

**Evaluation of the roles of doctors and the functionality of the
healthcare system in Nigeria**

ABSTRACT

Background: A comprehensive medical care system is required for effective healthcare delivery to people who need it. Even though exact configuration of healthcare services varies from country to country, a sturdy mechanism comprising of a robust financing, a well-trained and adequately paid workforce; research, policy recommendation and implementation is needed for a well-maintained system to deliver effective healthcare services.

Methods: This is a descriptive study conducted on 100 Nigerian trained doctors with at least 1-year practice experience. The online questionnaire was administered to participants through social media platforms such as WhatsApp, Facebook and twitter. Data analysis was done using Microsoft excel 2010 version.

Result: The response rate was 100%. Ninety six percent (96%) and 99% of surveyed doctors think their monthly salary and the amount of money budgeted to the health sector is grossly inadequate. It was also noted that poor enumeration and/or low income 82/330 (25%) and poor medical facilities 70/330 (21%) are the commonest reasons they believe doctors emigrate from Nigeria while problem identification (20.2%), provision of leadership, healthcare service delivery (13.5%), policy making and implementation (12.9%) and research and development (10.4%) are the commonest roles for doctors identified by study participants.

Conclusion: The Nigerian doctor is poorly enumerated, and the healthcare budget is poor. This accounts to large part why doctors leave Nigeria. There is need for better funding of the

24 healthcare system in Nigeria and more involvement of doctors in leadership, research and policy
25 development.

26 Keywords: Doctors, roles, healthcare system, Nigeria.

27

28 **INTRODUCTION**

29 The components of a well-functioning health system respond in a balanced way to a population's
30 needs and expectations by improving the health status of individuals, families and communities
31 defending the population against what threatens its health, protecting people against the financial
32 consequences of ill-health and providing equitable access to people-centered care.¹ For these to
33 be achieved there is need for a strong primary health care sector as the cornerstone of health
34 systems. In addition to a strong primary healthcare system, a well-motivated manpower and
35 material resources are also vital to achieving the universal basic health care for the population.¹
36 While many developed countries have to a large extent achieved the sustainable development
37 goal in the provision of basic and affordable health care for its population, the reverse is the case
38 in many developing countries especially in sub-Saharan Africa. Little wonder why these
39 countries have over the years recorded very poor vital statistics in mortality, morbidity and life
40 expectancy. Due to poor budgets and planning, Africa has witnessed a relentless emigration of its
41 health profession to industrial nations where working conditions and wages are considerably
42 better. In Nigeria for instance it was estimated that of the 72,000 medical doctors registered with
43 the Medical and Dental Council of Nigeria, only approximately 35,000 (48.6%) practice in
44 Nigeria² The Federal Ministry of Health in a 2006 survey reported that there were a total of 39
45 210 doctors (0.3 per 1000 population), 124 629 nurses (1.03 per 1000 population), 88 796
46 midwives (0.67 per 1000 population), 2482 dentists (0.02 per 1000 population) and 12 072

47 pharmacists (0.05 per 1000 population) for the year 2004 which are all less than the minimum
48 recommended by the World Health Organization.³ This has led to poor functioning and poor
49 state of health of Nigerians. We sought to evaluate from the perspective of the medical
50 practitioners in Nigeria, the reason for the continued increase in emigration of doctors for several
51 decades and the roles doctors should play in the improvement and functionality of the Nigerian
52 health care system.

53 **METHODOLOGY**

54 This was an online survey conducted on medical doctors who are Nigerians and have practiced
55 medicine for at least 1 year in the Nigerian healthcare setting. For a doctor to practice medicine
56 in Nigeria, s/he must undergo a 6 years basic medical undergraduate education in one of the
57 accredited universities in Nigeria. Foreign trained doctor who wishes to practice in Nigeria must
58 pass the Medical and Dental Council of Nigeria licensing examinations. Following successful
59 completion, medical graduate undergoes a one-year mandatory internship training and followed
60 by another one-year mandatory rural practice experience for doctors who are 30 years or
61 younger. Residency training is a 4-6 years postgraduate program commenced after passing the
62 primary postgraduate medical college examination in the respective faculties. It is not a
63 mandatory training program and not required to practice as a general medical officer in Nigeria.

64 Data collection was done through online social media such as WhatsApp, Facebook and twitter.
65 Electronic consent letters were sent to the potential participants. For those that agree to
66 participate in the survey, a weblink generated from <https://www.surveymonkey.com/> was posted
67 to them electronically. The participants were assured on confidentiality by non-collection of
68 personal information that could serve as identifier. Participants were requested to answer four
69 questions on the online questionnaires to the best of their abilities. These questions included

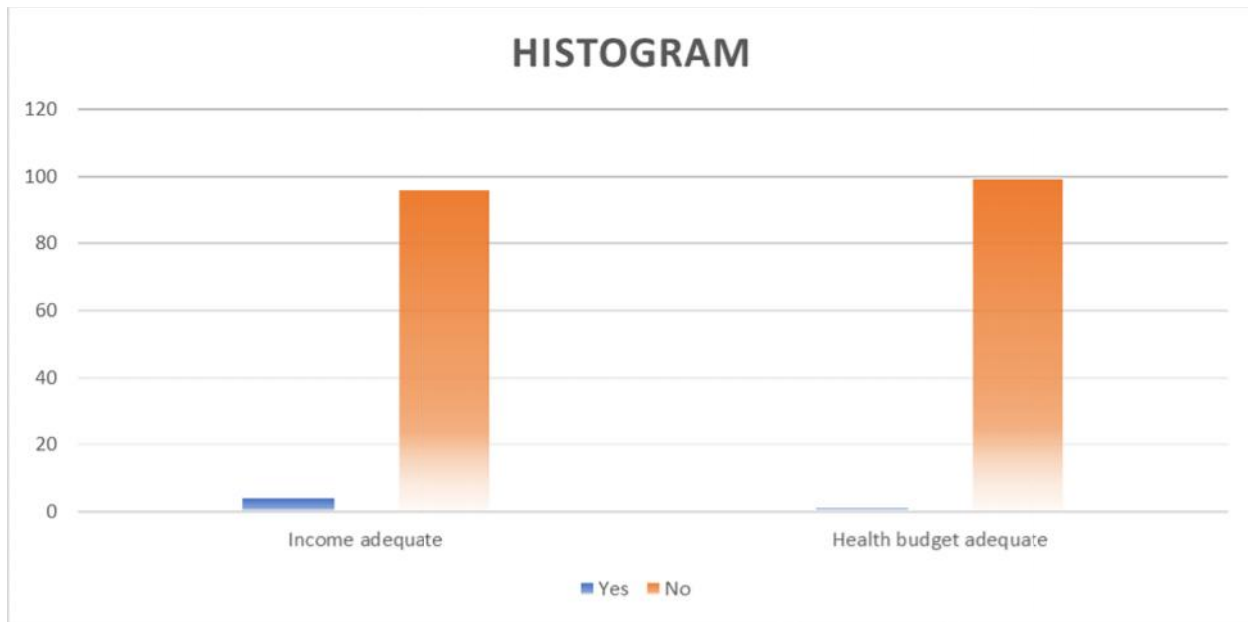
70 information on the adequacy of their monthly salary, national health budget, reason they believe
71 doctors leave to practice medicine outside Nigeria and what they believe are the role of doctors
72 in the healthcare system of Nigeria. The number of doctors enrolled was calculated based on a
73 doctor-population ratio of 0.03%,³ a 5% precision degree and a non-response rate of 50% to
74 accommodate possible sample loss due to attrition. Data collected was cleaned and analyzed
75 using Microsoft excel statistical software (2010 version). Results were presented in percentages
76 and charts.

77 Ethical approval was obtained from the Ethics and Research Committee of the Ben Carson
78 Senior School of Medicine, Babcock University. Online consent form was sent to all potential
79 participants prior to the online questionnaire link sent. Identifiers were not collected in the
80 questionnaire forms.

81 **RESULT**

82 A total of 100 doctors participated in the survey through the online monkey survey and response
83 rate was 100%. Ninety six percent (96%) think their monthly salary or income is inadequate or
84 does not match the time and effort they put in the medical job. Almost all (99%) except one are
85 of the opinion that the amount of money budgeted into the health sector is grossly inadequate.

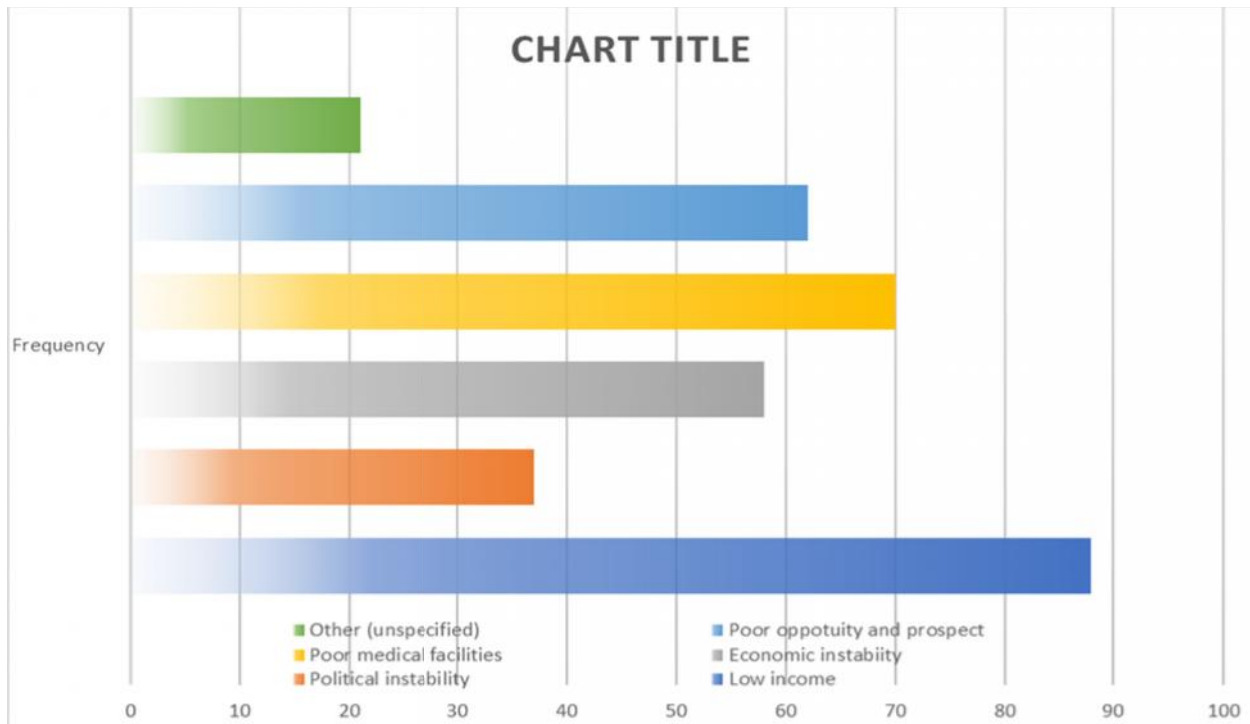
86 Fig 1



87

88 **Figure 1- Histogram showing responses to the adequacy of monthly salary and health**
 89 **budget in Nigeria healthcare system.**

90 When asked about reason doctors are leaving Nigeria, 330 responses were obtained giving an
 91 average of 3 responses per participants. Poor enumeration and/or low income 82/330 (25%) and
 92 poor medical facilities 70/330 (21%) were the commonest reasons indicated by the respondents.
 93 Other reasons included reduced job opportunity 62/330 (19%), economic instability 58/330
 94 (18%), political instability 37/330 (11%) and other unspecified reasons 21/330 (6%). Participants
 95 listed in their opinion what the main responsibility of doctors should be in the Nigerian
 96 healthcare system. One hundred and sixty-three responses were seen and some respondents gave
 97 ≥ 2 responses. Fig 2



98

99 **Figure 2- Bar chart showing responses on the reasons medical doctors leave Nigeria**

100 Based on the responses given, ten patterns of responses were identified, and these were
 101 thematized into major categories as shown in Table 1. About one-fifth (20.2%) of the responses
 102 by the surveyed doctors believed that the main roles of doctors should be problem identification
 103 in the healthcare sector and proffering solution/recommendation to the government on how to
 104 tackle same. Provision of leadership and/or coordination of the healthcare system was the second
 105 most common (14.7%) responsibility supposed to be performed by the Nigerian doctor. Others
 106 included healthcare service delivery (13.5%), policy making and implementation (12.9%) and
 107 research and development (10.4%) The least expected role of the Nigerian doctor according to
 108 respondents included Public health promotion (4.9%) and utilization and advancement of
 109 medical innovations (3.7%). Four unspecified (2.5%) responses reported in the survey included
 110 the role of the Nigerian doctor in the healthcare system is “vital”, “a lot”, “pivotal” and “the
 111 doctor has no role”.

112
113

Table 1: Doctor's opinion on the main responsibilities of the doctor in the Nigerian healthcare system

S/N	Thematic categories	Frequency (N)	Percentage (%)
1.	Healthcare service delivery	22	13.5
2.	Problem(s) identification, recommendation of solution and development of guidelines	33	20.2
3.	Research and development	17	10.4
4.	Advocacy, reformer and activist for the health system	13	8.0
5.	Utilization and advancement of medical innovations	6	3.7
6.	Public health and health promotion development	8	4.9
7.	Leadership and coordination of the health system	24	14.7
8.	Provision of training, medical curriculum and continuing medical education	15	9.2
9.	Policy making and implementation	21	12.9
10.	Others (unspecified)	4	2.5
Total Responses		163	100

114 **DISCUSSION**

115 This survey shows that majority of the surveyed doctors believe that the monthly take home pay
116 for the Nigerian doctors is inadequate. This is hardly surprising as an entry level doctor earns an
117 average of ₦100,000 ~ US\$ 276.62 (based on 02/2019 exchange rate on www.xe.com: at
118 exchanger rate of \$361.507) while an average middle-level medical doctor earns an average of
119 ₦250,000~US\$691.56 per month. This sum in most cases includes allowances and before tax
120 deductions. According to the consolidated medical salary scale 2009, the total salary of the
121 highest paid medical professional (i.e. specialist consultants) in Nigeria on level 7 and grade 9 is
122 roughly 5, 128, 200 naira per annum including all allowances.⁴ This translates to approximately

123 USD\$14,185.62 per annum (based on 02/2019 exchange rate on www.xe.com: at exchanger rate
124 of \$361.507). This is less than half of the annual salary of a sitting senator (N12, 902, 360.00)
125 and members of house of representatives (N9,525,985.50).⁵ This is even more abysmal when
126 compared to annual salary of doctors in other countries.⁶ This explains a recent NOI Polls which
127 showed that 8 in 10 Nigerian doctors are seeking to emigrate to practice medicine in other part of
128 the world due to poor wages and work conditions.⁷

129 Similarly, our study showed that almost all doctors surveyed believed that the national health
130 budget is grossly inadequate in comparison to other less important sector of the Nigeria economy
131 and health budget in other countries. According to the National bureau of statistics, Nigeria
132 allocates less than 5% of its total revenue to the health sector.⁸ Between 2012 to 2018, the
133 percentage allocated to the health sector declined from 5.97% to a paltry 4.0%.⁹ Even more
134 distressing is the fact that over 70% of this sum is allocated to recurrent expenditure such as
135 salaries, administrative travels etc. with less than 30% on important expenditures such as
136 research, capital projects etc.⁹ An ecological study conducted by the World Health Organization
137 in 2009 showed that the life-expectancy is directly and significantly correlated to the national
138 annual health spending ($r=0.629$).¹⁰ This may partly explain why there is poor health outcome in
139 many middle to low income countries with comparatively low life-expectancy in these countries.
140 Relatedly, most doctors believe that poor income, poor facilities and poor prospect with
141 opportunity are the commonest reason doctors leave Nigeria to practice medicine. It is fair to
142 state that this may be related to the poor health budget and implementation in the Nigerian health
143 sector.

144 Additionally, our survey reported that doctors believe that problem identification, leadership,
145 healthcare delivery, policy recommendation and research should be the main roles of doctors in

146 the healthcare system of Nigeria. These are some of the documented roles of doctors in
147 healthcare system around the world.^{11, 12} Except healthcare delivery, the engagement of the
148 Nigerian doctor in other identified roles is debatable and were specified has been grossly
149 suboptimal. In authors opinion, while doctor should be encouraged to get involved in politics to
150 help drive policies issues, their involvement in leadership and headship of hospital around the
151 country should be strengthened. By training, doctors are meant to be leaders in the health sector
152 based on their rigorous and comprehensive training. It will however be vitally expedient that
153 those going into administration should acquire further certification in administration. Such that
154 their holistic and comprehensive knowledge of the health sector with further professional
155 administrative training will translate to a robust economic engagement of the health industry in
156 the country. This, we believe will further strengthen the leadership qualities of a doctor
157 translating into a more robust economic management of the limited money, material and
158 manpower in the Nigerian healthcare sector with minimal conflicts and overlapping functions
159 that lead to recurrent fights and unnecessary strike actions among the three tier levels of health
160 care team.

161 Finally, as indicated by surveyed doctors, medical research is a key area that needs to be
162 advanced for development of the healthcare system to be achieved. This is an under-explored
163 area in the Nigeria healthcare system as studies have shown that most doctors globally have little
164 interest and/or are not involved in research. This reason for this trend may be related to the poor
165 health research funding¹³ and/or poor training of doctors in research methods. In a report
166 evacuating major professional activities of medical graduates from various countries, Nigeria
167 trained doctors were significantly noted to be less involved in research (0.6%) and administrative
168 activities (0.5%) compared to counterparts from other regions of the world.¹⁴

169 **Conclusion**

170 We conclude that the Nigerian doctor is poorly remunerated, and the healthcare budget is poor.
171 These, together with the resultant poor work conditions are some of the contributors to the poor
172 health state and reasons doctors are emigrating from Nigeria. Continued and strengthening of the
173 training and involvement in research and policy development by Nigerian doctors may help
174 improve the healthcare system in Nigeria.

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