



Ophthalmology as a Career Choice of Rotatory Medical Interns at Two Tertiary Hospital in Nigeria Middle Belt

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

The distribution of medical manpower among the various specialties should be of interest to government, health care planners and medical education of any nation. With this in mind, this study was design to determine the factors that may influence this specialty choice amongst interns especially in Nigerian middle belt. Ophthalmology is a unique field of medicine that combines the hypothesis generating intellectual aspect of diagnosis with the opportunity to perform procedures both in clinic and in the operating theatre. A cross-sectional study was conducted at Benue State University Teaching Hospital, Makurdi and Federal Medical Centre, Makurdi with a semi structured questionnaire. A total of 61 questionnaires were given out with 52 completely answered and returned given a response rate of 85.2% over a two week period. The mean age of the rotatory medical interns was 30.08 years with the youngest, 23 years and oldest, 42 years and a range of 19. Forty four (44) (84.6%) were male and eight (8) (15.4%) were female. The respondents mean age was 30.08 years with a range of 19. This is a dynamic work force and if effectively utilized will

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go a long way in the efforts at providing quality health care to the populace. The study also shows a significant relationship between the medical school attended and the choice of specialty. Concluding, factors influencing interns' specialty choice should guide government's health administrators and educators as they may be responsible for mal-distribution of medical manpower across the various specialties.

Keywords: Ophthalmology; Nigeria; medical interns; medicine.

1. INTRODUCTION

A career is often seen as a course of successive situation that make up a person's work life [1]. Choosing a future specialty after finishing medical school is a critical decision to be taking during the student's life, which also plays an important role in the country future workforce [2]. The distribution of medical manpower among the various specialties should be of interest to government, health care planners and medical education of any nation [3]. These distribution are governed by both intrinsic and extrinsic factors [2,4,5,6,7]. Intrinsic factor related to general personal attributes and preferences while the extrinsic factors are related to work environment life style flexibility of the specialty frequency of on-calls and patients load.

Ophthalmology is a unique field of medicine that combines the hypothesis generating intellectual aspect of diagnosis with the opportunity to perform procedures both in clinic and in the operating theatre [8,9]. Ophthalmology in Nigeria has undergone a radical change as subspecialty based ophthalmology was introduced in 2005 with approximately 300 ophthalmologists serving a population of about 200 million people [10].

In view of this obvious need for ophthalmologists in Nigeria, this study was design to determine the factors that may influence this specialty choice amongst interns especially in Nigerian middle belt.

It is hoped that the findings will guide policy formulation in attracting medical doctors to the field of ophthalmology. We are not aware of similar studies among medical interns in Nigeria middle belt.

2. METHODS

A cross-sectional study was conducted at Benue State University Teaching Hospital, Makurdi and Federal Medical Centre, Makurdi. A self

administered semi-structured questionnaire was given to both male and female rotating medical interns. A total of 61 questionnaires were given out and returned after a period of 2 week. Informed consent was obtained from the participants.

The first part of the questionnaire detailed the demographic characteristics of the interns and the length of posting as medical students in ophthalmology posting.

The second part asked questions relating to their impression about ophthalmology as a specialty. The third section focused on choosing the preferred specialty and influential factors that attracted the interns to the preferred specialty.

The last section asked question on the improvements that they would like to see in ophthalmology teaching and tracing.

The answers were then collected and analyzed using simple statistical method like means, percentages and presented with bars and charts.

3. RESULTS

A total of 61 questionnaires were given out with 52 completely answered and returned given a response rate of 85.2%. The mean age of the rotatory medical interns was 30.08 years with the youngest, 23 years and oldest, 42 years and a range of 19. Forty four (44) (84.6%) were male and eight (8) (15.4%) were female (Table 1).

The interns graduated from six (6) different medical schools within Nigeria (49) (94.2%) and outside Nigeria (Ukraine) (3) (5.8%) (Table 1). The medical schools of graduation were Benue State University, Nigeria (80.8%) Kharkiv National Medical University, Ukraine and Madonna University, Nigeria accounting for 5.8% each. Bingham University, Nigeria (3.8%,) University of Maiduguri, Nigeria and University of Jos, Nigeria, 1.9% each.

Table 1. Age, school and country

Variable	Frequency (N=52)	Percentage (%)
Age		
Male	44	84.6
Female	8	15.4
School		
Benue State University	42	80.8
Kharkiv National Medical University	3	5.8
Madonna University	3	5.8
Bingham University	2	3.8
University of Maiduguri	1	1.9
University of Jos	1	1.9
Country		
Nigeria	49	94.2
Ukraine	3	5.8

Analysis of the interns' career preference shows (Fig. 1) that the most popular specialties were General Surgery (34.6%), Community and Preventive Medicine (17.3%). Others included were Internal Medicine, Radiology and Chemical Pathology with 7.7% each. Obstetrics and Gynecology and Pediatrics 5.8% each while Anatomic Pathology and Ophthalmology were 3.8% each. Hematology and Blood Transfusion and ENT were 1.9% each. The study also shows that career in General Surgery is preferred to careers in specialized field of Surgeries.

Factors influencing choice of career specialty include (Fig. 2), personal convenience (31%), natural flair and interest (27%), personal aptitude (5%).

On the question about their impression of ophthalmology as a specialty, 58.8% of the interns considered the specialty as interesting and important, 23.1% thought it was boring while 1.9% considered the specialty as fulfilling and 19.2% has no opinion about the specialty (Table 2).

On the improvements they would like to see in ophthalmology teaching and training, 67.3% want more time allotted to it, 17.3% want more use of teaching aids like audio-visuals, 13.5% want more bedside teaching, and 1.9% want it separated from other surgical specialty (Table 2). Table 3 shows the length of ophthalmology training enjoyed as a medical student by the interns, forty (40) (84.6%) interns spent 2 weeks, 3 (5.8%) each spent 4 weeks and 8 weeks and 2(3.8%) spent 3 weeks.

Table 4 shows the association between medical school attended and choice of specialty. Thus, medical school attended is significantly related to the choice of specialty ($\chi^2 = 106.68$), P-value = 0.001). Table 5 shows no significant relationship between country of study and choice of specialty.

Table 4 shows the association between medical school attended and choice of specialty. The medical school attended is significantly related to the choice of specialty ($X^2 = 106.683$, P-value = 0.001).

Table 2. Attitude towards ophthalmology

Variable	Frequency (N=52)	Percentage (%)
What do you think of Ophthalmology as a specialty		
Interesting and important	29	55.8
Boring	12	23.1
Fulfilling	1	1.9
No opinion	10	19.2
The improvements that you will like to see in Ophthalmology teaching and training		
Use of teaching aids like audio-visuals	9	17.3
It should be separated from other surgical subspecialties	1	1.9
More time should be allotted to it	35	67.3
More bedside teaching	7	13.5

Table 3. Length of ophthalmology posting

Variable (weeks)	Frequency (N=52)	Percentage (%)
2	44	84.6
3	2	3.8
4	3	5.8
8	3	5.8

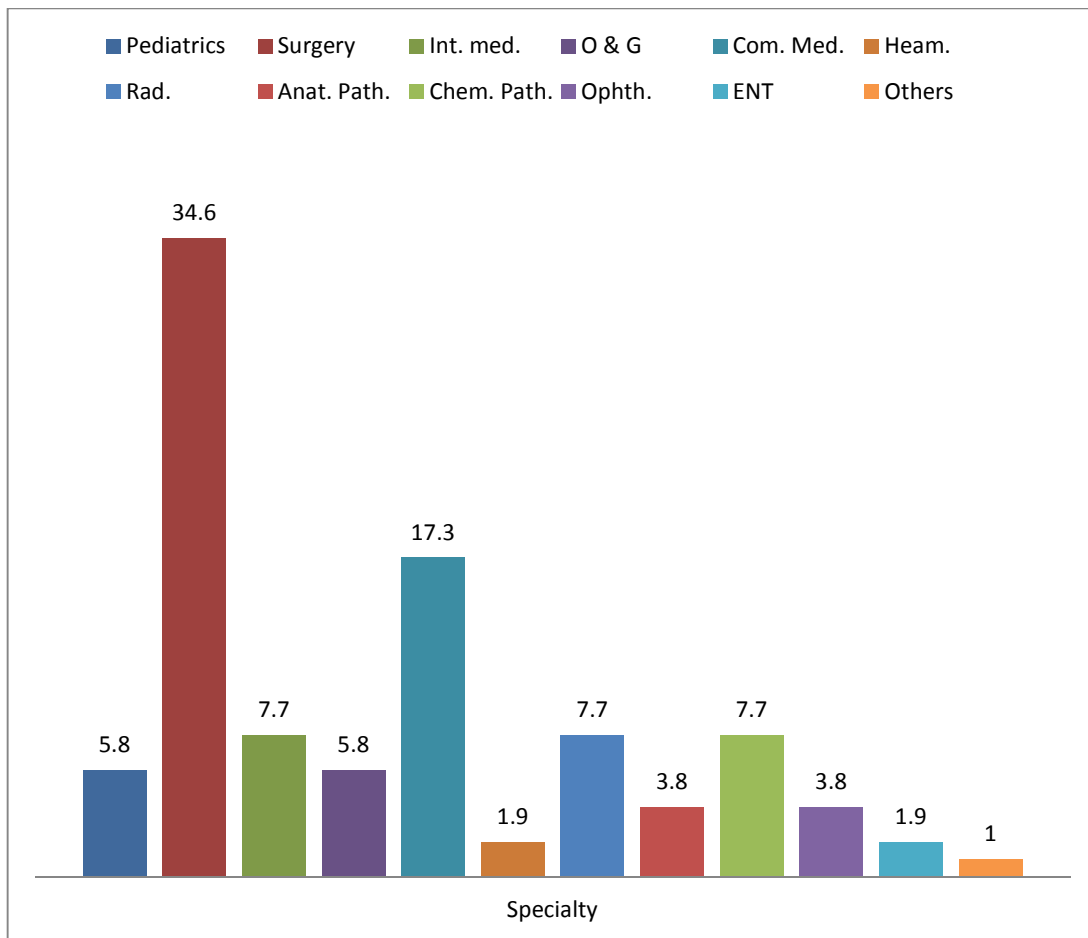


Fig. 1. Bar chart showing participants specialty of choice

Table 5 shows the association between the country of study and choice of specialty. The country of study is NOT significantly related to the choice of specialty ($X^2 = 10.101$, P-value = 0.521).

4. DISCUSSION

Medical specialty selection has always been a difficult task for medical students and medical interns. They are expected to weigh every field in terms of what they like and dislike, examine opportunities for professional and academic

growth, make room for lifestyle preferences, calculate for income and compensation and experience their preferred option through elective training and courses [8].

The respondents mean age was 30.08 years with a range of 19. This is a dynamic work force and if effectively utilized will go a long way in the efforts at providing quality health care to the populace.

The most popular specialties were General Surgery and Community and Preventive Medicine.

Table 4. Association between medical school attended and choice of specialty

		School						X ²	P-value
		Benue State Uni.	Bingham Uni.	Kharkiv Nat'l Med. Uni.	Madonna University	Uni. of Maiduguri	Uni. of Jos		
Choice of specialty	Pediatrics	1	0	1	0	1	0	106.683	0.001
	Surgery	16	1	1	0	0	0		
	Int. medicine	4	0	0	0	0	0		
	O & G	2	0	1	0	0	0		
	Com. Med.	6	0	0	3	0	0		
	Hematology	1	0	0	0	0	0		
	Radiology	4	0	0	0	0	0		
	Anat. Path.	2	0	0	0	0	0		
	Chem. Path.	4	0	0	0	0	0		
	Ophthalmology	1	1	0	0	0	0		
	ENT	1	0	0	0	0	0		
	Others	0	0	0	0	0	1		

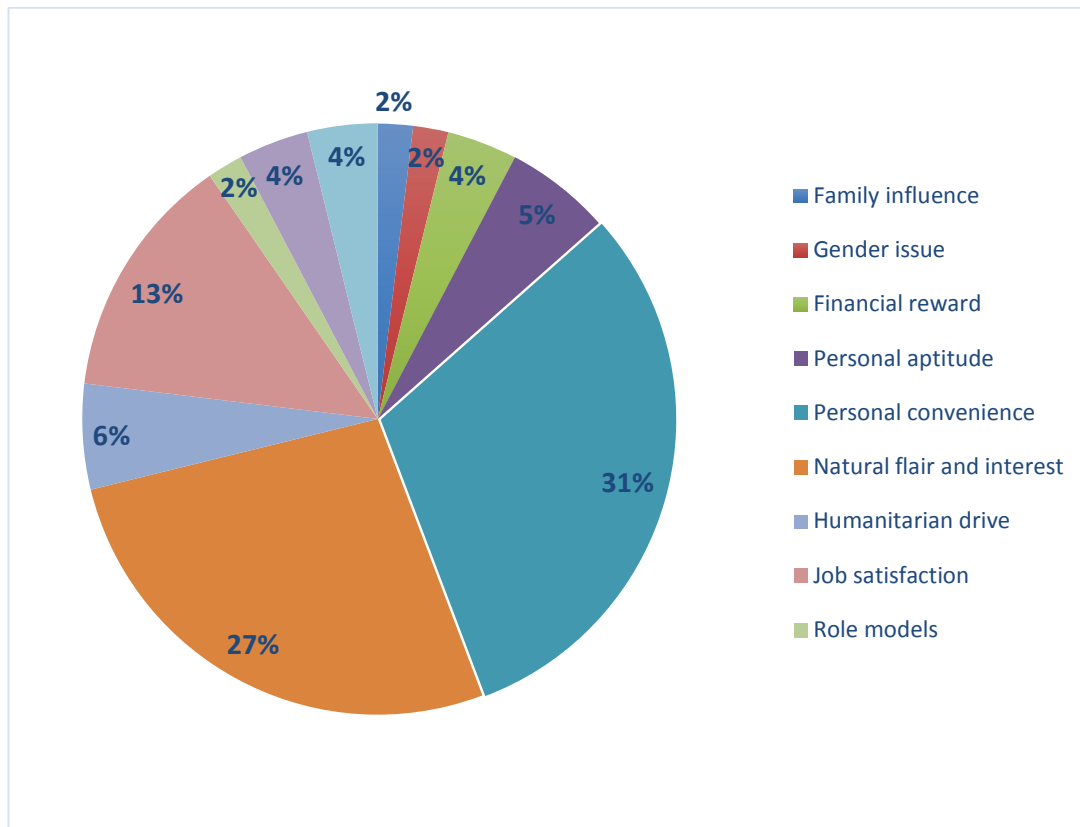


Fig. 2. Pie chart illustrating factors responsible for participant's choice of specialty

Table 5. Association between country of study and choice of specialty

		Country		X ²	P-value
		Nigeria	Ukraine		
Choice of specialty	Pediatrics	2	1	10.101	0.521
	Surgery	17	1		
	Int. medicine	4	0		
	O & G	2	1		
	Com. Med.	9	0		
	Hematology	1	0		
	Radiology	4	0		
	Anat. Path.	2	0		
	Chem. Path.	4	0		
	Ophthalmology	2	0		
	ENT	1	0		
	Others	1	0		

The choice of surgery as the number one career choice is in accordance with a 2006 Ilorin study [11] where Surgery, Pediatrics and Community Medicine were the first picks among medical interns in Ilorin. The four most popular specialties

in this work, General Surgery, Internal Medicine, Radiology and Chemical Pathology are quite different from most works in Nigeria. Most studies in Nigeria usually have Surgery, Pediatrics, Community Medicine and Obstetrics

and Gynecology as the most popular specialties of choice [11,12]. A Saudi-Arabia study on medical students also found General Surgery as the most preferred specialty [13]. It is also important to state that, this is the first study in Nigeria having a laboratory medicine subspecialty (Chemical Pathology) among the first four picks among interns in Nigeria. This contract with most studies in Nigeria [11,12].

Possible reason and factors for this may be the changing pattern of factors influencing preference for specialty with factors like personal convenience, natural flair/interest, gender issue; sub satisfaction and humanitarian drive playing a prominent role. Majority of the interns do not consider financial rewards, family influence, role model, and quality of teaching received as medical students as playing a deciding factor in their career preference.

Ophthalmology is a unique field of medicine combining the hypothesis generating intellectual aspect of diagnosis with the opportunity to perform procedures both in the clinic and in the operating theatre [8]. Its impact is much less than most other specialty while majority of the interns (58.8%) considered the specialty as interesting and important only 3.8% of them would consider it as specialty of first choice. Possible reasons for this may include very short period of posting in the specialty as a student (usually 2 weeks in Nigeria) and failure to incorporate the full scope of ophthalmology during posting. The specialty is taken alongside general surgery and other surgery subspecialties. The lectures and hospital experience are crowded and very limited. This very limited time does not expose the students to the full scope of what the specialty entails its advantages as a career choice. It is suggested that more time should be given to the course and the full spectrum of the course beyond lecturers.

The study also shows a significant relationship between medical school attended and the choice of specialty but this need further verification with an enlarge sample size and to also find out the different characteristics of the medical schools that determined their career choice.

5. CONCLUSION

Concluding, factors influencing interns' specialty choice should guide government's health administrators and educators as they may be responsible for mal-distribution of medical manpower across the various specialties. There

should be in place special incentives for interns to encourage them to have careers in specialties like ophthalmology.

6. RECOMMENDATION

In addition to the inducement allowance in place, more strategy should be employed to make the specialty more attractive.

CONSENT

Informed consent obtained from all the participants.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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