

MENTORING: A SURVEY OF RESIDENT DOCTORS IN A DEVELOPING COUNTRY.

Buowari DY^{1*}, Ebirim LN².

¹Department of Accident and Emergency, University of Port Harcourt Teaching Hospital, Nigeria.

²Department of Anaesthesiology, University of Port Harcourt Teaching Hospital, Nigeria.

*Correspondence: Dr. Dabota Yvonne Buowari; +234 803 732 4401; daboatabuowari@yahoo.com

Abstract

Background: Mentoring is important in medicine as it acts as a guide for the mentee to follow. Formal mentoring programme is abstract in most developing countries.

Objective: To determine the Importance of a formal mentoring programme of resident doctors in a developing country.

Materials and Method: This is a descriptive cross-sectional descriptive study using an 11 item semi structured questionnaire conducted in Nigeria among resident doctors.

Results: Only 36.55% (53) of respondents had mentors. Those without mentors 74 (8.43%) would love to have mentors. A greater number of respondents 89.66% (130) felt there is need for a formal mentoring programme as there are many advantages. About 77 (83.70%) would like to choose their mentor than been assigned one. about 87.59% (27) agreed that there is need for a formal mentoring programme. Resident doctors with mentors communicated with them face to face, via phone calls and emails.

Conclusion: There is a poor mentoring programme of Nigerian resident doctors.

Keywords: Mentoring, Mentor, Mentee, Resident Doctors.

Cite this article: Buowari DY, Ebirim LN. Mentoring: a survey of Resident Doctors in a developing Country. Yen Med J. 2021;3(1):67-74.

INTRODUCTION

Mentoring had long been practiced from time immemorial, and it has been recognized as a tool to success in different professions.¹ In both undergraduate and postgraduate education, it is a method of transfer of knowledge.^{2,3} Worldwide, medicine is an elite profession with much prestige attached to it.⁴ Hence, mentoring has been commonly practiced.¹

There are other terms interwoven with mentoring, these are coaching and tutoring.¹ Mentoring is important for capacity development.⁵ Therefore, mentoring is necessary for the advancement of medical career of both medical students and doctors of different cadres, that is resident doctors, medical officers, consultants and doctors in academia.¹ The process of mentoring involves an experienced person with more knowledge and skill referred to as the mentor who guides, directs, teaches, counsels, impacts and transfers skills and knowledge to a less experienced person known as the mentee.^{3,6,7}

There are basically two types of mentoring systems known as formal and informal mentoring. Sometimes mentoring is done individually and other times a mentor mentors a group of persons.³

Formal mentoring occurs when there is a structured mentoring system and mentees are allocated to the mentors who are consultants, chief medical officers and medical educationists.⁶⁻⁸ Whereas in informal mentoring is voluntary therefore the mentee chooses the mentor as he or she is not under obligation to have a mentee.^{7,8} Like any process in life, both types of mentoring have its advantages and disadvantages. For instance, residents have been found to advance greatly personally and professionally when there is a formal mentoring system in place.^{2,10}

Formal mentoring is not common in Africa.⁹ One of the advantages of formal mentoring is matching mentors and mentees that can adapt and be compatible.¹⁰ Some organized systems have formal mentoring systems.⁴ These

mentoring interactions take place in diverse ways within peers, in groups or individually.¹¹ There are many benefits of mentoring which may be categorized into three. They include benefits to the mentee, the mentor and the health institution which may be the medical or dental school, if the mentee is a medical student or the hospital, if the mentee is a doctor.¹⁻⁴

Mentoring is important in medicine to act as career guidance, counselling, psychosocial support, friendship, career improvement and development of clinical skills. It also enhances interest in less attractive and popular medical subspecialties and specialties, bridges the gap of hierarchy, discussion of sensitive issues and challenges, management of professional and personal development with little or no stress, increases job satisfaction, better and safer clinical care and better clinical skills.^{2,4,7-9,11} Many scholars have suggested that the career of a mentee is highly influenced by a committed mentor-mentee relationship.⁴ This is a research on academic mentoring of resident doctors in two Nigerian residency training centres.

Review of Related Literature

Several studies have been conducted on mentoring in medicine of both medical students and doctors. Despite this, there is still paucity of data on mentoring in medicine in Nigeria. In Northern India, mentoring of medical students in their first year in private schools was studied. The result showed that mentees benefited from the mentoring programme as they had career advancement, enhanced research interest and better academic performance.¹² In this study, the mentors were not also left out as they had better teaching skills, job satisfaction and personal development.

In another study on mentoring of medical students, they found out that medical students in their first year had problems getting adapted to medical school and making choice of specialty, hence they noticed that the mentoring programme guided the military leaders in their career in medicine and military.¹³ Mentoring is useful for increasing the number of skilled health workers, but it can also be strategic for addressing capacity building challenges among health care workers within developing countries.⁵

In a randomized control trial of peer mentoring of junior doctors, mentoring enhanced their clinical skills.¹⁰ Olayemi et al studied mentoring of resident doctors at a teaching hospital in Ghana; only 39.3% of the resident doctors had mentors. For the study participants without mentors, 82.8% felt that having mentors was important.⁹ Okereke et al studied mentoring among healthcare professionals in Jigawa State, Nigeria. This study revealed that the number of skilled healthcare professionals increased as they were mentored.¹⁴

MATERIALS AND METHOD

This is a cross-sectional descriptive study conducted in two tertiary hospitals in Nigeria. It was done using a semi-structured questionnaire divided into three sections. Section A consisted of four questions related to social demographics which include age, sex, cadre of doctor and department. Section B consisted of two questions investigating the time the respondent chose medical specialty and when the residency primary examination in any of the postgraduate medical colleges in Nigeria or West Africa was written. The primary examination of the postgraduate medical colleges in Nigeria is the qualifying examination to commence residency training.

In Nigeria, the residency primary examination is sometimes written more than once before being successful. Section C consisted of eight structured questions and three open-ended questions that are related to the reasons for having a mentor, having a formal hospital mentoring system, adequacy of meeting with their mentor, advantages and disadvantages of mentoring of resident doctors. The research participants are resident doctors at different stages of their residency training which are interns, registrars and senior registrars. Resident doctors are also known as junior doctors.

Interns are also known as house-officers. Internship is compulsory for any medical and dental graduate after graduation from medical or dental school. After graduation from a tertiary institution, every Nigerian graduate below the age of 30 years proceeds on a one-year service outside his or her state of origin. This is known as the National Youth Service Corps (NYSC). Once a doctor commences residency training in Nigeria, he or she is

known as a registrar. Success at the primary examination qualifies a doctor to commence the residency training programme. Depending on the training centre and medical specialty, success in the primary examination may not be required before employing resident doctors.

RESULTS

The number of resident doctors that participated in this study was 142. Table I shows the social demographics of the respondents. Table 2 shows time of writing primary examination and choosing specialty.

Table 1: Social demographic characteristics of the respondents

Variable		Frequency (n)	Percentage (%)
Age	20-25 years	7	4.9
	26-30 years	39	27.5
	31-35 years	65	45.8
	36-40 years	22	15.5
	41-45years	6	4.2
	46-50 years	1	0.7
	51-55years	2	1.4
Gender	Male	85	59.9
	Female	57	40.1
Rank	House officer	32	22.5
	Registrar	64	45.1
	Senior Registrar	45	31.7
	Medical officer	1	0.7
Department	Anaesthesia	13	9.2
	Pathology	5	3.5
	Community Medicine	6	4.2
	Haematology	8	5.6
	Family Medicine	6	4.2

	Internal Medicine	21	14.8
	O&G	29	20.4
	Paediatrics	16	11.3
	Surgery	14	9.9
	Others	24	16.9

Most of the respondents 65 (45.8%) of the respondents were between the age of 31-35years. 85 (59.9%) of the respondents were males and 64 (45.1%) were registrars.

Table 2: Time of writing primaries and choosing specialty

Variable	Frequency (n)	Percentage (%)
Time of Writing Primaries		
Immediately after graduation	3	2.1
During Housemanship	29	20.4
During NYSC	41	28.9
During residency programme	23	16.2
1-5 years after graduation	22	15.5
5-10 years after graduation	8	5.6
11-15 years after graduation	1	0.7
16-20 years after graduation	1	0.7
Time of choosing specialty		
As a medical student	49	34.5
During Housemanship	45	31.7
During NYSC	19	13.4
1-5 years after graduation	24	16.9
5-10years after graduation	3	2.1

NYSC: National Youth Service Corps

Most of the respondents wrote their primaries during NYSC 41 (28.9%) and chose their specialty while in medical school 49 (34.5%).

Resident doctors that had mentors were 52 (36.6%) while 90 (63.4%) did not have a mentor. Most of the respondents 65 (45.8%) were between the ages of 31-35 years, 85 (89.9%) of the respondents were males and 64 (45.1%) were registrars. Most of the residents wrote their primary examinations during the National Youth Service Corps 41 (28.9%) and chose their specialty while in medical school 49 (34.5%). Among the residents that do not have a mentor 71 (78.9%) wish to have a mentor while, 19 (21.1%) do not wish to have a mentor. Most of the respondents who had mentors chose their mentors themselves 50 (96.2%). Table 3 shows the distribution of response to questions related to mentoring among resident doctors that have a mentor.

Table 3: Distribution of response to questions related to mentoring among doctors that have mentors

Variables (N = 53)	Frequency	Percentage
When in residency training did you have a mentor		
1 year into training	23	43.4
2 years into training	12	22.6
3 years into training	4	7.5
Unspecified	14	26.5
What was your rank during residency did you have a mentor		
As a registrar	39	73.6
As a senior registrar	6	1.3
Unspecified	8	15.1
Mentor chosen by		
Self	49	92.4
Assigned	2	3.8
Unspecified	2	3.8

Table 4 shows respondents' preference on mentoring while figure 1 illustrates the communication and pattern of communication with mentors. Two (3.8%) of the respondents who had a mentor wish to switch to another

mentor while 50 (96.2%) do not wish to switch to another mentor.

Table 4: Distribution of doctors' response to questions related to benefits of formal mentoring programme

Variables (N = 142)	Frequency	Percentage
There are benefits of formal mentoring programme		
Yes	129	90.8
No	13	9.2
Benefits/advantages of formal mentoring programme**		
Provides guidance for proper development of clinical skills throughout residency training	65	45.8
Focus/dedication to career	15	10.6
Makes for direction	15	10.6
Helps to learn from mentor's experience	8	5.6
Makes for faster/easier training programme	8	5.6
Source of motivation/inspiration for mentee	8	5.6
Mentee is monitored for better progress/professional growth	7	4.9
Mentor advices/encourages/counsels mentee	4	2.8
Grooming of mentee in career	3	2.1
Helps promote/enhance mentee's performance in training	3	2.1
Provides academic exposure/sharpens mentee	3	2.1
Mentee can discuss and resolve issues/challenges	2	1.4
Think there is need for formal mentoring programme		
Yes	121	85.2
No	19	13.4
Unspecified	2	1.4

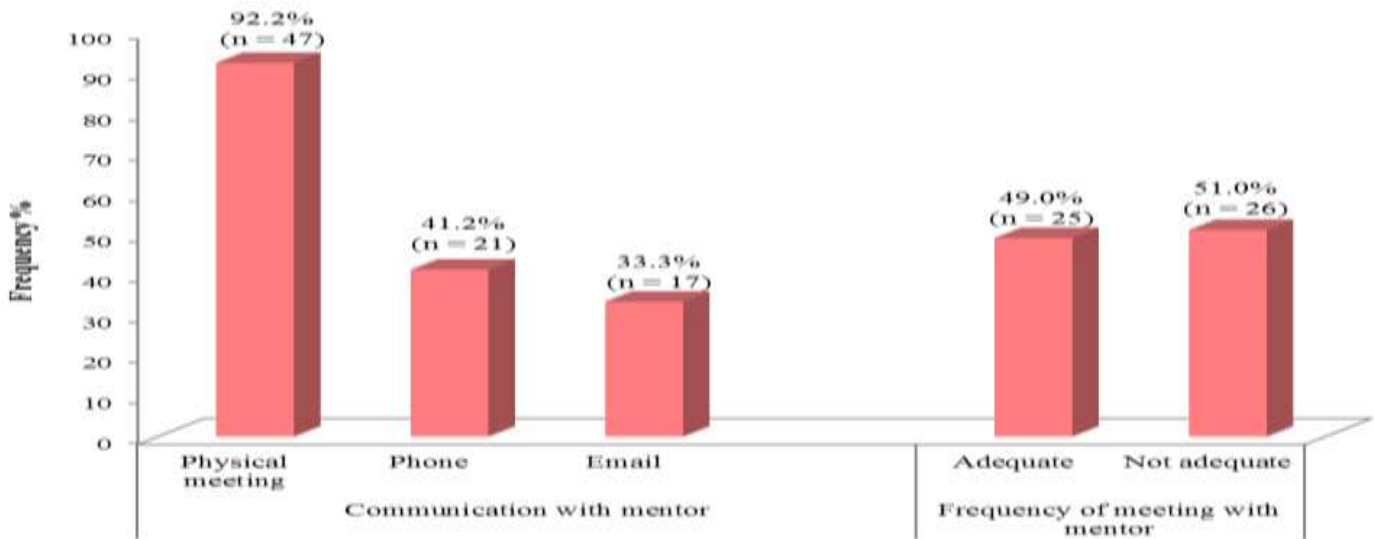


Figure 1: Communication with mentor and frequency of meeting with mentor

The reasons for wishing to switch to another mentor are mentors deficient in carrying out mentoring duties and mentor being inaccessible. Concerning if there are any benefits of having a mentor during their residency training, 129 (90.8%) said they yes and 13 (9.2%) said no. About 121 (85.2%) of the respondents agreed that it was necessary to have a formal mentoring system during the

residency training, while 19 (13.4%) disagreed. About 2 (1.4%) respondents did not specify their choices.

The respondents gave a wide range of responses on the benefits/advantages of mentoring (Table 5).

Among respondents that do not have a mentor, 65 (87.8%) will like to choose one while 9(12.2%) will like to choose one.

Table 5: Distribution of doctors' response to questions related to benefits of formal mentoring programme.

Variables (N = 142)	Frequency	Percentage
There are benefits of formal mentoring programme		
Yes	129	90.8
No	13	9.2
Benefits/advantages of formal mentoring programme**		
Provides guidance for proper development of clinical skills throughout residency training	65	45.8
Focus/dedication to career	15	10.6
Makes for direction	15	10.6
Helps to learn from mentor's experience	8	5.6
Makes for faster/easier training programme	8	5.6
Source of motivation/inspiration for mentee	8	5.6
Mentee is monitored for better progress/professional growth	7	4.9
Mentor advices/encourages/counsels mentee	4	2.8
Grooming of mentee in career	3	2.1

Helps promote/enhance mentee's performance in training	3	2.1
Provides academic exposure/sharpens mentee	3	2.1
Mentee can discuss and resolve issues/challenges	2	1.4
There is need for formal mentoring programme		
Yes	121	85.2
No	19	13.4
Unspecified	2	1.4

Table 6: Distribution of response to questions on choosing a mentor among doctors that have no mentor and wish to have one

Variables	Frequency	Percentage
Like to choose a mentor by self (N = 74)		
Yes	65	87.8
No	9	12.2
Reasons for desiring to choose a mentor by self (N = 65)		
Want a dedicated mentor comfortable with and can easily approach	8	12.3
For compatibility	7	10.8
Feels reasons are personal	5	7.7
Mentee wants to make the right choice for better skills	5	7.7
Need a mentor worth looking up to/inspiring	3	4.6
Mentee would want to choose a mentor that understands him	2	3.1
Mentee wants to get the best mentor to work with	2	3.1
Easy communication	1	1.5
For mentee to take responsibility for the outcome from choice	1	1.5
For focus	1	1.5
Mentee feels choosing a mentor by self will help	1	1.5
Mentee already has a person in mind	1	1.5
Mentee feels getting mentor he admires will improve learning	1	1.5
Proper guidance	1	1.5
To avoid conflict of interest	1	1.5
Unspecified	40	61.5
Reasons for not desiring to choose a mentor by self (N = 9)		
Feels mentors are not dedicated to mentoring	1	11.1
Mentee cannot tell who is a better mentor	1	11.1
Unspecified	7	77.8

DISCUSSION

Mentoring plays various roles in the medical training of medical students and resident doctors. This was seen in this study as the respondents gave some benefits and importance of mentoring. This is supported by Andrades et al who opined that mentoring enhances personal and

professional growth.² Some previous studies suggest that a formal structured mentoring system should be established in all medical schools and where doctors work.⁴ In this study residents without mentors desired to have one.

There have been a lot of changes, innovations and advances in both undergraduate and postgraduate medical education, and mentoring is one of them. Majority of the residents studied did not have a mentor; this corresponds to a study by Lau et al on mentorship in postgraduate psychiatry residents of a Canadian university where majority of the studied residents did not have a mentor also.¹⁵

Since various studies have highlighted benefits of mentoring, it is necessary that there is training for both mentors and mentees to foster effective mentoring system.¹⁶ The mentoring system should also be developed to meet international standards.¹ Mentoring helps medical students in the transmission from being a medical student to a qualified medical doctor.¹³

Mentees being allowed to choose their mentors is not new as in this study, respondents said they wish to choose their mentors themselves, this is in line with a study by Andrades et al that opined that the mentoring system in medicine will be more effective if residents are allowed to choose their mentors themselves.² Respondents gave a wide range of the advantages of mentoring, which means that mentoring is important even though not all of them have mentors.

CONCLUSION

Mentoring is a coaching system in which knowledge is transferred from the mentor to the mentee. There is need for a formal mentoring system to be established to enhance the residency training, and also to improve clinical skills as resident doctors are future consultants who will in turn train other doctors to become consultants.

REFERENCES

1. Frei E, Stamm M, Buddeberg-Fischer B. Mentoring programs for medical students – a review of the pubmed literature. *BMC Educ.* 2010;10(32):2-14.
2. Andrades M, Bhanji S, Valliant M, Majeed F, Pinjani SK. Effectiveness of a formal mentorship program in family medicine residency: the residents' perspective. *J Biomed Educ.* 2013:1-3.
3. Yeung M., Nuth J., Stiell IG. Mentoring in emergency medicine: the art and the evidence. *CJEM.* 2010;12(2):143-149.
4. Madhuri SK, Ujwala JK, Yashashrii S, Deshmukh YA, Patil DY. Mentoring for medical students. *Current Res J Soc Sci.* 2010;2(3):187-190.
5. Okereke E., Tukur J., Ogini AB., Obonyo B. Evaluating health workers knowledge following the introduction of clinical mentoring in Jigawa State, Northern Nigeria. *Afri J Rep Health.* 2015;19(3):118-125.
6. Zayyan MS, Madugu HN, Ameh N, Oguntayo OA, Adesiyun AG, Saad AA. Acceptability of clinical teaching by mentorship among medical students in Nigeria. *Arch Int Surg.* 2016;6:195-200.
7. Nimmons D, Giny S, Rosenthal J. Medical student mentoring programs: current insights. *Advances in Medical Education and Practice.* 2019;10:113-123.
8. Stamm M, Buddeberg-Fischer B. The impact of mentoring during postgraduate training on doctors' career success. *Med Educ.* 2011;45:488-496.
9. Obayemi E, Quartey ET, Tettey E, Acqhan M, Benneh A, Osafor Y, et al. An exploratory study of mentoring in residency training at a Ghanaian teaching hospital. *Int J Modern Educ Res.* 2014;1(3):48-52.
10. Ohanchani S, Chang D, Ong JSL, Anwar A. The value of peer mentoring for the psychosocial wellbeing of junior doctors: a randomized control study. *MJA.* 2018;209(9):401-405.
11. Harrison R, Anderson J, Laloe P, Santilo M, Lawton R, Wright J. Mentorship for newly appointed consultants: what makes it work. *Postgrad Med J.* 2014;90:439-445.
12. Kukreja NC, Kaur A, Arora R, Singh T. Introducing mentoring to first year medical students of a private medical college in North India: a pilot study. *Int J App Basic Med Res.* 2017;7:s67-s77.
13. Scott SE, Cook S, Farnet A, Kim SK, Pomfret RW, Samardzick K, et al. The rising physicians program novel approach for mentoring medical students. *Military Med.* 2019;184:e164-e167.
14. Iloh GUP, Chukwuonye ME, Onya ON, Godswill-Uko EU. Mentoring in a resource - constrained cross-sectional study of the prevalence, benefits, barriers and predictors among post-graduate medical college Fellows and members in South-Eastern Nigeria. *Nig Postgrad Med J.* 2019;26:38-44.

15. Lau C, Ford J, Vanlieshout R, Saperson K, McConnell M, McCarbe R. Enhancing mentorship in psychiatry and health sciences: a study investigating needs and preferences in the development of a mentoring program. *Multidisciplinary Scientific J.* 2018;1:8-18.
16. Garr RO, Dewe P. A qualitative study of mentoring and career progression among junior medical doctors. *Inter J Med Educ.* 2013;4:247-252.