rural medical school with emphasis on satisfaction with medical training among the students. It has been found that students who are satisfied with medical training withstand the stress of medical school better than those who are not satisfied.<sup>[38]</sup> Also, good student lecturer interactions during classes have been found to enhance the satisfaction of students during medical training.<sup>[39]</sup>

The government of Nigeria has a role to play in ensuring that doctors willing to practice Medicine in Nigeria are not deterred. Perhaps, when this is done, the dissatisfaction among the students will ease and that good will in intending to study Medicine could be fully realized. It has been postulated that the doctors that seek to practice Medicine abroad if properly guided could be the ones to stem the tide of medical tourism in Nigeria when they eventually return after specialist training to commence medical practice in Nigeria.<sup>[13]</sup> Stemming this tide could be an option towards improving medical practice in Nigeria for the doctors and people of Nigeria.

### Limitations

This study was conducted in one institution in Nigeria and may not present the overall situation in the country even though it provides a valuable insight on the subject. There may be the need to conduct a similar study on a national level for better generalization. Also, the emigration plans of students who were undecided

on specialization and those not sure of the country to specialize were not captured.

## CONCLUSIONS

Majority of students intend to pursue specialist training and also prefer training abroad. Minor proportion of students were willing to specialize in Nigeria and also willing to serve in rural areas. The students may have perceived medical practice in Nigeria as serving in rural areas hence students willing to work in rural areas were more likely to specialize in Nigeria. This may adversely affect health service delivery in Nigeria if left unchecked. The Nigerian authorities should ensure that medical graduates willing to practice in Nigeria are not deterred. Also, working out plans on how to encourage doctors to practice in Nigeria should receive the desired attention.

### Ethical approval and consent to participate

Ethical approval was obtained from the Research and Ethics Committee of Ebonyi State University Abakaliki, Nigeria. The approval was given on 7<sup>th</sup> March, 2020.

Research and Ethics Committee of Ebonyi State University Abakaliki, Nigeria. The students were required to sign a written informed consent form before participating in the study. Participation in the study was voluntary and participants were assured that there would be no victimization of anyone who did not want to participate or who decided to withdraw after giving consent.

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.

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