House Officers' Choice of Specialty in Nnewi, South East, Nigeria

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ABSTRACT

Background: The choice of area of specialization made by young doctors today will determine available specialist manpower in medical practice in Nigeria in the near future. It is a pointer to whether seeking of medical care abroad will be arrested or not.

Aim: This study aims to identify factors that affect the choice of house-officers in the area of medical specialization. Their expectations and perception to specialization was also assessed.

Method: This is a cross-sectional survey carried out among house officers in Nnamdi Azikwe University Teaching Hospital, Nnewi, Anambra State, South east, Nigeria. Pretested structured questionnaires were distributed to all the house officers. Data obtained was manually analyzed.

Result: Seventy-three doctors responded, of which 67(91.8%) had already made their choices. Male to female ratio was 1.15:1. Majority were in their 3rd and 4th decades of life. Obstetrics and gynaecology, 19(28.3%), Paediatrics, 19(28.3%) and Surgery16(23.8%) were the highest choices made. Thirty-six (49.3%) respondents had a combined total of 55 references during undergraduate training and 13 respondents made their choices from the area they had references in. Thirty-seven (55.1%) persons and 10(15.0%) persons respectively, submitted that they had good lecturers during undergraduate training in their area of choice and that the courses were less stressful. A role model in the practice, peers, duration of residency training and financial considerations were found not to have affected choice. All respondents agreed that specialization is good for the practice. There were various expectations from specialization.

Conclusion: This study reveals that arole model in the practice, peers, duration of residency training and financial considerations were found not to have affected choice of area of specialization. Effort need to be made to influence choice made by doctors, as consideration is given to personal idiosyncrasies rather than societal needs.

KEYWORDS: Specialty, Choice, House-officers

INTRODUCTION

The world over, the distribution of specialist in the medical profession is a great concern. The worry is that medical students and trainee physicians make their individual choices without any consideration to societal nor community need¹⁻³. The choices of house officers, the often neglected segment of doctors by trainers and policy-makers alike, will in the near future determine the manpower availability of the medical profession in Nigeria.

In the developed world, efforts are being made to guide and direct choice of area of specialty.

In the UK in 2007, the Medical Training Application Services (MTAS) was introduced under the auspices of the Modernizing Medical Careers (MMS). It is an on-line application service used for the selection of foundation house officers and specialty registrars and for allocating them to jobs in the UK. The aim is to ultimately cater for the manpower need of the UK in the area of medical practice, both now and in the near future⁴.

Though criticized and opposed in the UK, such active intervention and policy cannot be said to exist in Nigeria.

Nigeria offers a 6-year medical education. One year of pre-medical studies, two years of basic medical sciences and three years of clinical studies. This is then followed by one year of internship in an approved tertiary health institution, after which the fully registered doctor could choose to specialize or practice as a general practitioner. The medical education curriculum is still the conventional lecture-based as opposed to problem-based learning.

As the above points noted about medical education in Nigeria, choice of specialty could be influenced by the availability of specialist in training institution. Experiences of a medical graduate during undergraduate days and others socio-economic factors do determine choice of area of specialty⁵.

In a study at New Orleans USA, Marc J. Kahn et al Concluded that medical students make a choice of primary care residency as a result of complex set of factors other than debt⁶.

Aslam M. et al in a study noted that a high proportion of medical students and recent medical graduates in Karachi, Pakistan choose the same medical specialties¹. They concluded that this may lead to saturation in those areas of specialization and as a

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result leave the population underserved in other important areas. In addition, they observed that Students with an education from a private medical institution chose a wider range of specialties than did those trained in publicly-funded colleges. They had previously in the study noted a difference in the curriculum of private and public funded medical schools.

O.O. Odusanya, Lagos, discovered that surgery, obstetrics and gynaecology continue to attract young doctors to the detriment of other specialty areas and that financial considerations are a key determinants with regards to place of future practice⁵.

Ocheke A.N et al, Jos Nigeria, concluded that HIV/AIDS epidemic do not deter medical students and house officers from pursuing a specialization in surgery⁷.

In the past three decades, residency program has increasingly been a vogue among medical doctors in Nigeria. Yet the lack of or inadequate specialist in some areas are glaring. The high ratio of population per doctor in the country cannot be said to have answered all the questions raised. There remains the question of what informs the choice of area of specialization among medical doctors going into specialization. Few studies have attempted to answer this. There is no nationally collated data on this.

Findings from this study will guide the society and policy makers in their attempt to restructure residency training program and manpower provision in the medical practice.

METHOD

This is a cross-sectional study carried out in March 2011. Study population was all house officers doing their internship at Nnamdi Azikiwe University Teaching Hospital (NAUTH) Nnewi, Anambra State, Nigeria. NAUTH is a tertiary healthcare facility offering health services, training and research programs for more than two decades. Medical interns who trained in any part of Nigeria are also employed there.

After obtaining informed consent, pre-tested structured questionnaires were self-administered to the medical interns to obtain information on demography, choice of area of specialty, likely determinants, perceptions of and expectations from specialization by the study subjects. Analysis was manually done.

RESULTS

A total of 73 respondents were included in the study, 65(89%) of them falling within the age range of 20 to

30 years with mean age as 26.1 ± 4.1 years. There were 39(53%) males and 34(47%) females, giving a male to female sex ratio of 1.15:1. Sixty-four (88%) of these were single. All respondents were willing to specialize after their internship with 67(93%) having already made up their minds concerning area of specialization.

Table I shows the distribution of the choices of areas of specialization.

TABLE I: CHOICE OF AREAS OF SPECIALTY					
S/NO	AREAS	FREQ	PERC(%)		
1.	PAEDIATRICS	19	28.3		
2.	PATHOLOGY	1	1.4		
3.	INTERNAL MEDICINE	6	8.9		
4.	SURGERY	16	23.8		
5.	OBSTETRICS &	19	28.3		
	GYNAECOLGY				
6.	OTORHINOLARYNGOLOGY	1	1.4		
7.	RADIOLOGY	2	2.8		
8.	PRIMARY HEALTH CARE	1	1.4		
9.	ANAESTHESIOLOGY	1	1.4		
10.	OPHTHALMOLOGY	1	1.4		
	TOTAL	67	100		

Of the 73 respondents, 36(49.3%) had a combined total of 55 references in various courses during their undergraduate medical training. This is shown on Table II.

TABLE II: AREAS OF REFERENCES IN UNDERGRADUATE TRAINING					
S/No	COURSES	FREQ	%		
1.	MEDICINE	4	7.2		
2.	PATHOLOGY	6	10.9		
3.	PEDIATRICS	21	38.2		
4.	OBS & GYN	4	7.2		
5.	SURGERY	4	7.2		
6.	ANATOMY	5	9.0		
7.	BIOCHEMISTRY	3	5.4		
8.	PHYSIOLOGY	2	3.6		
9.	PHARMACOLOGY	5	9.0		
10.	PUBLIC HEALTH	1	1.8		
	TOTAL	55	100%		

Thirteen (17.8%) respondents made a choice of area of specialization in an area where they had references during undergraduate training.

Table III shows the time when the respondents made a choice of their area of specialization.

TABLE III: TIME OF CHOICE				
PERIOD	FREQ	%		
BEFORE ENTRY INTO				
MEDICAL SCHOOL	8	11.9		
PRE-CLINICAL PERIOD	2	3.0		
CLINICAL CLASS	39	58.5		
DURING INTERNSHIP	18	27		
ΤΟΤΔΙ	67	100		
ľ	PERIOD BEFORE ENTRY INTO MEDICAL SCHOOL PRE-CLINICAL PERIOD	PERIOD FREQ BEFORE ENTRY INTO MEDICAL SCHOOL 8 PRE-CLINICAL PERIOD 2 CLINICAL CLASS 39 DURING INTERNSHIP 18		

Of the 67 respondents who had made choices of areas of specialization, 37 (55.2%) were yet to do internship posting in their areas of choice.

With respect to respondents' experiences on the area of specialty during undergraduate training, 37(55.2%) felt they had good lecturers, 10 (14.9%) felt the program was less stressful. Only 2(2.9%) volunteered that it was difficult to learn, while 18 (26.8%) made no response.

Sixty (89.6%) of the respondents have role models in the medical practice and 33 (55.0%) of them have the same choice of area of specialty as their role model.

Sixty-three (94.0%) of the respondents who had made a choice of area of specialization, felt their choices were not influenced by peers and classmates. However, only 19(28.3%) out of them felt their choices were influenced by the prospect of better financial remuneration.

An opportunity to train abroad and an increase in duration of training would make only 12 (17.9%) and 16 (23.9%) of the respondents respectively, to change their choices of areas of specialization.

All the respondents agreed that specialization is good for the practice. However, only 17(23.3%) submitted it should be made compulsory. Majority, 61 (83.6%) of the respondents were comfortable with present scenario of absolute college regulation and administration of the residency training in the country, while 12(16.4%) want it to be hospital based.

Of the 67 respondents that had chosen areas of specialization, 46(68.7%) said they will not opt out the practice after specialization, while 21(31.3%) are ready to change career if they get other options.

There were varying expectations from specialization from the respondents as shown on table IV.

TABLE IV: EXPECTATIONS FROM SPECIALIZATION				
S/No	EXPECTATION	FREQ	%	
1.	JOB SATISFACTION	20	27.4	
2.	PROFICIENCY	11	15.1	
3.	FINANCIAL STABILITY	5	6.8	
4.	IMPROVED RATING AMONG COLLEAGUE	1	1.4	
5.	1. AND 2.	13	17.8	
6.	1. AND 4.	5	6.8	
7.	ALL OF 1., 2., 3., & 4.	18	24.7	
	TOTAL	73	100	

DISCUSSION

This study revealed that most, 65(89%) of the 73 respondents were in the age range of 20 to 30 years. This implies that house officers in Nigeria are mostly in this age range. An age in which enough experience is not yet gathered to think of the country as a whole and decisions are made with only personal consideration, and not that of the country. The range is same as in Britain⁸.

The absence of sex difference among the respondents in this study lends credence to the disappearing gap between male-child and female-child education in the developing world. Furthermore, the decreasing discrimination of the female sex in a country like Nigeria is brought to the fore.

It was also noted that all the house officers were willing to specialize, with 91.8% having already made their choice. This might not be unconnected with the general perception among this generation of young and upcoming doctors that specialization is good for the profession. However their reluctance to subscribe to a mandatory specialization for all doctors (23.3%) might not be divorced from the rigorous training and to the fact that the whole issue regarding specialization is entirely still a personal thing. This is unlike in Britain, where the government has made effort to regulate residency program; entrance into it and influence people's choice. There, every doctor does not want to specialize; some prefer to practice as general practitioners, even from as early as college days^{3,8}.

The apparent disadvantage of this does not yet apply to us, for where as there is a saturation of specialists in almost all specialist fields in Britain, same cannot be said to be applicable in Nigeria. The aim in developed countries is to get people to some areas of current and future need, while ours is that of gross need in most areas³.

The highest prevalent areas of choice are paediatrics, obstetrics and gynaecology, surgery and internal medicine, being a distant 4th. This is the same with other developing countries like Pakistan¹. These are the core and traditional areas in medical practice and specialization. The other areas contributed not more than 1.4% each. The implication of this is that we shall still have lack of specialists in areas of recent advances in medical practice. Interventional radiology, anaesthesiology, ophthalmology, emergency medicine etc will remain elusive in the country. The problem may reflect lack of training centers for those recent areas in Nigeria, which also compounds the problem.

Several factors were felt to influence the choices of areas of specialization. The under-graduate training was felt to affect choice. Good lecturers and less strenuous training were also felt to influence choice of specialty. Hence those who train medical students should bear in mind that their methods and attitude will not only influence outcome in examinations, but also affect their choices of areas of specialization tomorrow. This was similarly noted in Glasgow, Scotland, where many resolved to major in General Practice (GP) after their undergraduate rotation in Gp⁹.

However, peers/classmates, and prospects of financial gains seemed not to have influenced choice in individuals who had resolved to specialize. This might not be unconnected with the remuneration system in Nigeria, in which all specialists earn the same salary in the government-owned hospitals, irrespective of the area of specialization and input/output.

Also, decisions on area of specialization were made before a full grasp of the practice is got, as many made their choices as clinical students and before doing rotations in their areas of choice as house officers. It is obvious that all the necessary information was not available before such decisions were made.

It is also noteworthy that the decisions were rigid, as only a few would change their choices if they have opportunity to do their residency abroad, or if the duration of training is increased. Also, majority will not opt out of the practice if they specialize. All respondents agreed that specialization is good for the practice, with most of them insisting it should not be made compulsory for all. This however, provides a good enabling environment to influence choice and turnover of specialists in choice areas.

The high expectation from specialization implies that the country will have well motivated residents and enthusiastic specialist if properly encouraged.

Concerted effort should be made to influence choice of area of specialization by those in authority - government, training institutions and lecturers so that a dearth of personnel in some areas of the practice will not occur in the near future. Also, more than a routine and official approach should be employed in training medical students, so that appropriate role models for them will arise in the profession.

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