

Assessment of Resident Doctors' Perception of Postgraduate Medical Education in Nigeria Using the SPEED Tool: A Pilot Study

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Abstract

Background: Obtaining feedback from trainees is important in the evaluation and evolution of Postgraduate Medical Education (PME), and policies made based on their felt needs would go a long way in making residency training a worthwhile experience. This pilot study aimed to assess resident doctors' perception of the training content, atmosphere, and organization using the Scan of Postgraduate Educational Environment Domains (SPEED) tool. **Methodology:** This was a cross-sectional study conducted amongst resident doctors at Babcock University Teaching Hospital (BUTH) in Nigeria, between May and August 2019. A self-administered questionnaire was used to collect participants' sociodemographic data, their perception of PME in their respective departments, as well as the strengths and weaknesses of the training programmes. Validity and reliability indices were assessed, and descriptive, inferential, and correlational analyses were run where appropriate. **Results:** The mean score for the resident doctors' perception of training content, atmosphere, and organization was 4.0 ± 0.4 , 4.2 ± 0.5 and 3.69 ± 0.60 respectively, out of a maximum of 5, indicating a positive perception of training in BUTH. The major strengths perceived by most residents were good inter-personal relations between residents and their trainers, as well as conducive learning and work environment; while the weaknesses include poor remuneration and limited staffing which hampers rotations. **Conclusion:** Resident doctors in BUTH mostly had a positive outlook on their training. This study serves as a reference point for local policy change (in BUTH), and a framework from which future studies on PME can emerge.

Keywords: Africa, Nigeria, pilot study, postgraduate medical education, resident doctors, scan of postgraduate educational environment domains tool

INTRODUCTION

The World Federation of Medical Education defines Postgraduate Medical Education (PME) as "the phase of medical education in which doctors develop competencies under supervision after completion of their basic medical qualification, and it is the final preparation step for certification and/or licensure of specialist doctors."^[1] In Nigeria, the duration of training ranges from 4 to 7 years or more, depending on several factors including the specialty in question, success at the postgraduate exams, delayed accreditation by the postgraduate colleges, incessant industrial action, and disruptions in training, as observed during the height of the COVID-19 pandemic and the associated lockdown in Nigeria. During residency training, trainees are expected to develop substantial knowledge and

advanced skills (competencies) under the supervision of mentors or consultants in their chosen specialties, enabling them to practice at high levels of proficiency (as Consultants) upon completing the programme.^[2] Before 1973, Nigerian doctors who wanted residency training either went to the United States, the United Kingdom, or other European countries. In an effort to develop the medical human resource capacity from

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local talent, PME in Nigeria was birthed. Consequently, this helped to reduce brain-drain in the country.^[3]

Three institutions deliver and regulate PME in Nigeria at present – the West African College of Physicians (WACP), West African College of Surgeons (WACS), and the National Postgraduate Medical College of Nigeria (NPMCN).^[4-6] The framework for the delivery of residency training in Nigeria has however not undergone significant evolution into the current PME paradigms since it first started in the late '70s and early '80s.^[3] The colleges adopt the same style consisting of residency training programmes that are hospital-based, at accredited centres, followed by examinations at specified intervals. Fully registered doctors are accepted into residency training after they pass the Primary fellowship exams, wherein they are called registrars (or junior residents). Upon passing their Part I fellowship exams they become senior registrars (SRs). Senior registrars then become fellows of the respective colleges who can subsequently be appointed as consultants, after passing their Part II Fellowship exams.^[7] In most hospitals, resident doctors are required to provide clinical services as an essential part of their training, with structured training virtually nonexistent. Many residency programmes lack well-designed syllabuses, rigorous lecture schedules, and other postgraduate teaching events through which the residents are to consolidate their knowledge and hone their skills.^[3] Obtaining feedback from trainees is therefore important in the evaluation and evolution of PME, and policies made based on the felt needs of the trainees would go a long way in making residency training a worthwhile experience. The Scan of Postgraduate Educational Environment Domains (SPEED) tool is a validated questionnaire developed by Schönrock-Adema *et al.*,^[8] which assesses how resident doctors perceive their training environment. It is one of the few tools designed to obtain information from trainees in a structured format to inform change in the organization and delivery of PME based on the responses of the trainees. This tool is however yet to be validated or used in the Nigerian setting, to the best of our knowledge.

This pilot study aimed to assess resident doctors' perception of the training content, atmosphere, and organization in Babcock University Teaching Hospital (BUTH), using the SPEED tool. The study also sought to obtain resident doctors' perception of the strengths and weaknesses of their training programs, as well as suggestions to the postgraduate colleges to improve residency training.

METHODOLOGY

Study setting

The study was conducted at BUTH, a tertiary health care institution owned by the Seventh-day Adventist Church in Nigeria. It is one of the three tertiary health centres in Ogun State, South-west Nigeria, located in Ilishan-Remo, about 63 km from the state capital, thus making it one of the major referral centres in the state and its environs. The hospital is

equipped with modern equipment and technology. Nearly all specialties have been accredited for residency training by WACS, WACP, and NPMCN.

Study design and study population

The study, which was carried out between May and August 2019, employed a cross-sectional, mixed-method design, and included all doctors undergoing residency programme in BUTH, who had been in the programme for more than a year, and were willing to participate in the study. Those who had been in the residency programme for under a year, and those who refused participation were excluded.

Sampling technique

Total sampling method was used in this study.

Data collection

Data was collected using a self-administered questionnaire. Study participants were recruited individually from each department, to participate in the study. The chief resident for each department assisted in recruiting residents from their department.

Study instrument

Socio-demographic data were collected in the first section of the questionnaire. The second section consisted of the SPEED tool proper. The tool is a validated questionnaire designed by Schönrock-Adema *et al.*,^[8] with high reliability coefficients (Cronbach's alpha), as reported from previous studies.^[8,9] Some of the items in the original questionnaire were modified to suit the current study, with some modifications sourced from a similar study.^[9] The modified full version of the SPEED tool [Appendix 1] was divided into three domains (same as the original SPEED tool) – content, atmosphere, and organization, each having sub-themes with questions representing various aspects of the domain. The tool in its original form utilizes a 4-point Likert scale ranging from 0 (completely disagree) to 3 (completely agree), excluding a "neutral" response. However, in our study, a mid-way "neutral" response was added for those who neither agree nor disagree, to give a 5-point Likert scale. Each response was assigned a score from 5 to 1 in descending order as their attitudes moved from strongly agree to strongly disagree. The third section of the questionnaire included open-ended questions in which the participants were to highlight the strengths and weaknesses of their training programmes, and recommend changes they would like to see implemented regarding the training programmes, to the postgraduate medical colleges and the training institution. The questionnaire was submitted to three independent PME experts to review for content validity, and it was deemed valid.

Data analysis

Data analysis was done using the IBM SPSS Statistics for Windows, Version 22.0 (IBM Corp., Armonk, NY, USA). Descriptive statistics were used to summarise the sociodemographic data. The three domains (content, atmosphere and organization) of the modified SPEED tool

were each subjected to a test of internal consistency. The result of reliability analyses yielded Cronbach's alpha of 0.866, 0.879, and 0.916 for the three domains respectively, all of which were satisfactory. The mean perception score for training content, atmosphere and organization were compared between age groups, gender, marital status, level of training and departments of the resident doctors, using Student's *t*-test and analysis of variance as appropriate. Correlation analysis (using Pearson's correlation or Spearman's rank correlation where appropriate) was used to assess for correlation between age, number of years spent in residency, number of resident doctors in the department, number of consultants in the department, consultant-resident ratio, and the mean perception score for training content, atmosphere, and organization respectively. Assumptions for all statistical tests were upheld, and the level of significance was set at $P \leq 0.05$.

Ethical consideration

All entries into the study were anonymized, as no identifying information was collected. No form of coercion was employed in the recruitment of study participants, and informed consent was obtained from all participants. Ethical approval for the study was granted by the Babcock University Health Research Ethics Committee (BUHREC) with reference number BUHREC572/19.

RESULTS

A total of 36 resident doctors participated in this study, with ages ranging from 27 to 46 years and a mean age of 33.65 ± 5 years. A majority (58.3%) of them were male. Over two-thirds (69.4%) of the respondents were married; 29 (80.6%) of them were registrars, while 7 (19.4%) were SRs. The distribution of the resident doctors according to their departments is highlighted in Table 1. The participants reported a consultant-resident ratio ranging from 2:5 (or 0.4:1) to 3:2 (or 1.5:1).

The mean score for the resident doctors' perception of the training content, atmosphere, and organization was 4.0 ± 0.4 , 4.2 ± 0.5 , and 3.69 ± 0.60 respectively, out of a maximum

of 5 (5-point Likert scale), indicating a positive perception of training in BUTH. There was no significant difference in perception of the training content, atmosphere, and organization amongst the different age groups, gender, marital status, level of training, and departments of the resident doctors [Tables 2-4]. Furthermore, there was no significant correlation between age, number of residents in the department, number of consultants in the department, consultant-resident ratio, years spent in residency training, and resident doctors' perception of their training content, atmosphere, and organization respectively.

The strengths and weaknesses of the training programme as perceived by the resident doctors are detailed in Tables 5-7. The most prevalent strength noted by participants was the good interpersonal relationship between consultants and residents, fostering a healthy learning and work environment. Notably, participants mentioned poor remuneration and staffing as weaknesses of the training programmes.

The following are some of the recommendations offered by the study participants to the WACP. One resident suggested that "*curricula should highlight the need for teachers to use them in training...*" and the curricula should "*be used as a strict guide during training.*" Another participant suggested that "*evaluation of the trainers and trainees be done in each centre at least once in a year.*" One participant suggested that WACP should consider shortening "*the time between the close of application date for examination and the time of examination...*" while another recommended that the "*number of years before seating for part one exam...*" as well as "*the amount of update fees*" be reduced. Concerning the WACS, one participant emphasized the need for "*evaluation of available training equipment*". Another participant said – "*there should be harmonized curricula between both colleges...*" (presumably WACS and NPMCN) "*...in terms of extra-departmental postings.*" A participant recommended that the WACS make "*gynaecology endoscopic procedures/exposure compulsory,*" while another wished for the training institution to "*start bedside teachings and morning reviews, and to allow residents to have hands-on experience especially for minor surgeries.*" Similar recommendations as stated above were made to the NPMCN, however a participant added that "*log books have to be updated to exclude out-dated procedures*" and another alluded to expedited accreditation in Paediatrics department.

DISCUSSION

Previous studies have demonstrated the stressful nature of residency training in Nigeria as reported by resident doctors, many of whom also report dissatisfaction with the structure and delivery of PME in the country.^[10,11] This is however not peculiar to Nigerian postgraduate medical trainees, as the rigor of the residency training period is often associated with high levels of stress and burnout worldwide.^[12-15] This study sought to determine how resident doctors in a Nigerian tertiary hospital perceive their training programmes, using the SPEED

Table 1: Distribution of resident doctors by department

Department	Frequency (%)
Internal medicine	6 (16.7)
Surgery	2 (5.6)
Obstetrics and gynaecology	5 (13.9)
Paediatrics	4 (11.1)
Chemical pathology	1 (2.8)
Pathology	1 (2.8)
Haematology	1 (2.8)
Radiology	3 (8.3)
Community medicine	4 (11.1)
Ophthalmology	3 (8.3)
Family medicine	4 (11.1)
Medical microbiology	2 (5.6)
Total	36 (100.0)

Table 2: Comparing mean score for training content (Domain I) across sociodemographic parameters

Variable	Categories	Mean score for Domain I (training content)	t/F test	p-value
Age (years)	21-30	3.89	2.277	0.119
	31-40	4.12		
	41-50	3.66		
Gender	Male	4.07	1.140	0.262
	Female	3.93		
Marital status	Single	3.976	0.367	0.716
	Married	4.03		
Level of training	Registrar	3.978	-1.074	0.290
	SR	4.150		
Department	Internal medicine	4.04	0.792	0.646
	Surgery	3.63		
	Obstetrics and gynecology	4.26		
	Pediatrics	3.82		
	Chemical pathology	3.53		
	Pathology	3.95		
	Hematology	4.16		
	Radiology	3.86		
	Community medicine	4.25		
	Ophthalmology	4.11		
	Family medicine	3.96		
	Medical microbiology	4.00		

SR: Senior registrar

Table 3: Comparing mean score for training atmosphere (Domain II) across sociodemographic parameters

Variable	Categories	Mean score for Domain II (training atmosphere)	t/F test	P
Age (years)	21-30	3.96	3.149	0.057
	31-40	4.39		
	41-50	4.14		
Gender	Male	4.33	1.413	0.167
	Female	4.11		
Marital status	Single	4.04	1.718	0.095
	Married	4.32		
Level of training	Registrar	4.21	-0.628	0.534
	SR	4.34		
Department	Internal medicine	4.19	1.286	0.290
	Surgery	4.00		
	Obstetrics and gynecology	4.53		
	Pediatrics	4.55		
	Chemical pathology	3.91		
	Pathology	4.36		
	Hematology	3.91		
	Radiology	3.61		
	Community medicine	4.39		
	Ophthalmology	4.52		
	Family medicine	4.07		
	Medical microbiology	4.09		

SR: Senior registrar

tool, and this, to the best of our knowledge would be the first attempt to use and adapt this tool to the Nigerian setting. The study was designed as a pilot study, the first instalment in a vision to obtain the national picture of how resident doctors in training centres across the nation perceive residency training.

In contrast to most previous works on the subject matter, this current study (with the help of the SPEED tool), provides in-depth details of the various aspects of PME.

The perception score for training content in our sample was 4 out of 5. This implied that on average, most resident doctors felt

Table 4: Comparing mean score for training organization (Domain III) across sociodemographic parameters

Variable	Categories	Mean score for Domain III (training organization)	t/F-test	P
Age (years)	21-30	3.59	1.465	0.247
	31-40	3.79		
	41-50	3.09		
Gender	Male	3.77	0.903	0.373
	Female	3.595		
Marital status	Single	3.53	1.138	0.263
	Married	3.77		
Level of training	Registrar	3.72	0.329	0.744
	SR	3.63		
Department	Internal medicine	3.73	1.558	0.175
	Surgery	3.13		
	Obstetrics and gynecology	3.78		
	Pediatrics	3.56		
	Chemical pathology	3.63		
	Pathology	3.88		
	Hematology	3.13		
	Radiology	2.85		
	Community medicine	4.14		
	Ophthalmology	4.17		
	Family medicine	3.796		
	Medical microbiology	4.00		

SR: Senior registrar

Table 5: List of strengths and weakness of postgraduate medical education in Babcock University Teaching Hospital by department (surgical specialties)

Department	Strengths	Weaknesses
Ophthalmology	Consultants are more humane in their dealings with residents Good resident: consultant ratio Training is fair	Lack of accreditation Inadequate number of registrars
Surgery	Close interpersonal relationship with consultants Supervisors are respectful towards registrars Atmosphere of cooperation and mutual respect	Low resident: consultant ratio Low remuneration No hands-on especially surgical skills No morning reviews or clinical bedside teachings No mortality and morbidity reviews
Obstetrics and gynecology	Good and conducive teaching and work environment Good rapport with supervisors Good supervision from supervisors Support from institution in educational resources for training Consultants are accessible to the residents in a tension-free atmosphere Good equipment to work with Laparoscopic exposure	Few number of patients Need for improvement in welfare Delay in completing rotations due to lack of enough residents

that the content of their training programmes was well rounded and included all the required clinical and practical skills needed. They also felt that the trainers utilized learning opportunities (such as ward rounds, morning reviews and postgraduate seminars) effectively, providing adequate feedback and appraisal of competencies. They furthermore reported satisfaction with the educational resources in the institution and admitted to being given opportunities to participate in the formal educational programme. A similar score of 4.2 was obtained for training atmosphere. This showed that resident doctors felt that there was a general aura

of mutual respect and team spirit with the consultants, nursing staff, and other allied health professionals. They also felt that the consultants were accessible and contributed positively to their educational climate, in offering personal and professional support and mentorship. Regarding the training organization, the mean score was 3.69, which also implies that most residents had a positive outlook on the organization of postgraduate training at BUTH, particularly as regards supervision. Most of the resident doctors expressed satisfaction with the facilities at BUTH. These findings are in contrast to previous studies across

Table 6: List of strengths and weakness of postgraduate medical education in Babcock University Teaching Hospital by department (medical specialties)

Department	Strengths	Weaknesses
Internal medicine	Adequate contact with consultants in each department	Insufficient number of SRs
	Availability of wide range of investigations	Insufficient registrars in each unit to get a second opinion
	Availability of modern diagnostic equipment and facilities	Poor remuneration
Family medicine	Easy access to trainers	Inadequate remuneration
	Hands-on experience in skills acquisition	Lack of manpower
	Exposure to broad spectrum of cases	Frequent exit of doctors to the western world (brain drain)
	Team spirit	
Pediatrics	Residents are trainable and dedicated	
	Consultants are approachable and accessible	
	Good relationship between consultants and residents	Few sub-specialties/consultants
	Availability of consultants, who provide adequate support in the management of patients	Low patient turn-out
	Good working environment	Low diversity in type of cases
	One-on-one interaction with seniors and a spirit of cordiality	Low remuneration
	The institutional environment is fair	Management attitudes
Community medicine	Financial support/sponsorship for updates and exams	Limited number of residents
	Consultants/supervisors are approachable and always available and very supportive	Poor remuneration
	Research oriented	Need for more consultants and residents
	Resourceful consultants	Need for more inter-institutional collaboration at local and international levels
		Emphasis on service rather than training
	High turn-over of resident doctors	
	Poor structure of training	

SRs: Senior registrars

Table 7: List of strengths and weakness of postgraduate medical education in Babcock University Teaching Hospital by department (laboratory specialties)

Department	Strengths	Weaknesses
Medical microbiology	Residents have one-on-one contact with seniors, in a spirit of cordiality	There are no SRs to teach upcoming registrars
	Consultants are friendly with their residents and most times give the needed push to succeed	
	Teaching style is autonomous and provides an efficient way of learning	
	Training is very organized and senior colleagues are ready to teach effectively	
Chemical pathology	Facilities are readily available	Insufficient patient load
	Enough trainers and facilities	
Pathology	Availability of facilities and equipment	Patient load (moderate)
Hematology	Training (including hands-on exposure) is fair	Low patient turn-out
Radiology	Trainers are not unnecessarily harsh	Inadequate manpower
		Inadequate number of consultants
		No structured goals for specific periods
		Overwork to the detriment of educational activities

SRs: Senior registrars

the country, where more often than not, resident doctors rated their training programmes to be inadequate.^[16,17] Several factors may be responsible for these divergent findings. Firstly, the teaching hospital where our study was done is privately owned and well-funded, but has much fewer resident doctors, compared to the others which include government establishments. Hence, it is more likely that elements of the training programme are easier to manage and modify to suit the trainees' needs. Also, some of the other studies were conducted in single departments, or rather poorly defined across departments, thus the perceptions may only represent views of resident doctors in a particular department.^[16]

Notably, most of the other Nigerian studies did not cover the three domains that the SPEED tool addresses – content, atmosphere and organization of training, therefore the result of comparison is bound to be skewed.

Despite the lack of statistical significance when comparing the responses of the participants by their sociodemographic characteristics across the three domains, it is noted that those aged 31–40 years, males and married respondents had the highest perception scores across all three domains (content, atmosphere, and organization), while SRs had higher scores than registrars

as regards training content and atmosphere, and registrars had higher scores regarding training organization. The finding of male predisposition to better attitude (or perception) in our study, was in contrast to a similar study where females had higher attitude scores than males.^[8] It was also noted that the most conspicuous strengths of the residency training across departments were good inter-personal relations between residents and their trainers, as well as a conducive work and learning environment, while poor staffing and poor remuneration were the most prominent weaknesses. The strengths noted could be attributed to the less heavy patient flow that is generally found in private facilities leading to more work satisfaction and less physical and psychological burnout. It could also be due to the trainers' awareness of their vital roles as mentors and leaders to their trainees. The weaknesses mentioned in this study are similar to those noted by Yusufu *et al.*^[16] The staffing and remuneration concerns of our study participants do not apply to all training institutions, as the funding for these institutions come from different sources: most teaching hospitals are government-funded and have higher salary packages than the privately funded teaching hospitals. Some may argue that delayed accreditation of the training programmes, as identified by some of the respondents, is not a weakness of a training programme *per se*, as training is not considered to have started until at least partial accreditation is granted to the institution in question, by any of the colleges.^[18]

Among the recommendations made to the colleges by resident doctors, was the need for implementing training curricula, as well as evaluation of trainees and trainers. A leading figure of PME in Nigeria also made similar recommendations in his public lecture.^[3] These are important recommendations, as they help the trainees to track their competencies and know areas where improvement is needed. The duration before eligibility for part one exam was also noted and suggested to be reduced. A possible solution to this could be the transition of the Nigerian system of PME from the traditional time-based system, to competency-based medical education, which focuses on the trainees achieving predetermined competencies necessary to move to the next stage of training.^[19] Another important recommendation by a participant is the need to harmonize the curricula of WACP/WACS and NPMCN, such that the differences in the programmes are negligible.

The current study has limited generalizability as its limitation, since only one institution was assessed. However, the aim of this study as a pilot study precludes generalization and focuses more on validating the SPEED tool while simultaneously considering the residents' perception of PME in the institution. Future studies of larger scale, considering more institutions around the country would be beneficial, giving a clearer national picture.

CONCLUSION

The SPEED tool is an effective tool in assessing how resident doctors perceive their postgraduate medical training in Nigeria. We found that resident doctors in BUTH had a positive outlook on the content, atmosphere and organization of their training, though points for improvement were suggested for the colleges and the training institution to note. Apart from contributing

to the literature on perception of PME, this study (as a pilot study) serves as a point of reference for future studies on residents' perception of PME in Nigeria, so that meaningful improvements can be made to the structure and design of those studies.

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Conflicts of interest

There are no conflicts of interest.

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Appendix 1: The scan of postgraduate educational environment domains tool (modified)

Domain	Subject/theme	Question	SA (5)	A (4)	N (3)	D (2)	SD (1)	
Content	Purposiveness	The training in this post prepares me for my future career						
		The clinical learning opportunities in this program include all required clinical skills						
	Teaching style	This post includes all adequate practical and clinical skills to be acquired						
		There is a formal educational programme in place like didactic lectures, seminars and formative assessment during the course of the training						
		The formal educational program is targeted to my learning needs						
		I see a good range of patients and presentations in this training post						
	Appraisal and feedback	I see an appropriate number of patients for my level of training						
		My supervisors are all in their own way positive role models						
	Independence and responsibility	I am asked on a regular basis to provide a rationale for the clinical choices I make and for my actions						
		Senior staff utilize learning opportunities effectively e.g., ward rounds, morning reviews, postgraduate seminars						
Monitoring progress	The feedback provided by my consultant is focused on my strengths and weaknesses							
	My consultant bases feedback on concrete observations of my performance							
Atmosphere	Respect	My consultant not only appraises my medical expertise but also other competencies such as teamwork, organization or professional behaviour						
		The level of autonomy given to me is appropriate to my level of training						
	Team spirit	The level of clinical responsibility given to me is appropriate to my level of training						
		My consultant gives me enough freedom to independently perform tasks that suit my current knowledge and skills levels						
	Relations and atmosphere	My consultant encourages me to find out things for myself						
		In this rotation, evaluations are useful discussions about my performance						
	Support	In assessment interviews, the consultant provides a clear link to previously defined learning goals						
		The consultants are respectful towards residents						
	Organization	Attuned to learning aims	There is an atmosphere of cooperation and mutual respect in the department					
			The consultants promote an atmosphere of mutual respect					
Organization of supervision		Consultants, nursing staff, other allied health professionals and residents work together as a team here						
		I feel like a part of the team working here						
Task clarity		There is (are) no consultant (s) who have a negative impact on the educational climate						
		I have a good sense of rapport with senior staff in the department						
Environment		Accessibility	The consultants are approachable and helpful					
		When I need to consult a consultant, he/she is readily available						
Environment		Support	My consultant supports me in difficult situations (e.g., morning reviews or with difficult patients)					
		My consultant helps and advises me on how to create and/or maintain a good work-home balance						
Environment	Organization	Teaching and learning are emphasized in this department						
	I am given relief from clinical duties to be able to participate in the formal educational programme							
Environment	Task clarity	The educational resources available at this training post are satisfactory						
	Residents are generally able to attend scheduled educational activities							
Environment	Task clarity	My consultant reserves time to supervise/counsel me						
	Good clinical supervision is available at all times							
Environment	Task clarity	Trainee's comments on the training program seem to be taken seriously by the staff						
	The guidelines clearly outline when to request input from a senior colleague							
Environment	Task clarity	The staff is clear about my duties and responsibilities						
	There are clear clinical protocols in this post							
Environment	Task clarity	There is clarity about to whom to report, in a variety of circumstances						
	I had an informative introductory program							
Environment	Task clarity	My consultant prevents me from having to perform too many tasks irrelevant to my learning						
	My workload in this job is fine							
Environment	Task clarity	Senior medical staff is clear about what they expect of me during each posting						
	I am satisfied with the facilities offered at the hospital where I work							

Letters in bold are the modifications made by the authors to the SPEED tool. SPEED: Scan of postgraduate educational environment domains tool