

## 1 REASONS WHY STUDENTS STUDY MEDICINE AT DELTA STATE

## 2 UNIVERSITY ABRAKA, SOUTH-SOUTH NIGERIA

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4 **KEY WORDS: Reasons; Medicine; South-South Nigeria**

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## 6 ABSTRACT

7 **Background:** The demand to study medicine in Nigeria is very high thereby  
8 putting lots of pressure to the University authorities because of in adequate  
9 space and provision to accommodate the large number of applicants.

10 **Objective:** The aim of this study was to determine the factors motivating  
11 students and influencing their desire to study medicine and proffer solutions to  
12 reduce the population of applicants to medical schools.

13 **Methodology:** Self-administered questionnaires were used to collect  
14 information from 311 medical students of Delta State University Abraka,  
15 Nigeria. Data collated and analysed using IBM SPSS version 22 software.

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19 **Results.** Three hundred and eleven students were interviewed comprising 193  
20 males (62.1%) and 118 females (37.9%). The mean age was  $23.47 \pm 3.92$  years.  
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22 More than 90% of the students were Christians and the same proportion were  
23 single. The Urhobos were of the majority. Reasons for studying medicine were:  
24  
25 want to save lives (58%), doctors are respected (26%), other reasons such as  
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27 passion for medical profession (12.8%) and desire to be rich (3.2%). People's  
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29 influences from friends, teachers and even family members were minimal as  
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33 51.8% of respondents took a self-decision to study medicine.

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 35 **Conclusion:** The reasons why the students study medicine were quite good and  
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 37 justified and hence they should be encouraged to fulfil their dreams.  
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 39 Government should establish more medical schools to accommodate the  
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 41 increased demand to study medicine. This will promote the production of more  
 42  
 43 medical doctors and reduce the current poor and embarrassing doctor-to-patient  
 44  
 45 ratio in Nigeria  
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## 47 INTRODUCTION

48 Medicine is one of the most sought after courses as many students apply to  
 49 study Medicine and Surgery (MBBS) every year during JAMB examinations.  
 50 Despite the over twenty-five medical schools in Nigeria<sup>1</sup> yet the number of  
 51 applications received in each medical school are so much that the quota given to  
 52 each school is highly and seriously exceeded. There are just 2,435 quotas for  
 53 medical training in the fully accredited medical schools in Nigeria. If you add  
 54 the 300 in the partially accredited medical schools, you have 2,735 spaces.  
 55 Meanwhile, every year more than 100,000 candidates apply to study medicine  
 56 in Nigerian medical schools<sup>1</sup>. At the last Post University Tertiary Matriculation  
 57 Examination (PUTME) screening exercise of Delta State University (DELSU)  
 58 in July 2016 for Medicine course about two thousand candidates came for a  
 59 space meant for about 50 students. This scenario places extreme pressure on the  
 60 University authorities to the extent that they are often coerced to admit more

61 than their quota thereby over-stretching the few human and material resources  
 62 available to train the students. **A times**, the rich and the mighty use their  
 63 powerful influence to arm-twist the university authorities into admitting their  
 64 not-so-good wards and children thereby denying the better students admission  
 65 opportunities. These “bad students” constitute all forms of nuisance in the  
 66 medical school and a good number of them end up being withdrawn from the  
 67 medical school due to poor academic performances. If they manage to graduate,  
 68 they throw caution to the winds and indulge in lots of unethical practises  
 69 thereby bringing the revered medical profession to disrepute.

70           Studies are few on the reasons why students chose to study medicine  
 71 and surgery. While in primary school and secondary schools, a choice of career  
 72 has been a basic issue[2]. The issue of poverty has played an important  
 73 determining role in the opportunities available to all. The income level of  
 74 secondary school families may determine what career a student chooses during  
 75 a specific time in the student’s life; choices that will determine a large part of  
 76 that student’s future. Some students will have to budget education according to  
 77 their personal income [3]. People desires from a career are different, many  
 78 people desire high income; others want adventures while some others want to  
 79 serve people to make the world a better place [4]. It has been shown by a study  
 80 that the family; the ability of the learner self to identify his/her preferred career  
 81 choice; and teachers were significant factors that influence the career choice and  
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aspirations of students [5]. Parental influences have been recognized as a determining factor in students' career decision-making and Sometimes such influence tends to ignore the child's personal interest [6,7]. Stanley (1996) observed that prestige of a profession was a strong motivating factor influencing students in making career choices [8]. Peer group influences have also been identified [9]

A study showed that **13.2%** of medical students/residents choose a career in surgery because of future employment, career opportunities, and intellectual challenge and some of those aspiring to a career in surgery placed most emphasis on prestige [10]. Personal satisfactions are likely influential factors with financial rewards being the least significant. Surgery is also popular in Nigeria despite their increased awareness of risk of HIV/AIDS associated with surgery[11]. According to Katherine Grindley, an Elsevier Australian medical student ambassador, "For me, medicine is about the irresistible combination of altruism, intellectual challenge and the dynamics of our knowledge base"[12]. Plenty of opportunities upon graduating, Working with people, Team work, Respect in society, A great need for doctors and Safe job/career have all been adduced to be reasons students chose to study medicine[13]

### **AIMS AND OBJECTIVES**

Whenever students are asked why they study medicine, the stock standard

121 answer is usually because they want to help people/save lives – but in essence,  
 122 this makes medicine no different from any other career involving health care.  
 123 The aim of this study is to determine factors influencing students’ application to  
 124 study medicine with a view to proffering solutions and stemming the tide in  
 125 number of applications into the medical schools.

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## 127 **MATERIALS AND METHODS**

128 Self-administered structured questionnaires were distributed among all the  
 129 medical students who met the inclusion criteria. These criteria were, being a  
 130 medical student and giving of consent. The questionnaires enabled us obtain  
 131 the necessary information concerning the students such as: General  
 132 Biodata:(Age, Sex, Tribe, Religion and Marital Status), Primary School  
 133 attended, whether any member of the family is a medical doctor, why did  
 134 he/she decide to study Medicine and who influenced his/her decision to study  
 135 medicine?

### 136 **Ethical approval**

137 An approval of the study was obtained from Health Research Ethics Committee  
 138 (HREC) of Delta State University Teaching Hospital, Oghara. The  
 139 participants/respondents of the study were informed that their participation was  
 140 entirely voluntary and they were free to withdraw from the study at any point.

### 141 **Data analysis**

142 The data collected were entered in SPSS version 22 software (IBM SPSS  
 143 Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp). Frequency  
 144 distribution tables, bar charts and pie charts were used for presentations of

145 selected variables.

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## RESULTS

148 This work was a cross-sectional study which was carried out at the medical

149 school of Delta State University Abraka. Three hundred and thirty-one(331)

150 students were interviewed. Table 1 shows the general biodata of the

151 respondents. The mean age was  $23.47 \pm 3.92$  years. The youngest student was

152 17 years while the oldest was 42 years. Majority of the students, (Fifty eight

153 point five percent) belonged to the age bracket of 20-24 years. This was

154 followed by age range 25-29 years representing twenty four point four percent.

155 Only three students (1.0%) were in the least age bracket which happened to be

156 the oldest age range(40-45). Male medical students were more than the females

157 represented by 193(62.1%) and 118(37.9%), respectively. In terms of the tribal

158 affiliations, the two major tribes of the students were the Urhobos, 144(46.3%)

159 and the Igbos, 67(21.5%). The Isokos and Ukwuanis were 31(10%) and

160 16(5.1%), respectively. The Binis were only 11(3.5%). Three hundred and eight

161 students (99%) were Christians. Fig.1 showed the marital status of the students

162 where it was shown that 308(97%) were single while only 8(3%) were married.

163 The primary schools attended by the students were shown in table 2. One

164 hundred and eighty two students (58.5%) attended private schools, 116(37.3%)

165 attended public school while the remaining 13 students (4.2%) attended the

mission schools. Fig.2 showed the proportion of students who have a medical doctor in their families. Seventy three students (23%) have a medical doctor in their families and the relationship with the doctor is shown in fig.3. Father(16.4%), mother(2.7%), brother (16.4%), Sister(15%), others(49.3%). Fig.4 showed the reasons the students chose to study medicine. The main reason was that the doctors save lives 181(58%), this was followed by the fact that doctors were well respected in the society 80(26%). There are other reasons given by 40 students (12.8%). Surprisingly, only 3.2% of the students decided to study medicine because of monetary gains. Fig 5 showed the level influence played by individuals in the choice of medicine. About half of the respondents(51.8%) chose to study medicine based on self-decision without anyone's influence. Fourteen point one percent were influenced by their mother while the father's influence was 16.1%. The influence of the siblings was 4.2%, friends 4.8%, teachers 2.9% and other influences was 6.1%

**TABLE 1. GENERAL BIODATA (n=311)**

|                    | Frequency | Percent |
|--------------------|-----------|---------|
| <b>Age (years)</b> |           |         |
| 15-19              | 32        | 10.9    |
| 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  |
| <b>Gender</b>   |     |      |
| Male            | 193 | 62.1 |
| Female          | 118 | 37.9 |
| <b>Tribe</b>    |     |      |
| 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  |
| <b>Religion</b> |     |      |
| Christianity    | 308 | 99.0 |
| ATR             | 2   | 0.64 |
| Echist          | 1   | 0.36 |

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182 **TABLE 2: PRIMARY SCHOOL ATTENDED**

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

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**FIGURE 1. MARITAL STATUS**

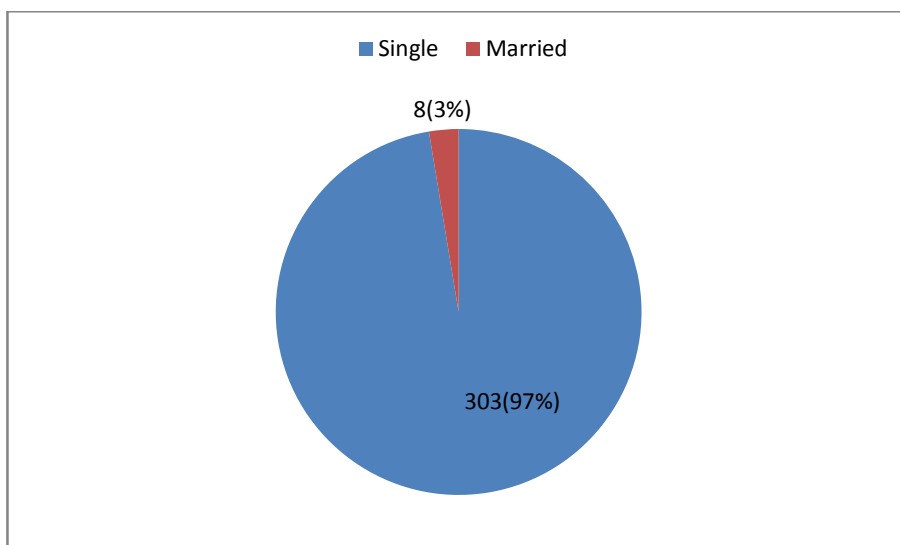
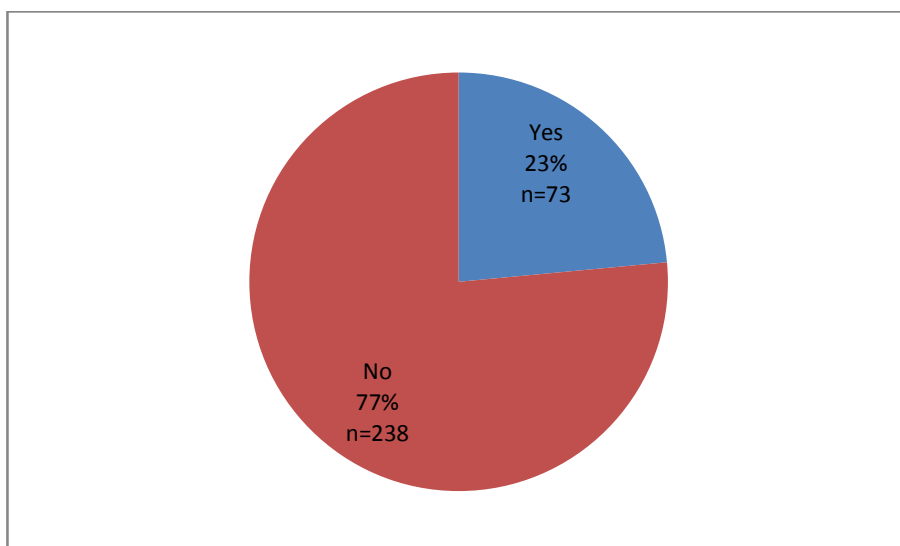
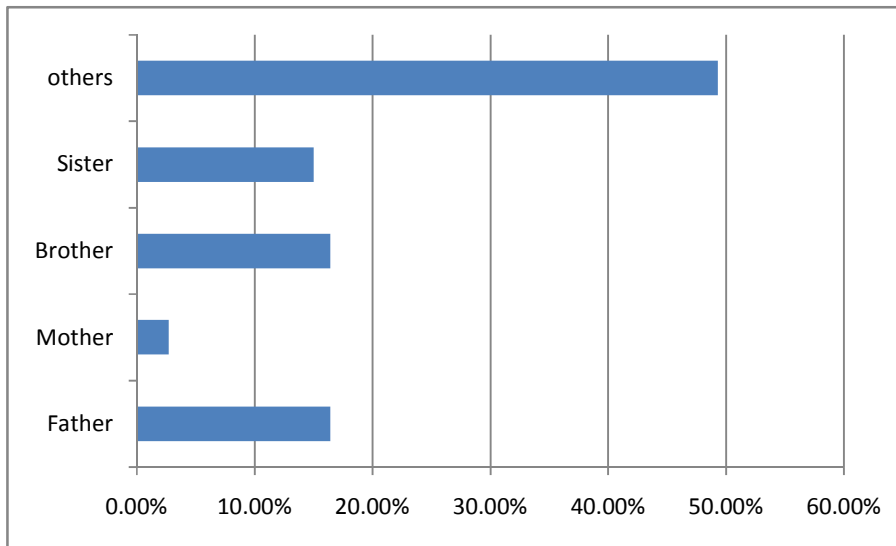


**FIG 2: MEMBER OF A FAMILY BEING DOCTORS**

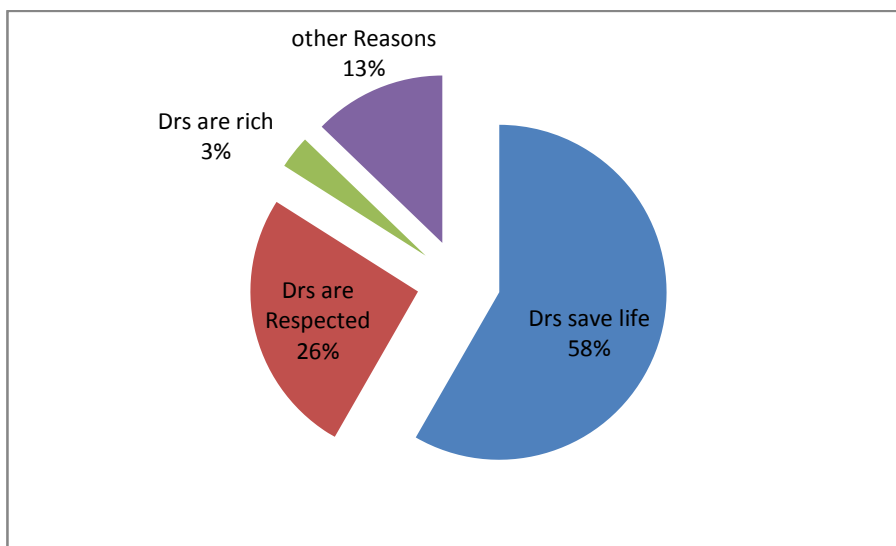


195 **FIG 3.RELATIVES WHO ARE DOCTORS (n=73)**



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198 **Fig. 4 REASONS FOR STUDYING MEDICINE**



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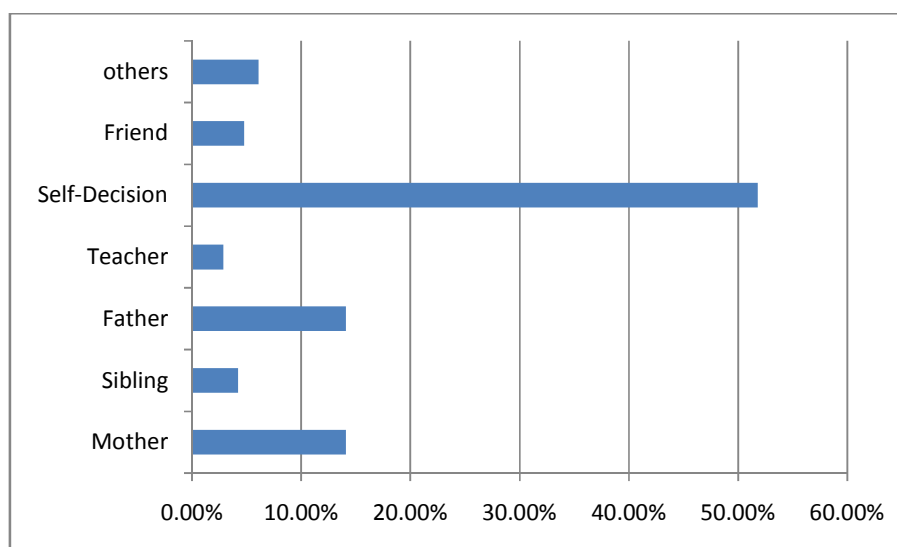
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**FIG 5. INFLUENCIAL IN CHOSING MEDICINE**



## DISCUSSION

This study was carried out among young undergraduate university students.

This reflected in the age distribution of the respondents where almost all the population sample (98%) were below 35years. It also reflected the changing

landscape of higher education pattern of University admissions<sup>14</sup> these days

students are admitted in their teens unlike in the 1960s/70s where university

admissions were not common and when it occurred the students were much

older. In this study, there were more males (62%) than females(38) in the ratio

of 1.6:1. This was in contrast with what obtains in Europe. For example, in

Northern Ontario School of Medicine, women out-number men at most of the

medical schools<sup>15</sup>. In Nigeria, medicine is a very demanding course and takes a

219 minimum of 7-8 years for graduation. Many females are not comfortable with  
 220 this long duration of study. Enough time to acquire a degree in other fields and  
 221 settle down for a family life. In addition, female University education is still  
 222 seriously down-played by many cultures in Nigeria. Only 3 of the respondents  
 223 are married. This was not a surprise as marriage needs quite some level of  
 224 independency and financial stability. The students still depend on their  
 225 parents/guardians for sustenance in medical school. The tribal distribution  
 226 reflected the major tribes in Delta state. The Bini were few because they were  
 227 the main tribe in neighbouring Edo state. Again, Edo state has three medical  
 228 schools therefore the Binis have minimal need applying to Delta to study  
 229 Medicine. In terms of religion, 99% of the respondents were Christians. This  
 230 again did not come as a surprise. Nigerian citizens are divided along two major  
 231 religions, the northern muslims and southern christians. The religion in this  
 232 study is skewed into Christianity as the study was done in southern Nigeria.

233 As for the primary school attended by the students, majority attended  
 234 private schools. This is the trend of school choice in Nigeria because public  
 235 schools which is owed by the government were not adequately maintained and  
 236 funded. The government schools are bedevilled by incessant trike actions by the  
 237 teachers with various degrees of interruptions to the academic programmes.  
 238 Having a relative or a family member as a doctor seem not to play a

239 determining factor in the choice of medicine as a course. This was because only  
 240 twenty-three percent of the students had a medical doctor as a member of their  
 241 family. Among those whose relatives were doctors, this study showed that  
 242 majority were neither the parents nor the siblings rather they were the aunties,  
 243 uncles and cousins. Majority of the students said the reason why they chose to  
 244 study medicine was because doctors save lives and they wanted to do the same.  
 245 This has earlier been one of the reasons motioned for chosing medicine<sup>4</sup>.  
 246 Monetary gains and becoming rich were the least reasons why the students  
 247  
 248 came to the medical school. This should be applauded. One would have thought  
 249 the desire to make money was the driving force to study medicine. The reason  
 250 behind this less emphasis on money could be attributed to the fact that almost  
 251 everybody was a Christian and the teachings of Christianity down-play  
 252 monetary gains as reasons for provision of services. Demand of money by  
 253 medical doctors before medical services are rendered should be discouraged  
 254 because people have lost their lives on account of this unethical practise. Apart  
 255 from desire to save lives, prestige and respect accorded to medical doctors by  
 256 the society was another reason the students applied to study medicine, this was  
 257 in agreement with one of the reasons behind career choice among college  
 258 students[8]. A good proportion of the respondents (13%) had other reasons why

259 they decided to study medicine, these include: passion for the medical  
 260 profession, medicine being a challenging and dynamic course, empathy for  
 261 patients suffering from sickle cell anaemia and medicine as an adventurous  
 262 discipline. We wanted to know the main influential person in the choice of  
 263 medicine among the students. Majority of the students said they were in medical  
 264 school by their own freewill and self-decision contrary to the expectations that  
 265 parents have a strong influence on the career their children choose[6,7]. Again  
 266 this is another good sign and quality of a good doctor-to-be. This self-decision  
 267 promotes doggedness in the students to withstand the stress and rigors of  
 268 medical school and training.

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## 270 **CONCLUSION/RECOMMENDATION**

271 The demand to study medicine in Nigeria is very high and hence  
 272 Medicine/Surgery is one of the most competitive courses in Nigerian  
 273 Universities. This study intended to find out reasons students chose to pick  
 274 medicine as a course of study with the intention of proffering solutions to  
 275 reduce the demand. However, findings from this study show the reasons  
 276 adduced by the students were quite germane and the students should be  
 277 encouraged to pursue their dreams. Self-decision, desire to save lives, respect  
 278 from society and less emphasis on monetary gains are very important

motivating factors for a good doctor. The society needs such selfless doctors and healthcare providers. Nigeria is currently posting a poor doctor-patient ratio of 1:3500 against the World Health Organization (WHO) standard of 1:600. We recommend that government should, as a matter of priority, establish more medical schools to accommodate the teeming population of Nigerians seeking admissions in medical schools. In addition, the government should also make funds available to properly and adequately fund the existing medical schools in Nigeria.

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