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Dearth of Haematologists in Nigeria: Unfriendly Specialty among Medical Students in Niger-Delta Region of Nigeria

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Authors' contributions

This work was carried out in collaboration between all authors. Author NMU designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Author BME managed the analyses of the study. Author OT managed the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

Background: There is continuous rise in haematology and haemato-oncology cases in Nigeria. Unfortunately, there is inadequate number of haematologists to care for these rising cases despite the high number of medical doctors being churned out by over twenty medical schools in Nigeria.

Object: The aim of this study is to find out the preference rate of Haematology among medical students in a typical Nigerian medical school.

Methodology: Questionnaires were used to collect data from medical students who met the inclusion criteria. The collected data were analyzed using Statistical Package for the Social Sciences (SPSS) software version 22. Results were presented in Frequency distribution tables and pie charts.

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Results: Three hundred and thirty-one students were interviewed. The mean age was 23.47 ± 3.92 years. Male medical students were more than the females: 193(62.1%) versus 118(37.9%), respectively, giving a male to female ratio of 1.63:1. Urhobo, 144(46.3%) and Igbo, 67(21.5%) were the two major tribes of the students. Others were the Isokos 31(10%), the Ukwuanis, 16(5.1%), and the Binis 11(3.5%). One hundred and eighty two students (58.5%) attended private schools, 116(37.3%) attended public schools while the remaining 13 students (4.2%) attended the mission schools. Two hundred and eighty two students (91%) said they would specialize while the remaining 29(9%) said they will not specialize after graduation. Surgery was the most preferred choice (23.5%), followed by Obstetrics and Gynecology (13.2%), Internal Medicine (11.9%), Family Medicine (10.9%) and Paediatrics (9.0%). Twelve point nine percent of the students have not decided which specialty they would choose. The choice to specialize in Haematology was 1.9%.

Conclusion: This study showed that the preference of haematology as a specialty for specialization was abysmally too low. Haematology should be made to be more interesting and appealing to the students. There is need for re-structuring and re-organization of the medical training to increase the student-patient interaction during the students postings in haematology.

Keywords: Haematologists; unfriendly specialty; medical students; Nigeria.

1. INTRODUCTION

In Nigeria, studying Medicine in the University is a thing of great joy because medical doctors command tremendous respect in the society and are held at a high esteem [1,2]. Hence every year Medicine is one of the most competitive courses in JAMB examinations. JAMB is Joint Admissions and Matriculation Board, a statutory body assigned to organize University entrance examinations into Nigerian Universities. The high demand to study medicine results in the quota given to the medical schools to be exceeded [3]. Though there is large number of students' enrolment to study medicine, deciding to specialize and choosing a specialty after graduation are usually not a simple task [4,5]. Only a few students know the specialty they will choose even before they entered medical school but many other students are unable to find the field that suits them even at their final year in medical school.

Haematology is an essential branch of medicine which involves the study of blood, blood-forming organs and their disorders. Haematological disorders are on the increase in Nigeria but the numbers of specialist haematologists managing these diseases are seriously inadequate. As at 2011, only 50 registered haematologists attended to 140 million Nigerians [6]. The small number of haematologists may not be unconnected to the fact that medical students do not see specialization in haematology as a necessity. Studies have shown the specialties of preference by medical students are Surgery, followed by Obstetrics and Gynaecology, Internal Medicine and General medical practice [7].

Another study in Northern Nigeria showed a similar pattern of preference with Surgery leading the choice of disciplines followed by Internal medicine, public health and Obstetrics and Gynaecology [8]. A study by Adeleye et al in Benin City, Nigeria still followed similar pattern except that internal medicine was not among the first four preferred choice unlike previous studies [9]. None of these studies showed the level of preference of Haematology by medical students which is the basis for this study. The objective of this study is to determine the level of preference of Haematology as specialty for post graduation specialization and to proffer solution to the small number of haematologists in Nigeria.

2. METHODOLOGY

The study population were medical students of Delta State University Abraka, South-South Nigeria. The questionnaires were used to collect vital data from the students. These questionnaires were structured, Self-administered and distributed among all the medical students who met the inclusion criteria. These criteria were: being a medical student and granting of consent. The questionnaires enabled us obtain the necessary information concerning the students such as: General Biodata comprising the Age, Gender/Sex, Tribe, Religion and Marital Status. Other variables collected included the Primary School attended, why did he/she decide to study Medicine, whether they would like to specialize after graduation and which specialty/discipline would they like to specialize. The approval of this study was granted by the Health Research Ethics Committee (HREC) of Delta State University

Teaching Hospital (DELSUTH), Oghara. The students were informed that their participation was entirely voluntary and they were free to withdraw from the study at any given time.

2.1 Data Analysis

Collected data were entered in Statistical Package for the Social Sciences (SPSS) software (IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp). Frequency distribution tables and pie charts were used for presentations of selected variables.

3. RESULTS

Three hundred and thirty-one (331) students were interviewed. Table 1 shows the general biodata of the students. The mean age was 23.47±3.92 years. The youngest student was 17years while the oldest was 42 years. Fifty eight point five percent of the students belonged to the age bracket of 20-24 years. This was followed by age range 25-29 years (24.4%). Only three students (1.0%) were in the oldest age range (40-45). Male medical students were more than the females: 193(62.1%) versus 118(37.9%), respectively, giving a male to female ratio of 1.63:1. Urhobo, 144(46.3%) and Igbo, 67(21.5%) were the two major tribes of the students. Other tribes were the Isokos 31(10%), the Ukwuanis, 16(5.1%), and the Binis 11(3.5%). Almost all the students were Christians, 308 (99%). Fig. 1 shows the marital status; Three hundred and eight students (97%) were single while only 8(3%) were married. Table 2 shows the primary schools attended by the students. One hundred and eighty two students (58.5%) attended private schools, 116(37.3%) attended public school while the remaining 13 students (4.2%) attended the mission schools.

Fig. 2 shows the number of respondents who would like to specialize after graduating from medical school. Two hundred and eighty two students (91%) said they would specialize while the remaining 29(9%) said they will not specialize.

Table 3 shows the year of study of the respondents. The highest proportion of the students were in their 4th year (34.4%) while the lowest number of students (13.2%) were in their 3rd year and 6th/final year, respectively.

Table 4 shows the choice of specialties among the medical students. Surgery was the most preferred choice (23.5%), followed by

Obstetrics and Gynecology (13.2%), Internal Medicine (11.9%), Family Medicine (10.9%) and Paediatrics (9.0%). Twelve point nine percent of the students have not decided which specialty they would choose. The choice to specialize in Haematology was 1.9%; which was among the five least preferred disciplines, others were anaesthesia (1.9%), Psychiatry (1.4%), Ophthalmology (1.0%) and Biochemistry (0.6%).

Table 1. Demographic characteristics of respondents (n=311)

Demographic variables	Frequency	Percentage (%)
Age (years)		
15-19	32	10.3
20-24	182	58.5
25-29	76	24.4
30-34	12	3.9
35-39	6	1.9
40-45	3	1.0
Gender		
Male	193	62.1
Female	118	37.9
Tribe		
Igbo	67	21.5
Urhobo	144	46.3
Ukwuani	16	5.1
Isoko	31	10.0
Ika	15	4.8
Bini	11	3.5
Others	23	8.8
Religion		
Christianity	308	99.0
ATR	2	0.64
Echist	1	0.36

ATR= African Traditional Religion

Table 2. Types of primary school attended

School	Frequency	Percent
Public	116	37.3
Private	182	58.5
Mission	13	4.2
Total	311	100.0

Table 3. Level/Year of study

Level	Frequency	Percent
2 nd	64	20.6
3 rd	41	13.2
4 th	107	34.4
5 th	58	18.6
6 th	41	13.2
Total	311	100.0

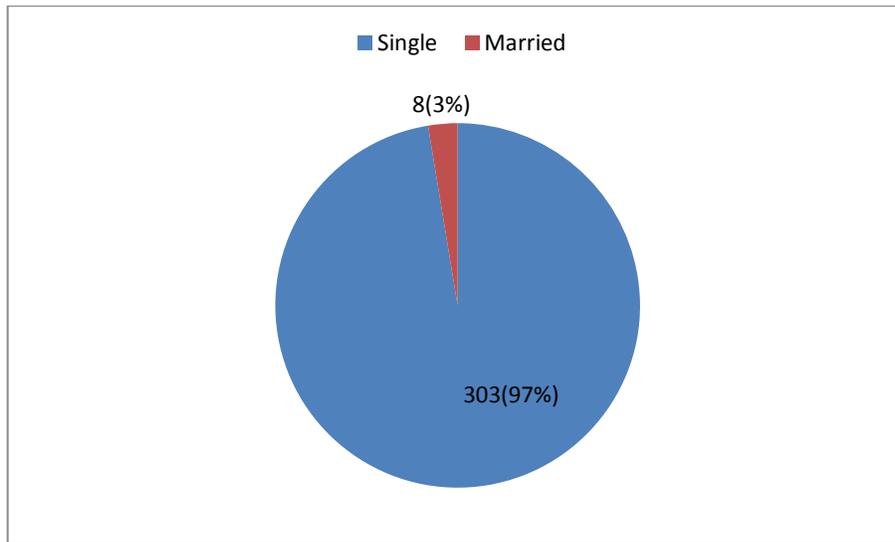


Fig. 1. Marital status

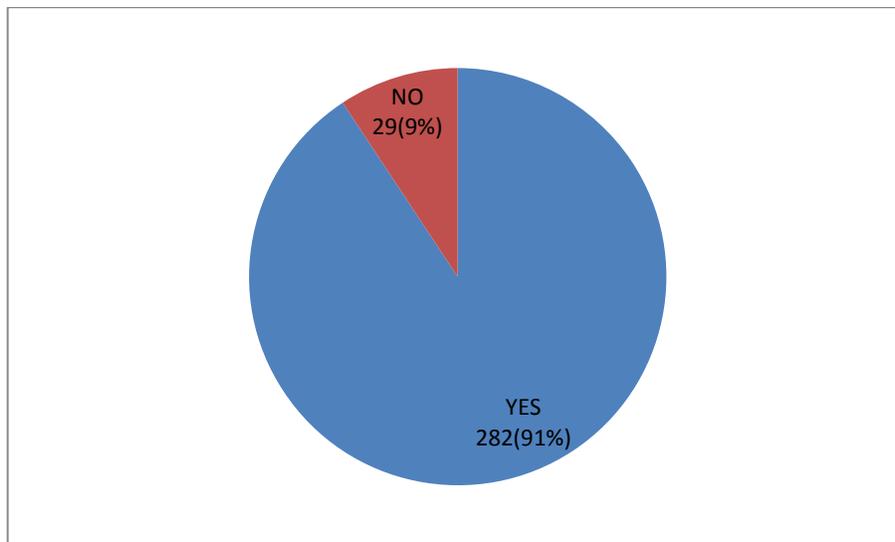


Fig. 2. Would you specialize after graduation?

4. DISCUSSION

Despite the high level of interest in pursuing a postgraduate training, the preference to specialize in haematology was 1.9% which is among the least desired disciplines in postgraduate training. Surgery remains the most desired specialty, this was in support of the finding in previous studies [7,8,9]. Young doctors are attracted to Surgery because there is a special joy that comes with the practice of surgery. Surgeons, indeed, are distinguished by the art and craft of their ability to perform surgical

procedures or operations [10]. The preference for surgery is not because surgeons make more money than haematologists because all of them are placed on same salary scale in the Nigerian civil service. Again, recent studies by Nwagu et al. had earlier shown that monetary gains was not the main reason students chose to study medicine [11]. Why then are students not interested in specializing in Haematology? The most likely reason is because of the pattern of students' postings in Haematology. Unlike in surgery and other pure clinical areas, the twelve months posting period of the students in

haematology involves mainly lectures, haematology laboratory practicals, tutorials with minimal exposure of the students to haematology clinics where they see haematology patients and watch clinical procedures. Students love encountering a new concept by seeing it in a patient, that is the best way to learn. There is no adequate alternative to any medical student or resident doctor than seeing a patient with a given diagnosis [12].

Table 4. Students' specialties of choice

Specialty	Frequency	Percent
Surgery	73	23.5
O&G	41	13.2
Undecided	40	12.9
Internal medicine	37	11.9
Family medicine	34	10.9
Paediatrics	28	9.0
Radiology	15	4.8
Community health	10	3.2
Histopathology	8	2.6
Anaesthesia	6	1.9
Haematology	6	1.9
Geneomics	4	1.4
Psychiatry	4	1.4
Ophthalmology	3	1.0
Biochemistry	2	0.6
Total	311	100.0

O & G = Obstetrics and Gynaecology

5. CONCLUSION AND RECOMMENDATION

There is a very low preference by medical students to specialize in Haematology. This trend, if allowed to continue, will adversely affect the quality of care given to teeming number of patients suffering from Haematological disorders. We, therefore, recommend a complete restructuring of the medical students postings to allow more clinical exposure to the students. This will stimulate and promote their interest in the area of haematology which in turn will ultimately improve the current abysmally small number of haematologists in Nigeria.

CONSENT

It is not applicable.

ETHICAL APPROVAL

As per international standard or university standard, written approval of Ethics committee

has been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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