

Perception of Early Career Doctors Towards Residency Program in a Nigerian Teaching Hospital

***Ochuko EBRORHIE, **Michael Olayinka ADEYEMI, ***Emmanuel Onyebuchi ONUOHA**

**Dental Department, Babcock University Teaching Hospital, Ogun State, Nigeria*

***Department of Oral and Maxillofacial Surgery, College of Medicine, University of Lagos/Lagos University Teaching Hospital, Lagos, Nigeria*

****Dental Department, Federal Teaching Hospital, Owerri, Imo state, Nigeria*

Correspondence

*Dr. Ochuko Ebrorhie
Dental Department
Babcock University Teaching Hospital,
Ogun State, Nigeria
E-mail: ebrorhieochuko@gmail.com*

ABSTRACT

Background: The residency program was established to train doctors to become specialists who offer specialized care to the population. There has been a steady decline in the number of applicants to the residency program in the last decade. This study assessed the perception of early career doctors towards the residency training program in Nigeria.

Methods: Using a structured questionnaire, the study was conducted among house officers at the Lagos University Teaching Hospital, Nigeria.

Results: One hundred and twenty-six accurately filled questionnaires by participants were analyzed. There were 54.8% female and 45.2% male. The majority of the participants were not interested in the residency program and about a third stated that the program was inadequate and could be better. Poor work facility (33%) was the most common factor responsible for emigration, followed by poor remuneration (27.8%).

Conclusion: The residency program awards residents with specialist degrees. However, there has been a decline in the number of applications. Poor working environment and poor pay were cited as some of the reasons for emigration. Professional health bodies/governments need to urgently look into the factors responsible for the poor perception of early career doctors towards the residency program.

Keywords: Early career doctors; Program; Residency; Specialty

INTRODUCTION

The residency program in Nigeria was officially established in 1974 to produce medical and dental specialists of the highest standards who will provide world-class services in teaching, research, and health care (Yusufu et al., 2010). The residency program was also established to halt the brain drain of young medical and dental professionals relocating to high-income countries for clinical practice or specialist training¹. The act of training specialists through the residency program was considered cheaper in the long term for the Nigerian economy. Institutional centers for residency are usually accredited by the National and West African Postgraduate Medical Colleges (Yusufu et al., 2010). These centers are usually tertiary health institutions however, a few secondary and private hospitals also offer residency programs.

Citation Ebrorhie O, Adeyemi MO, Onuoha EO (2025). *Perception of Early Career Doctors Towards Residency Program in a Nigerian Teaching Hospital. Nig J Dent Sci; 8(1):23-30.*

The choice of becoming a specialist is often a preconceived idea commonly acquired before entering a residency program (Fomete et al., 2022).

This idea often takes shape during medical/dental school. In Nigeria, patient care is of utmost importance in health care delivery and high quality can be ensured by skilled clinicians who have completed a residency training program to become specialist (Fomete et al., 2022). Sponsorship of residency programs exists through various means including but not limited to self, institutional, and government funding (Fomete et al., 2022; Yeo et al., 2009). In Nigeria, sponsorship is mainly provided by the government or institutions although,

self-sponsorship also exists (Fomete et al., 2022). A study conducted by Yeo et al. (2009) in the United States reported that all general surgery residents were institutionally sponsored. Another study conducted in the United States found that 77% of oral and maxillofacial residents are self-sponsored while only 8% received scholarship funding (Fomete et al., 2022). Fomete et al. (2022) in a study conducted in Nigeria, reported that the majority of oral and maxillofacial surgery residents were sponsored by either government or their institution while only 10% were self-sponsored. The Nigerian Medical Residency Training Act enacted by the National Assembly provides some form of government sponsorship to residents in Nigeria (Act PR, 2004).

Becoming a specialist is often a preconceived idea that early career doctors nurture before it becomes a reality. Early career doctors in Nigeria are similar to junior doctors in the United Kingdom. In Nigeria, early-career doctors, typically include medical and dental officers not in training positions (Kanmodi et al., 2019) as well as pre-registration house officers undergoing housemanship (Eze et al., 2020). In the United Kingdom, early career doctors complete a two-year foundation training program after graduating, rotating through six specialties during this period known as F1 and F2 years (Hollis et al., 2020; Rizan et al., 2019). After completion of this foundation training, they are eligible to apply for the residency program which lasts between three to seven years depending on the specialty⁷. Austria, differs from the United Kingdom, as medical graduates begin training in general medicine for a period of three to five years or specialty training directly after completion of medical school (Scharer & Freitag, 2015). In some West African countries like Ghana, House officers have to complete a two-year housemanship period before being eligible to practice (Kang et al., 2023).

In Nigeria, admission into the residency program requires that a medical and dental graduate on completion of housemanship, or during the 12 months of housemanship writes and pass the primary examination organized by the National Postgraduate Medical College of Nigeria or West African Medical College of Surgeons (Fomete et al., 2022; Anyaehie et al., 2012) and have also completed or exempted from the national youth service, and duly registered with the Medical and Dental Council of Nigeria (MDCN)¹². The National Postgraduate Medical College and the West African College of Physicians and Surgeons are the two bodies entrusted with the task of admitting early-career doctors into the residency program and conferring specialty awards to resident doctors who have fulfilled the requirements to become a specialist.

Residency training in Nigeria began in Ibadan by the Association of Surgeons of West Africa (ASWA) on December 3, 1960, which later became the West

African College of Surgeons (WACS) and West African College of Physicians (WACP) in 1973 (Nwachukwu, 2019; Yusufu et al., 2010; Umar et al., 2021). The National Postgraduate Medical College of Nigeria was established by a decree in 1979 (Nwachukwu, 2019). The West African College of Surgeons together with the National Postgraduate Medical College and the West African College of Physicians are responsible for awarding fellowships to trainees who have been certified to have met the minimum training requirements. Trainees spend 4 years to 7 years in the program depending on the specialty (Taiwo et al., 2021).

There has been a reported increase in the number of candidates seeking admission into the residency program occasioned by increased remuneration, the quest to become a specialist, and the desire to perform advanced procedures¹². The graduates of the residency training program possess a comprehensive range of expertise including in-depth knowledge of their specialty, positive attitude, advanced skills, and research capabilities. This enables them to significantly contribute to advancing health care, both in Nigeria and globally, by providing high-quality patient care, conducting innovative research, and demonstrating leadership in their field. The selection of a medical career is a complex process that is influenced by various factors and these choices are of concern to the government and universities who collectively strive to provide the right balance of medical professionals to meet the needs of their communities (Elkhawaga et al., 2015). However, a recent trend has emerged, indicating a growing reluctance and perceived phobia by students and young career doctors for the residency program¹. This perceived aversion to residency training programs has been attributed to unstable government and institutional policies, dwindling national economy, and low budgetary priority. Consequently, this has contributed to an increase in brain drain (Ojo et al., 2014), as talented medical professionals seek opportunities abroad.

The residency training program in Nigeria has faced numerous challenges since its inception. Reports indicate that many resident doctors complete their training without acquiring essential skills needed to be a specialist as some of the procedures expected to be done before their final examinations are not done either due to lack of experienced personnel or inadequate equipment (Nwachukwu, 2019). Practice satisfaction or lack of it has been reported as an important determinant in early career doctors' migration to seek better opportunities abroad (Eze et al., 2020). Some of these challenges can lead to workplace issues and these issues are centered around practice satisfaction, low remuneration, multidisciplinary team leadership challenges, conflict and resolution issues, inadequate training and skills

acquisition, limited research opportunities, unsatisfactory work schedules, and other work-related issues⁶. These challenges encourage doctors to emigrate. The migration of highly skilled professionals causes a shortage of manpower in critical areas like the health sector which in turn hurts the Nigerian economy. Estimates suggest that the country loses about \$1,800,000 per fully trained medical or dental doctor, equivalent to the value they would have added to the economy during their lifetime (Akinyemi et al., 2022). On the other hand, it has been estimated that it costs about \$65,000 to obtain a medical degree which is the cost from primary school to obtaining the degree¹⁷. Other reasons that have been reported for doctors' emigration include poor intellectual stimulation, lack of career path of choice, and lack of good educational and research facilities (Akinyemi et al., 2022). There has been a recent decline in the number of early-career doctors applying to the residency program. Also, there has been an increase in emigration by early career doctors to developed countries in search of greener pastures, especially after the completion of housemanship and the national youth service. This trend has had a severe negative impact on the Nigerian economy despite the investment by the Nigerian government hence, this study seeks to determine the perception of early career doctors towards the residency training program in Nigeria. The results of this study will enable the medical profession/government to know the reasons for the downturn in the residency program and make the necessary adjustments. This study shall also add to the growing knowledge of research as it relates to the emigration of doctors.

MATERIALS AND METHODS

This study was a descriptive cross-sectional study conducted among medical and dental house officers in Lagos University Teaching Hospital Idi-Araba, Lagos State between November 2022 to October 2023 to assess their perception towards the residency training program.

The study population consisted of medical and dental house officers who did their house job training at Lagos University Teaching Hospital during this period and who consented to participate in the study. Ethical approval for the study was obtained from the Health Research and Ethics Committee (HREC) of the Lagos University Teaching Hospital, Idi-Araba with the assigned number ADM/DSCST/HREC/APP/5475.

The instrument for assessment was a structured self-administered questionnaire. The questionnaire was divided into 3 sections. Section 1 was on demography. Section 2 assessed the perception of participants towards the residency training program as well as the quality of the program. Section 3 assessed the intention of participants to emigrate and the factors responsible for emigration amongst these early career doctors. The statistical package of Social Science (SPSS, IBM) version 23.0 was used for data analysis. Percentage, mean, and standard deviation were used to represent variables. Open-ended questions were analysed by Counting the number of times specific words or phrases appeared. Chi-square test was used to assess the association of categorical variables. p-value less than 0.05 was considered statistically significant.

RESULTS

A total of 130 participants were initially enrolled in this study but only 126 completed the questionnaire and were included in the final analysis. The participants ages ranged from 22 to 40 years with a mean age of 28.06 ± 2.94 years. The study population consisted of more females (54.76%) than males (45.24%) (figure 1). A total of 54.8% of the subjects expressed no interest in writing the primary examination for entrance into the residency program, while 65.9% of the participants were unwilling to embark on the residency program. When asked for their opinion on the lack of interest in the residency program, the most common reason cited was poor pay (24.1%) (Table 1). Additionally, 34.9% perceived the quality of training for the residency program in Nigeria as inadequate and in need of improvement, whereas the majority (63.5%) were undecided on its adequacy (Table 1). When asked about their willingness to stay back and practice in Nigeria after completing their house job, only 16.7% of the participants indicated a willingness to stay. In contrast, a majority (77%) expressed a desire to emigrate outside the country (Table 2). When asked about their primary reasons for emigration, the most common response was poor work facilities (33%) followed by poor remuneration (27.8%). Influence of trainers and age significantly predicted decisions to write primary and embarking on the residency training program as p-value equal 0.05 and 0.034 respectively (table 3). None of the variables positively predict their decisions to emigrate.

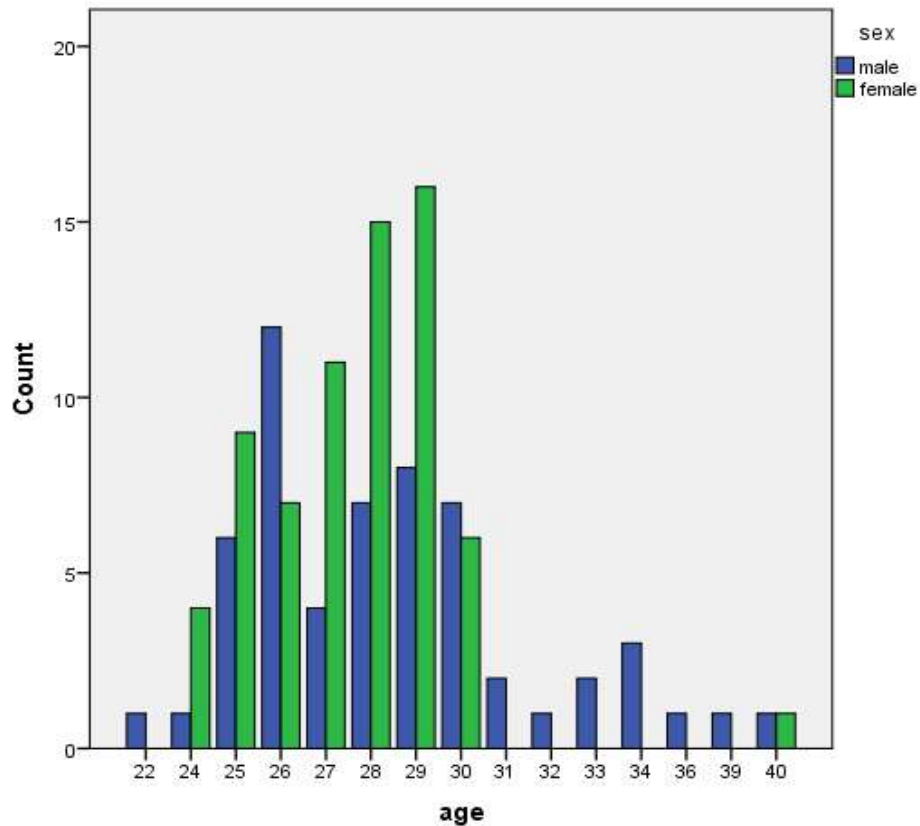


Figure 1: Shows distribution of age and sex

Table I: Shows assessment of interest and perception of participants towards the residency program

Variable	Frequency(n=126)	Percentage (%=100)
Interest in writing primary		
Yes	51	40.5
No	69	54.8
Undecided	6	4.8
Participants interested in residency		
Yes	33	26.2
No	83	65.9
Undecided	10	7.9
Reasons for lack of interest in the residency program		
Master's program	5	6.0
Greener Pasture	9	10.8
Poor pay	20	24.1
Stress	16	19.3
No interest	7	8.4
Poor Facility	5	6.0
Toxic environment	4	4.8
Undecided	4	4.8
Lack of security	1	1.2
Other plan	12	14.5
Total	83	100
Quality of residency program		
Good	2	1.6
Can be better	44	34.9
Not sure	80	63.5

Table 2: Shows factors responsible for emigration

Reasons for emigration	Frequency (n=126)	Percentage (100%)
Do you intend to stay in Nigeria?		
Yes	21	16.7
No	97	77.0
Undecided	8	6.3
Reasons for not staying back		
Poor intellectual stimulation	12	12.4
Lack of career path	10	10.3
Poor remuneration	27	27.8
Lack of mentorship	15	15.5
Poor workplace facility	32	33.0
Others	1	1.0
Total	97	100

Table 3: Shows the Association of Factors Influencing the Decision to Write Primary, Embark on Residency Program and Emigrate.

Variables	Yes n(%)	No n(%)	Undecided n(%)	X ²	P-value
Interest in writing primary					
Age (years)					
21-29	40(31.7)	55 (43.7)	6(4.8)	0.373	0.208
30-39	10(7.9)	13(10.3)	0(0)		
>40	1(0.8)	1(0.8)	0(0)		
Sex					
Male	27(21.4)	26(20.6)	4(3.2)	3.924	0.141
Female	24(19.1)	43(34.1)	2(1.6)		
Influence of Trainers					
Yes	42(33.3)	46(36.5)	6(4.8)	5.953	0.05
No	9(7.1)	23(18.3)	0(0)		
Interest in Residency program					
Age (years)					
20-29	25(19.8)	66(52.4)	10(7.9)	43.044	0.034
30-39	7(5.6)	16(12.7)	0(0)		
>40	1(0.8)	1(0.8)	0(0)		
Sex					
Male	18(14.3)	37(29.4)	2(1.6)	3.740	0.154
Female	15(11.9)	46(36.5)	8(6.3)		
Influence of Trainers					
Yes	25(19.8)	59(46.8)	10(7.9)	3.970	0.137
No	8(6.4)	24(19.1)	0(0)		
Intention to stay in Nigeria					
Age (years)					
20-29	17(13.5)	78(61.9)	6(4.8)	1.246	0.594
30-39	4(3.1)	17(13.5)	2(1.6)		
>40	0(0)	2(1.6)	0(0)		
Sex					
Male	10(7.9)	45(35.7)	2(1.6)	1.423	0.491
Female	11(8.7)	52(41.3)	6(4.8)		
Influence of Trainers					
Yes	16(12.7)	72(57.1)	6(4.8)	0.036	0.982
No	5(4.0)	25(19.8)	2(1.6)		

X² = Chi square

DISCUSSION

The residency program was officially established in 1974 by the Federal Government of Nigeria. The program aims to train specialists who will provide high-quality healthcare services to the population (Act PR, 2004). Residency training enables specialists to adequately ensure excellence in patient care hence, it must be attractive to retain the best clinicians who will provide quality care (Fomete et al., 2022). The choice of specialty is usually dependent on the individual drive of early-career doctors and career choice is usually of concern to the government and universities who collectively strive to provide the right balance of medical professionals to meet the needs of their communities (Elkhawaga et al., 2015).

The mean age of participants in this study was 28.06 ± 2.94 . In another study conducted in Nigeria by Ojo et al. (2014) among resident doctors, the mean age was 33.9 years. There were more females 54.8% than males 45.2% in this study and this is contrary to a similar study conducted by Elkawaga et al. (2015) in Egypt, who reported more males (59.5%). The observed differences in demographics may be due to different study locations and populations.

There has been a decline in the number of applicants to the residency program in recent years, with various factors attributed to this decline. In this study, although about a third of the subjects expressed interest in writing the primary examinations, the majority were not interested in applying for the residency program. A similar trend was also reported in another study in developing countries (Astor et al., 2005). Numerous factors were responsible for the decline in interest in application into the residency program. In this study, poor pay was the most frequently reported factor responsible for a lack of interest in applying to the residency program. This was followed by the perceived stress of the program. While it is difficult to alter the motivating factors in application into the residency program, it is clear that income will continue to be a motivating factor (Astor et al., 2005). In a similar study, early career doctors consider the level of income, when applying for and choosing specialty (Elkhawaga et al., 2015). The stress of the program is another major factor responsible for the decline in interest for application into the residency program in this study. Other studies have also reported that the residency training program is stressful (Taiwo et al., 2021). Regardless of stress, countries like the United Kingdom, United States of America, and Canada have good training facilities, robust health care, and sound economic policies and these are very attractive factors for brilliant potential

emigrant doctors (Akinyemi et al., 2022). In a study conducted in Nigeria, it was also reported that the decline in the program was due to irregular intake into the program and a decreased number of trainers (consultants) (Nwachukwu, 2019). There is bound to be a continued decline in interest for application into the residency program in Nigeria if the motivating factors of early career doctors are not met.

The quality of the residency training program has been an influencing factor towards the application of early career doctors into the program (Nwachukwu, 2019). In assessing the quality of the residency program in this study, the majority of the participants were not sure of the quality while about a third indicated that it could be better. These findings are similar to the findings by Nwachukwu, 2019). In his study, he concluded that despite the effort being put to improve the program, there is still a poor state of training in terms of funding, facility, exposure, and manpower therefore, there is a need to revamp the training program to meet up with the challenges being faced by the healthcare sector (Nwachukwu, 2019). It has also been reported that good working condition is an important factor in choosing a specialty (Elkhawaga et al., 2015). Similarly, Anyaehie et al (2012) in their study conducted in the southeast region of Nigeria, reported that the majority (53.4%) of their respondent rated the residency training program as inadequate. The reasons for poor rating of the quality of the residency program in this study might not be unrelated to poor work facilities, stress, poor pay, and the incessant strikes by doctors in training across the federation.

Emigration of early career doctors has been on the increase recently and emigration of highly skilled health workers hurts the economy (Kanmodi et al., 2019; Akinyemi et al., 2022). This is because skilled professionals contribute an estimated amount of money to the tune of about \$1,800,000 which amounts to the value, they would have added to the economy during their lifetime (Akinyemi et al., 2022). In this study, poor workplace facility is the most frequent factor responsible for emigration and this was followed by poor remuneration. Factors highlighted as reasons for emigration in other studies include good working conditions, better job satisfaction, lack of workplace facilities, poor remuneration, lack of mentorship, poor intellectual stimulation, and lack of career path (Eze et al., 2020; Akinyemi et al., 2022).

A study conducted in Nigeria reported that constant exposure to challenges revolving around demography, workplace, and psychological issues

by early career doctors makes them contemplate emigration to developed countries in search of better job satisfaction, good working conditions, and remuneration, career progression, professional advancement and improve quality of life and all these factors lead to brain drain (Eze et al., 2020; Akinyemi et al., 2022). Similar to this study where poor work facility was the most common reason for emigration followed by poor remuneration, was a study conducted by Akinyemi et al. (2022) who reported that the top reason for emigration was not for an economic reason but rather for access to further training, professional development, and job satisfaction and this was closely followed by remuneration. They further reported that out of the 85.4% of their participants who reside in Nigeria, more than half (64.4%) of them have considered leaving the country, whereas, 57.5% intend to leave. This study, however, reported that 77% of participants had no intention of staying back in Nigeria. On the other hand, Astor et al (2005) in their study reported that the desire for more income, access to technology, security, and improved prospects for dependents are the major reasons for emigration with income and buying power topping the list unlike in our study where it is second on the list. The time difference in the factors responsible for emigration between our study and some other studies is up to ten years and this time interval might affect the perception of early career doctors.

CONCLUSION

This study revealed a concerning trend among early-career doctors in Nigeria, with a low interest in pursuing residency training and a high interest in emigrating. The study suggests that this trend is driven by factors such as unfavourable working conditions, poor pay, and limited career opportunities. Despite the government's significant investment in medical education, many young doctors are not enthusiastic about specializing in their home country. Instead, they are inclined to leave Nigeria in search of better opportunities, highlighting the need for urgent attention to address these push factors and retain talented medical professionals in the country.

ACKNOWLEDGMENT

We want to thank Dr Morkly Jehiel Benjamin for his assistance in data collection.

CONFLICT OF INTEREST

There was no conflict of interest in this study.

FUNDING

This study did not receive any funding from an external source.

REFERENCES

- Act PR. Federal Republic of Nigeria official gazette. Fed Gov Niger Lagos. 2004;(17).
- Akinyemi TO, Lawani OO, Adewole AA, Oiwoh SO (2022). Perception of postgraduate medical trainers and trainees on residency training program in a developing country and its influence on brain drain. *Niger J Med*; 31:20-24.
- Anyaehe UE, Anyaehe U, Nwadinigwe CU, Emegoakor CD, Ogbu VO (2012). Surgical resident doctor's perspective of their training in the Southeast region of Nigeria. *Ann Med Health Sci Res*; 2:19-23.
- Elkhawaga G, Bernard B (2015). House officers' attitude towards family medicine and its choice as a career in Egypt. *Family Pract*; 32(2): 198-204.
- Eze UA, Tolani MA, Adeniyi MA, Ogbonna VI, Isokariari O, Martin CI, et al (2020). Challenges of residency training and early career doctors in Nigeria Phase II: Update on objectives, design, and rationale of study. *Niger J Med*; 29:714-719.
- Yusufu LMD, Ahmed A, Odigie VI, Delia IZ, Mohammed AA (2010). Residency training program: Perceptions of residents. *Ann African Med*;9(2):91-94.
- Fomete B, Adebayo ET, Oginni FO (2022). Expectations, Experiences and Perceptions of Oral and Maxillofacial Surgery Residents to Training in Nigeria. *Eur J Dent Educ*;26(2):248-253.
- Yeo H, Viola K, Berg D, Lin Z, Nunez-Smith M, Cammann C, Bell RH Jr, Sosa JA, Krumholz HM, Curry LA (2009). Attitudes, training experiences, and professional expectations of US general surgery residents: a national survey. *JAMA*. ;302(12):1301-1308. doi: 10.1001/jama.2009.1386. Erratum in: *JAMA*. 2009; 302(21):2322.
- Kanmodi K, Ekundayo O, Adebayo O, Efuntoye O, Ogunsuji O, Ibiyo M et al (2019). Challenges of residency training and early career doctors in Nigeria study (Charting Study) A Protocol Paper. *Nig J Med*; 28(2). doi:10.4103/1115-2613.278584.
- Hollis AC, Streeter J, Hamel C Van, Milburn L, Alberti H (2020). The new cultural norm: reasons why UK foundation doctors are choosing not to go straight into speciality training. *BMC Medical Educ*; 20:282–288.

- Rizan C, Montgomery J, Ramage C, Welch J, Dewhurst G (2019). Why are UK junior doctors taking time out of training and what are their experiences? A qualitative study. *J Royal Soc Med*;112(5): 192–199.
- Scharer S, Freitag A. Physicians' exodus: why medical graduates leave Austria or do not work in clinical practice. *The Central European Journal of Medicine*. 2015;1–7.
- Kang MJ, Kwesi Sakyi Ngissah R, Bo-Ib Buunaaim AD, Baidoo R, Odei-Ansong F, Wordui T, et al (2023). The need for hands-on training and supervision for entry-level physicians in a country with low surgical staffing density: a nationwide survey in Ghana. *BMC Med Educ*;23(1):1–10.
- Nwachukwu A (2019). The state of residency training in Nigeria –Resident doctors' perspective. *World J Innov Res*. 2019; 6(4): 109-112.
- Umar SS, Babandi ZS, Suleiman AG, Umar UM, Olorukooba AA, Ahmad AJ, et al (2021). Assessing performance of resident doctors in training in Northwestern Nigeria. *Niger J Med*; 30:264-70.
- Taiwo FT, Adesegun OA, Idowu AO, Mene A, Imaralu JO, Adekoya AO, et al (2021). Assessment of resident doctors' perception of postgraduate medical education in Nigeria using the speed tool: A pilot study. *Niger J Med*; 30:71-78.
- Ojo EO, Chirdan OO, Ajape AA, Agbo S, Oguntola AS, Adejumo AA, et al (2014). Post graduate surgical training in Nigeria: The trainees' perspective. *Niger Med J*; 55:342-347.
- Astor A, Akhtar T, Matallana MA, Muthuswamy V, Olowu FA, Tallo V, et al (2005). Physician migration: Views from professionals in Colombia, Nigeria, India, Pakistan and the Philippines. *Soc Sci Med*; 61(12):2492–2500.