

MENTORSHIP IN ORTHOPAEDIC AND TRAUMA RESIDENCY TRAINING PROGRAMME IN NIGERIA: THE RESIDENTS' PERSPECTIVE

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ABSTRACT

BACKGROUND

Mentorship is important in residency training as it is necessary for personal and professional development of the resident trainees

OBJECTIVES

This study documents mentorship in orthopaedic residency training programme in Nigeria by assessing the awareness of orthopaedic residents on the role of a mentor, willingness to be mentored and their perceived reasons for the possible lack of mentors/ participation of senior colleagues in a mentorship programme

METHOD

This was a descriptive cross sectional study of 37 orthopaedic residents attending a revision course of the Faculty of Orthopaedics, National Postgraduate Medical College of Nigeria. Self-administered structured questionnaires were used to collect data. Data obtained was analyzed using SPSS version 21.0.

RESULTS

The mean age of the respondent was 34.7 ± 4.7 years. The Male:Female ratio was 19:1. The average number of years already spent in the residency programme by the respondents was 2.8 ± 0.9 years. Only 27% of residents had participated in a mentorship programme since they began residency programme but only half were still being mentored at the time of the study. Sixty-five percent reported no formal mentorship programme in their institutions. However, 73% of the respondents would want a formal mentorship programme in their institution. Ninety percent of the respondents desired to be mentored.

CONCLUSION

Most residents are willing to be mentored. Consultants and trainers should ensure that the trainees are mentored.

KEYWORDS – Mentorship, Orthopaedic Residents, Residency Training, Fellowship Training Nigeria.

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INTRODUCTION

Residency programme is a period of advanced medical training and education that normally follows graduation from medical school and licensing to practice medicine. It involves supervised training and practice in a specialty in a hospital and its outpatient department.¹ It is a structured training programme with the objective of producing highly skilled specialists. Residency training programme was formally established in Nigeria in 1974.² The current orthopaedic training programme in Nigeria is still modeled after the model made popular by William Halstead, which is in the form of master/apprentices

model of “see one, do one, teach one”.^{3,4}

The Standing Conference on Postgraduate Medical and Dental Education (SCOPME) described mentoring as “a process whereby an experienced, highly regarded, empathic person guides another individual in the development and re-examination of their own ideas, learning and professional development.”⁵ Pellegrini⁶ in his study, described an effective mentoring relationship as a mutually beneficial method of transferring the intellectual capital of a senior practitioner - acquired over decades of practice - to a more junior physician in the early stages of their career.⁶ Mentoring in surgery is an important feature of personal and professional development of the surgical trainee.⁷ Residents must acquire a broad range of technical, interpersonal, administrative and research skills, besides the clinical and surgical skills.⁸

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A mentor serves as a role model, counsellor and an advocate to a protégé.⁶ and a mentor, during the process of mentoring is to develop his or her mentee with professional values, attitudes and the technical and non-technical skills required to be a competent surgeon.⁷ Mentorship plays an integral role in the career development of orthopaedic surgeons.⁹ Mentorship has been found to be a key factor for a successful and satisfying career in academic medicine and surgery.¹⁰ Successes of mentorship is well known and documented. Zuckerman,¹¹ in his study of 92 Nobel laureates found that 48 of them had worked or been in close contact with older Nobel laureates. Mentorship, therefore, helps a protégé to outline a path to follow with a sound preparation to walk the path. Arora¹² posited that "being mentored properly is one of the precious blessings that a trainee can get and mentoring a trainee is the most effective tool to disseminate the art of surgical science".¹² Entazami et al¹³ reported that proper mentorship is the foundation for training quality surgeons. The term "Mentor" was first mentioned in the Odyssey by Homer. Mentor was the Greek king Odysseus friend and was meant to help Telemachus develop as a successor to the throne while he was away for the Trojan War. When the king returned years later, Telemachus had developed into a brave, honest and strong young man. In the story, Mentor was more than a teacher but a role model and guardian who ensured that Telemachus developed both emotionally and intellectually.^{6,14}

This study aims to document mentorship in orthopaedic residency training programme in Nigeria by assessing the awareness of orthopaedic residents on the role of a mentor, willingness to be mentored and their perceived reasons for the possible lack of mentors/ participation of senior colleagues in a mentorship programme

Methodology

This was a descriptive cross-sectional study. Orthopaedic residents attending the revision course organized by the Faculty of Orthopaedics of the National Postgraduate Medical College of Nigeria held in June, 2015 were recruited for the study. Data was collected using a pretested self-administered structured questionnaire. To ensure reliability, validity and to confirm that the questionnaire was appropriate for the study objectives, the questionnaire was pre tested on a group of resident doctors in the Department of Surgery, Lagos University Teaching Hospital. The responses were analyzed and interpreted to confirm that the responses answered the objectives of the study. Other qualitative approach to ensure reliability included self-administration, which guaranteed anonymity and confidentiality. Structural

modifications identified in the pretest were implemented, before finalizing the questionnaire. Ethical clearance was obtained from the Lagos University Teaching Hospital (LUTH) Health Research and Ethics Committee.

Information collected were on socio-demographic characteristics, training history such as number of years in the residency training programme, knowledge about mentorship, involvement in mentorship programmes and interest in joining a mentorship programme.

Data was collated and analyzed using Statistical Package for the Social Sciences (SPSS inc. Chicago, Illinois. version 21.0). Frequency distribution tables were generated. The level of significance was set at 5%.

Results

Fifty-four questionnaires were distributed but only 37 questionnaires were returned. Response rate was 68.5%. The mean age of the respondent was 34.74 ± 4.7 years. The male: female ratio was 19:1 (Figure 1). The average number of years in residency programme by the respondents was 2.8 ± 0.9 years. Residents from different regions of the country participated in this study. (Figure 2) Orthopaedic Residents in their 2nd and 3rd year of residency training made up 81% of the participants in this study. (Figure 3) Only 27% of residents had participated in mentorship programme since they began residency programme but only half was still being mentored at the time of the study (Table I)

Most residents (90%) want to be mentored. Seventy-three percent (73%) of the respondents would want a formal mentorship programme in their institution. However, some residents do not know who should be a mentor to them.(Table 2). Some orthopaedic residents are not fully aware of the scope of mentorship and how mentorship affects organizational socialization, job satisfaction and career outcome. (Table 2) However, the orthopaedic residents demonstrated good knowledge on the benefits of mentorship, though some did not know that mentorship can also provide emotional support and protection. Among the orthopaedic residents, the average rates of attendance of conference for both local and international conferences were 62.2% and 5.4% respectively. The average rates of oral and posters presentations were 8.1% for local conferences and 0% for international conferences. Ninety seven point three percent of the respondents believed that these statistics can improve with mentorship. Average rate of article publications in peer reviewed journal was 16.2%. The respondents also believed that this can improve with mentorship. (Table 3)

Discussion

An Orthopaedic resident is required to acquire various skills while in training. Residency training is a structured training programme with the objective of producing highly skilled specialists and professionals. Such training requires acquisition of technical and non-technical skills.¹⁵ Moller et al⁸ emphasized that surgical trainees must acquire skills such as the technical, interpersonal, administrative and research skills besides the clinical and surgical skills. A trained specialist should be well rounded in all aspect of the practice for effective and efficient performance in practice, personal and professional development and great career outcomes. Mentorship, being a process whereby an experienced, highly regarded, empathic person guides another individual in the development and re-examination of their own ideas, learning and professional development helps in this aspect. Non clinical skills such as interpersonal, administrative and research skills are usually acquired during an effective mentorship programme.⁸ Ramanan et al¹⁶ noted that mentored residents were twice likely to attest to excellent career preparation.

Only 27 % of the respondents have had a form of mentorship since the commencement of their residency programme with half (13.5%) of them already discontinued at the time of this study. This is similar to the study done in Ghana where the prevalence of mentoring was 39.7%.¹⁷ However, this was in contrast with studies by Flint et al¹⁸ and Ramanan et al¹⁶ where higher percentages of residents were involved in mentorship programme. Our finding also differs from the result of a study done by Elebute et al¹⁹ for residents in the Department of Surgery, Lagos University Teaching Hospital where he noted that 68.8% of the respondents believed that they have had a form of mentorship. The study by Elebute et al¹⁹, however, concluded that majority of the specialist surgical residents were dissatisfied with the level of mentorship received

From this study, 73% of the respondents would want a formal mentorship programme in their institution. Flint et al¹⁸ reported that residents were most satisfied with mentoring when there was a formal programme in place but he also noticed that residents who had selected their own mentor were more satisfied with their mentor than those who had their mentor assigned to them. He, therefore, suggested the residency programmes should consider establishing formal mentorship programme and thereafter encourage the residents to select their own mentors.¹⁸ Patel⁷ also concluded that formalizing the mentoring process creates a mentoring culture with equal opportunities

and cultural adaptation for all trainees to be involved in mentoring. This fact is corroborated by Entezami et al¹³ who then suggested that developing formal mentorship programmes will help to alleviate certain barriers such as time constraints. It is therefore, pertinent for various institutions where residency training is being undertaken to establish formal mentorship programme to cater for this unmet need of residents, as 90% of the respondents in our study desired to be mentored, though these residents may be allowed to choose their mentors. Andrades et al²⁰ documented that the effectiveness of the mentorship program in residency can improve if the residents are allowed to choose their own mentors and concluded that a formal mentorship does help residents in their personal and professional lives.

Each orthopaedic surgeon-in-training, is a potential 'mentee', starves for a great mentor to mould him in the shape of a good clinician /surgeon /academician /researcher and human being.¹² This is revealed in this study as 90% of the orthopaedic residents desired to be mentored. Edeghonghon²¹ also stated that over 80% of doctors in residency training in Ghana felt they needed mentors. Ramanan et al¹⁶ documented that 93% of respondents in their study reported that it is important to have a mentor during residency training. Participants in the study by Flint et al¹⁸ also ranked the value of mentorship as very high. The yearnings of these orthopaedic residents should be fulfilled through a formal / structured mentorship programme in the institutions where residency programme is being offered.

Majority of the residents showed a fairly good understanding on who a mentor should be. Almost 40% of the residents believe their trainers must also be their mentors. The orthopaedic residents should be re-oriented to know that a mentor is an individual who is not necessarily a trainer or works in the same specialty or subspecialty as them but must be willing and committed to impact lifelong personal and professional development. Most of the residents are aware of the gains of being mentored except that some did not know that mentors can and should also provide emotional support and protection. This level of relationship can only develop after trust is built overtime. This is one of the reasons it has been suggested that mentees should select their own mentors.

The two leading suggestions by the orthopaedic residents concerning the lack of participation in mentorship programme by their senior colleagues included, busy schedules and lack of formal/

structured mentoring programme in place. Siow-ann chang²² posited that there may be a need to put within the structures for mentoring of doctors, amongst others, forms of reward system which may include formal recognition of good mentors with letters of recognition , awards and formal recognition of such services at scientific and social gatherings. This may provide more impetus for mentors. This is supported by Andrades et al²⁰ when they concluded that faculty contributing quality time and effort ought to be acknowledged academically through rewards such as recognition during the promotion process. This, they believed, will encourage more senior colleagues to volunteer and accept their role as mentors. Busy schedules and time constraints had been identified as barriers to effective mentorship. Levine et al⁹ noted that

there are many financial, administrative and clinical workload pressures that have the potential to compromise mentoring relationship. Formalizing the mentorship programme and proving “protected time” will ensure effective mentorship programme.²⁰ Elebute et al¹⁹ also suggested attitudinal change of the senior colleagues as a part of the way forward towards effective mentorship programme in our institutions.

Conclusion

Mentorship is a key part of residency training and institutions offering training should endeavor having a structured mentorship programme that will cater for the need of the residents. Most residents are willing to be mentored. Consultants and trainers should ensure that the trainees are mentored.

FIGURES AND TABLES

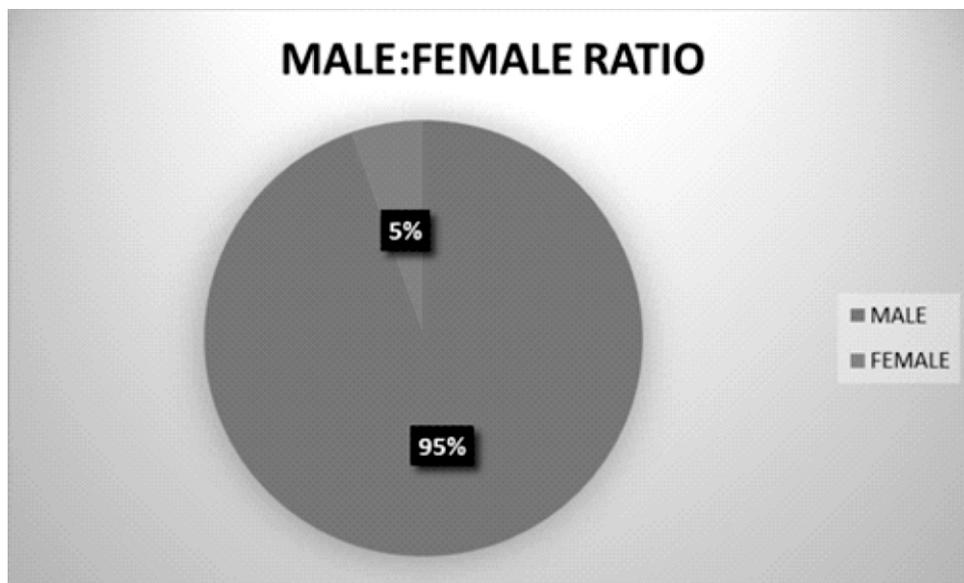


Figure 1: Male: Female ratio

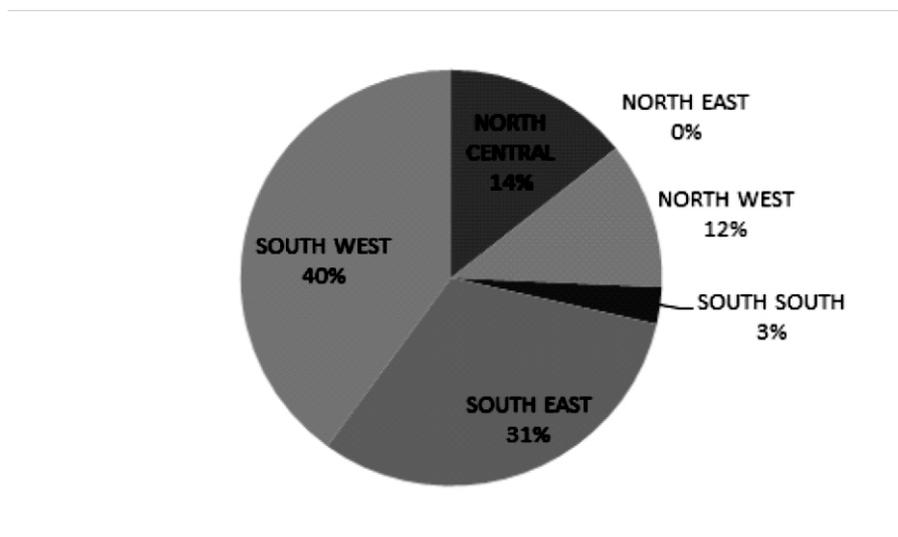


Figure 2: Regions of the country represented by the respondents

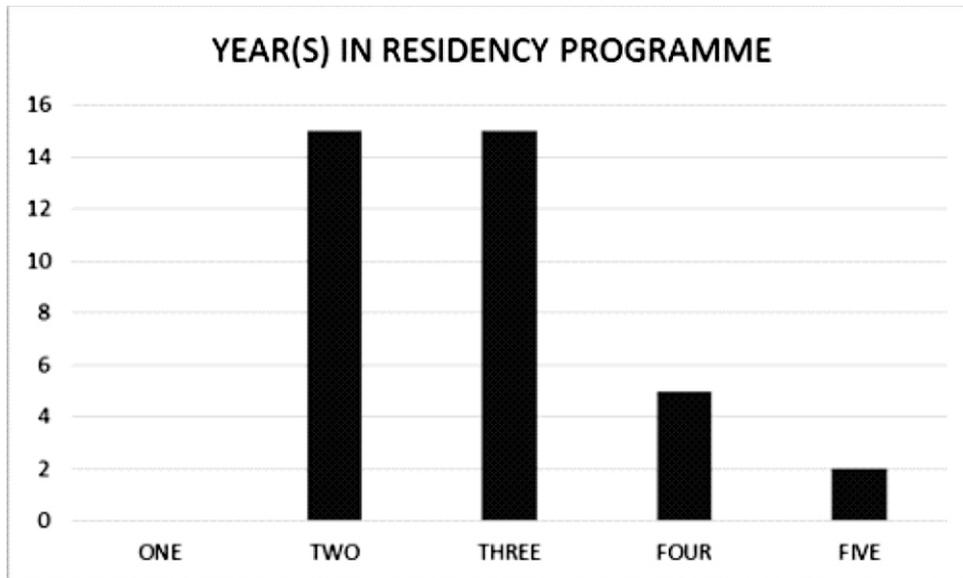


Figure 3: Year(s) in Residency training programme

Table 1: mentorship in orthopaedic Residency programme

Variables	Frequency(n = 37)	Percentage (%)
Ever participated in mentorship programme		
YES	10	27.0
No	25	67.6
No response	2	5.4
Currently participating in mentorship programme		
Yes	5	13.5
No	30	81.1
No response	2	5.4
Training institution has a mentorship programme		
Yes	5	13.5
No	24	64.9
I do not know	6	16.2
No Response	2	5.4
Would want a formal mentorship programme in their training institution		
Yes	32	86.4
Indifferent	2	5.4
No Response	3	8.1
Willing to be mentored		
Yes	33	89.2
No	1	2.7
I do not know	1	2.7
No Response	2	5.4

Table 2: Residents knowledge about mentorship

	Correct response n=37	Percentages of the respondents who were correct
Mentorship is		
A process whereby an experienced, highly regarded person guides another individual in the development and re-examination of their own ideas, learning and professional development	False	10.8%
A process whereby an experienced, highly regarded, emphatic person guides another individual in the development and re-examination of their own ideas, learning and professional development	True	77.8%
A complex , intermutual process that occurs between two people of different levels of knowledge and expertise	True	54.1%
A mentor is an individual with advanced experience and knowledge		
Who trains you must be your mentor	False	45.9%
Who knows you well must be your mentor	False	64.9%
Who is willing and committed to providing upward support and mobility to their protégé (Yes)	True	91.9%
Who is willing but not committed to providing upward support and mobility to their protégé	False	81.1%
Mentorship		
Covers mainly the career advancement and educational aspects of the mentee life	False	78.4%
Covers mainly the interpersonal and psychological development of the mentee life	False	78.4%
Covers career and educational, interpersonal and psychological development of the mentee life (Yes)	True	81.1%
Does not have any effect on organizational socialization	False	83.8%
Does not affect job satisfaction	False	78.4%
Improves career outcomes (Yes)	True	91.9%
Benefits of being mentored		
a. Improves networking	True	88.9%
b. Improves career planning	True	97.2%
c. Provide coaching	True	100%
d. Provides emotional support	True	88.2%
e. Provides Role models	True	97.2%
f. Provides protection	True	63.9%
g. Provides Exposure	True	88.9%

Table 3: mentorship and scholarly activities

Perceived effects of mentorship	Percentage
Rate of attendance of local conferences among orthopaedic residents	62.2%
Rate of attendance of international conferences among orthopaedic residents	5.4%
Rate of oral and poster presentations at local conferences attended.	8.1%
Rate of oral and poster presentations at international conferences attended	0%
Orthopaedic residents perception on effect of mentorship for improvement on attendance and presentations at conferences	Yes - 97.3%
	No – 0%
	No response – 2.7%
Present rate of article publications in Peer reviewed journal amongst orthopaedic residents	16.2%
Can mentorship improves articles publications	Yes - 97.3%
	No – 0%
	No response - 2.7%

Table 4: Reasons suggested on lack of participation by senior colleagues

Reasons suggested on lack of participation by senior colleagues	Percentage (%)
No protected time for mentorship	60%
Busy schedules	54.3%
No formal mentorship programme	54.3%
Poor interpersonal relationship	2.9%
Mentorship is tasking and demanding,	2.9%

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