



Internal Medicine as a Career Choice among Rotatory Interns in a Developing Country- A Multi Centre Study

Monday O. Ogiator^{1*}, Babarinde A. Ojo², Ephraim T. leave³, Adaora B. Ogiator⁴
and Innocent O. Abah⁵

¹Department of Medicine, Benue State University, Makurdi, Nigeria.

²Department of Histopathology, Benue State University, Makurdi, Nigeria.

³College of Medicine, Benue State University, Makurdi, Nigeria.

⁴Department of Paediatrics, Benue State University, Makurdi, Nigeria.

⁵University of Abuja Teaching Hospital, Abuja, Nigeria.

Authors' contributions

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

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ABSTRACT

There is shortage of medical manpower including internists in Nigeria. Young interns prefer certain specialties to the neglect of others. This creates a gap in health care delivery.

Objectives: The aim of the study was to determine the rate of selection of internal medicine as a career choice and the factors influencing career choice among rotatory interns in three (3) tertiary institutions in Nigeria namely Benue State University Teaching Hospital, Makurdi, University of Abuja Teaching Hospital, Gwagwalada, Abuja and Federal Medical Centre, Makurdi.

Methods: This was a cross sectional questionnaire based study conducted using pre-validated self administered questionnaire among rotatory interns from 3 tertiary hospitals in Nigeria.

*Corresponding author: E-mail: tatandy09@yahoo.com;

Results: A total of 110 interns responded (81 males and 29 females) out of 130 giving a response rate of 84.6%. The popular choices among the interns were surgery 28(25.5%), obstetrics and gynaecology 28 (25.5%), paediatrics 18 (16.4%) and internal medicine 14(12.7%). The factors which influenced career choice among interns enrolled in the study included personal interest, job satisfaction/opportunities, personal convenience and role model.

Conclusion: Fourteen (12.7%) interns that enrolled in the study indicated interest in internal medicine specialization. This is not very encouraging and implies that there is need for improvement of training facilities and method of teaching so that more interns will develop a liking for internal medicine.

Keywords: Career choice; internal medicine; rotatory interns; multi-centre study.

1. INTRODUCTION

The medical specialties chosen by doctors for advanced careers play a crucial role in the development of health-care services in the country [1,2]. Globally the distribution of physician specialization is a growing concern as these choices may not meet the needs of the population [3].

With many emerging diseases and greater understanding of risk factors for many disease conditions, there is need for the medical workforce to be well appropriated and distributed. This is important because preference for a specialty could lead to an over- supply or under supply of skilled healthcare workforce. In a developing country like Nigeria with low doctors' patient ratio and shortage of physicians in various specialties including internal medicine, there is need for a balanced distribution of the health care workforce². For instance considering the huge burden of medical diseases, a lack of interest in internal medicine can hamper quality health care delivery. The interest in internal medicine from some studies done in Nigeria has not been very encouraging. For instance in a cross sectional survey involving 110 interns only 11(10%) indicated interest in internal medicine specialization [4]. Similarly Kelechi Okonta et al. [5] reported that 13 interns out of 129 indicated interest in internal medicine specialization. Despite the strategic role of internal medicine in health care delivery there is a decline in the number of interns choosing a career in internal medicine [6,7]. This has led to shortage of internists and a gap in health care delivery.

The drive for better job opportunities and conditions are leading to shortages of some specialists including internists in some countries [8,9]. Policy makers are saddled with the task of predicting future needs for various specialties in the context of a rapidly changing health service.

If the reasons for choice of areas of specialization by interns are known, policies can be put in place to take care of these needs in order to generate more interest in internal medicine or any other area of specialization. This will lead to the recruitment of sufficient numbers of trainees for each specialty thus ensuring a balanced distribution of highly skilled healthcare workforce to meet the health needs of the population.

The shortage of qualified health personnel in certain field of medicine is detrimental to the healthcare system of any country [10,11]. The implication is that patients requiring their services will not be able to access care readily. They may resort to medical tourism which will further deplete the country's resources that could have been used to develop the health sector.

The challenges in the health sector are enormous at the moment including the rising incidences of emerging infectious diseases and non-communicable diseases like cardiovascular diseases, chronic kidney disease, diabetes mellitus, and malignant diseases. The number of internist should increase to match the challenges and growing demands of the population. This requires that urgent attention must be given to the issues of career choice in our environment and the factors that can influence the rate of selection of internal medicine as an area of specialization [12]. There are various studies that highlight the factors influencing the choice of medical specialties[13,14,15].These factors can be exploited to increase the liking of internal medicine as a career choice among interns. Understanding the dynamics of career choice decisions is thus crucial to efforts to influence the career aspirations of interns to meet the specialist workforce needs [16,17].

The objectives of this study were to investigate the rate of selection of internal medicine as a

career choice among rotatory interns and to evaluate the factors that influence their decision making.

2. MATERIALS AND METHODS

This was a cross sectional questionnaire based study conducted using self administered questionnaires.

A semi- structured pre-validated questionnaire was distributed to a total of 130 interns. One hundred and ten questionnaires were filled and returned by willing participants who gave informed consent giving a response rate of 84.6%. The first part of the questionnaire consist of demographic details like age, gender, marital status, religion, year of graduation from medical school, present posting. The second part consist of field of interest they want to pursue a career(carrier choice) like internal medicine, surgery, paediatrics, obstetrics and gynaecology, pathology, radiology, community medicine. The third component of questionnaire consists of factors influencing choice of career like personal interest, job satisfaction/opportunities, personal convenience, quality of teaching, expected financial reward, personal aptitude, family influence, role model. The fourth part consists of participants perception of internal medicine as a specialty. Items include important and interesting, interesting but not important, boring and difficult to understand. The last part sought information on ways of improving internal medicine as a specialty from the participants like improvement in the quality of teaching and lectures, allotting more time to bedside teaching and clinical exposure. The questionnaire was pre-tested. The questionnaire was subjected to a validation process which included submitting the questionnaires to interns and experts to check for item appropriateness and comprehensiveness.

Participation in the study was voluntary and informed consent form was administered along with the questionnaire. The inclusion criteria was being an intern and accepting to participate in the study. The exclusion criterion was refusal to participate in the study.

2.1 Data Analysis

Statistical analysis was done using SPSS version 19.0. The qualitative data were expressed as frequencies and percentages while the quantitative data were expressed as mean and standard deviation.

3. RESULTS

One hundred and ten completed forms were returned. The mean age of respondents was 26 ± 7 years. Eighty-one (83.3%) of the respondents were males and 29(26.4%) were females. The most preferred specialties amongst the respondents were surgery 28 (25.5%), obstetrics and gynaecology 28(25.5%), paediatrics 18(16.4%) and internal medicine 14(12.7%). This is shown in Fig. 1.

Fig. 2 shows the factors which influenced choice of specialty among the respondents. The commonest factors which influence choice of specialty among respondents included personal interest 55(50.0%), job satisfaction/opportunity 26(23.6%), personal convenience 16(14.5%) and influence by a mentor (role model) in 3 (2.7%). Quality of teaching was chosen as a factor by 2 (1.8%) of the respondents.

Also 46(41.8%) respondents thought there should be improvement in the quality of teaching of medicine while 52(47.3%) thought more time should be allotted to bedside teaching. 12(10.9%) thought more time should be allotted to medicine and its subspecialties generally. This is shown in Fig. 3.

Interns' perception of medicine (Fig. 4) showed that 86(78.2%) interns reported that medicine is important and interesting. 18(16.4%) thought that medicine is boring and 5(4.5%) thought that medicine is difficult to understand.

4. DISCUSSION

This is a multi-centre survey consisting of three (3) tertiary hospitals. There was uniform access and even distribution of the questionnaires to interns working at the different hospitals. The career decisions that intern make are very important to the health-care system and to the society. The choices made by respondents from this study reflect the availability of manpower to meet the physician workforce of the country.

The result of the study revealed that the top choices of interns in the survey were surgery, obstetrics and gynaecology, paediatrics and internal medicine. This is similar to the results of studies by Ohaeri in Ibadan [10] Odusanya and Nwawolo in Lagos [9], and Ugezu and Modekwe [18] in Nnewi. The reason may be due to exposure of interns to these major clinical specialties during internship as well the influence

of medical school curriculum which focuses on these core clinical specialties [19,20].

The findings from this study however contrasts with the finding from a United Kingdom study among medical students where the reported top choices were General Practice, and surgical specialties [8]. This can be explained by difference in locality and study participants in the two studies. While General Practice is a well-established and lucrative specialty in the United Kingdom, the same cannot be said in Nigeria.

The prevalence of internal medicine as an area of specialization among interns in this study was 14(12.7%). This result is similar to the findings of the work done in Enugu, Nigeria by Madu AJ et al. [4] which reported a prevalence of 11(10%) among 110 interns and Okonta KE et al. [5] who reported a prevalence of 13(10.1%) among 129 interns in a multi centre survey. These reports are also in agreement with several studies suggesting a marked decline in the rate of selection of internal medicine as a career choice over the years [6,7,21].

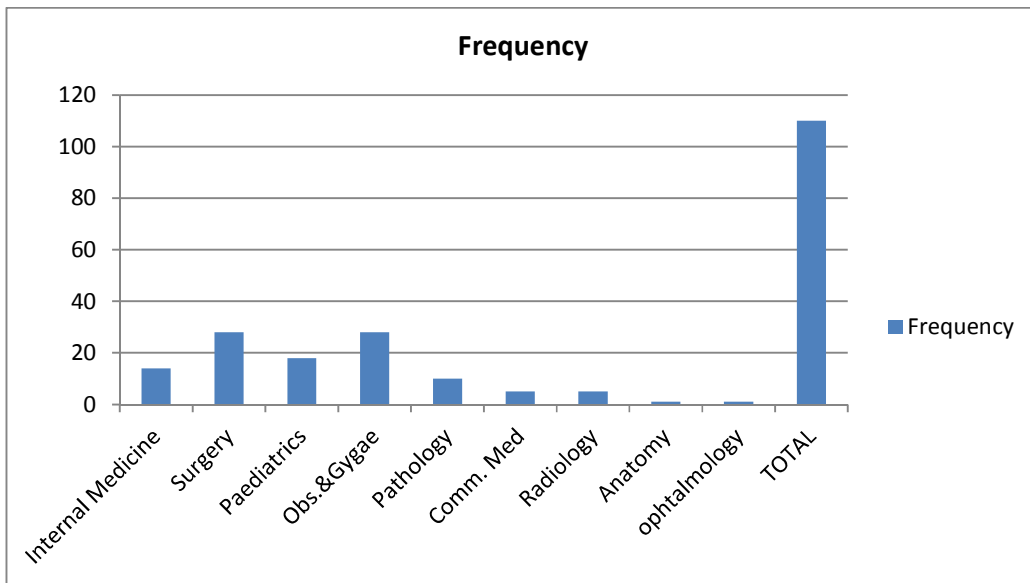


Fig. 1. Bar chart showing specialty choices among respondents

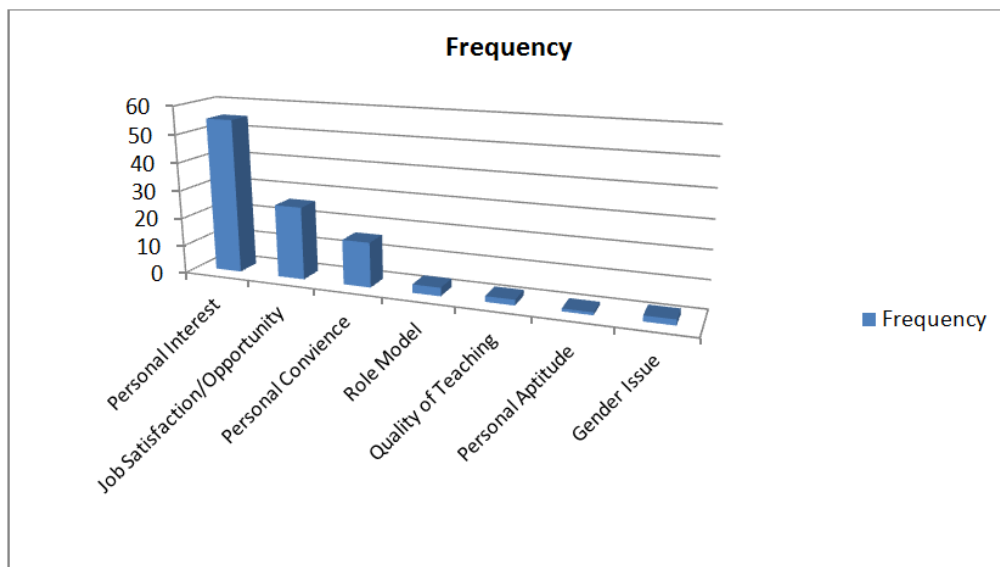


Fig. 2. Bar chart showing factors influencing career choice in respondents

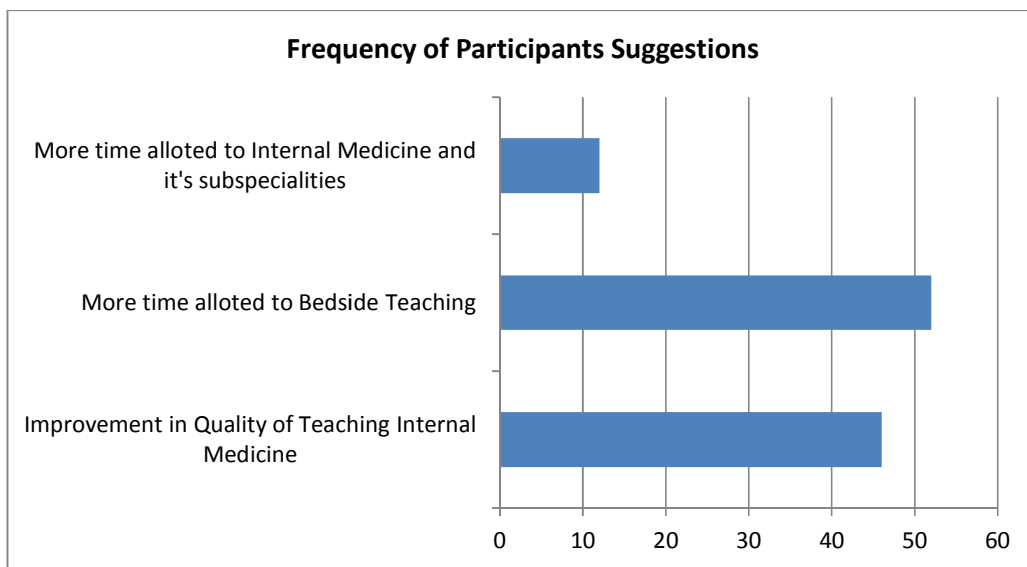


Fig. 3. Participants suggestions

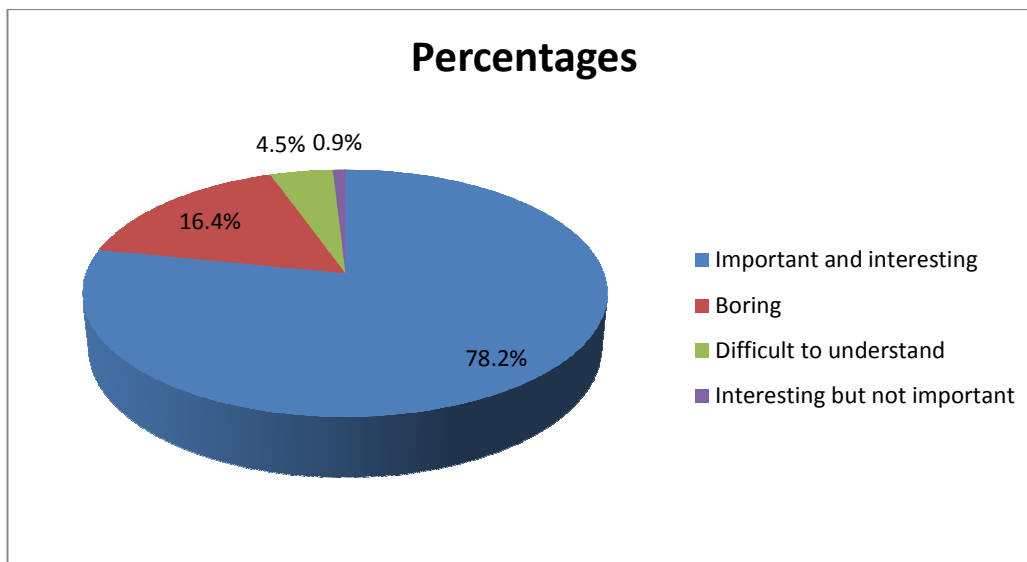


Fig. 4. Pie chart showing perception of internal medicine as a career among respondents

Our study showed that the most common factors influencing choice of specialty among interns were personal interest and job satisfaction. This agrees with the finding of researchers from previous studies [22,23]. This is however different from report of the study carried out by Khadev et al. [24] on Jordanian medical students who made their career choice based on intellectual content of specialty and personal aptitude. Additionally some medical students and interns made their career choice because of the influence of role models [25,26]. Interestingly

majority of participants 86(78.2%) perceived internal medicine as an interesting and important specialty but only 14(12.7%) indicated interest to pursue a career in internal medicine. That means a combination of factors may have influenced their choice. Career choices and specialty preferences in medical profession are influenced by multiple factors including personality traits, teaching and learning environment, gender and socioeconomic standing among other reasons [27,28,29]. This may account for the different reasons seen in studies. Efforts to reform

residency training could affect career plans for many residents as well as the balance between general practitioners and availability of specialists to meet the health needs of the country [30].

5. LIMITATION

The limitation of this study is that it is a cross sectional study. Career preferences may change over time. A prospective cohort study following the students through internship and assessing their career preferences at the end might yield valuable information on trends in career choice by medical students.

6. CONCLUSION

Internal medicine was the least popular core clinical specialty among interns in our study. The main factors for selecting specialties among interns were personal interest, job opportunities and personal convenience. These factors can be exploited by policy makers to motivate interns to increase the rate of selection of any specialty including internal medicine.

We recommend therefore that policies be formulated and infrastructures put in place to accommodate and guide career choices of interns to increase the rate of selection of internal medicine as an area of specialization in order to avoid dearth of internists in the nation's healthcare workforce.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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