Open Access
Original Article
Post Graduate Training
Pak Armed Forces Med J 2018; 68 (4): 807-11

POST GRADUATE MEDICAL TRAINING IN PAKISTAN

Shahid Mahmood, Tanwir Khaliq*, Ahmad Raza

Islamabad Medical and Dental College Islamabad Pakistan, *Pakistan Institute of Medical Sciences Islamabad Pakistan

ABSTRACT

Objective: To determine the level of satisfaction of Fellow College of Physicians & Surgeons (FCPS) part II trainees.

Study Design: Prospective study.

Place and Duration of Study: The study was conducted at eight different hospitals of Rawalpindi and Islamabad in Social Security Hospital, Benazir Bhutto Hospital, District Headquarters Hospital, Fauji Foundation Hospital, Federal Government Services Hospital, Holy Family Hospital, Kahutta Research Laboratories Hospital and Pakistan Institute of Medical Sciences Islamabad. Duration of study was 3 months from Apr 2014 till Jun 2014.

Material and Methods: This study included 155 post graduate trainees including level 1, II, III and IV from Rawalpindi & Islamabad. Data were collected on a self-made questionnaire. Non-probability convenience sampling was done as the participants were from naturally formed groups, e.g. different specialties. Written consent was taken from all the participants.

Results: Only 28% of trainees were satisfied with the internet, library and their residential rooms. Only 11% trainees were satisfied with their residences. Majority of the trainees (48%) were able to receive reasonable level of guidance from their supervisors. Overall level of satisfaction was found to be 29.41% regarding different aspects of their training.

Conclusion: Post graduate trainees feel that there are short comings in the facilities like information technology (IT), library, multidisciplinary meetings (MDM), grand rounds and regularity of assessments.

Keywords: Academic, Interdisciplinary, Pakistan, Perception, Training.

INTRODUCTION

Level of satisfaction of postgraduate trainees has a significant impact on their learning. There are different medical training programs present for post graduate training all over the world. Respective faculties and departments of medical educations are concerned about their validity and are working day and night to improve them. One aspect of training is how the trainees themselves perceive their training program. As a result of program, how confident they are in treating emergencies, complications, minor illness and communication skills etc. There are different interesting studies present in the literature regarding the perception of trainees about their level of confidence, competencies achieved and examination process. Christopher J Watling, and Lorelei Lingard conducted a study in North America in 2011. They concluded that trainee's perceptions of an evaluation process profoundly affect the usefulness of the evaluation and the extent to which it achieves its goals. Attempts to improve evaluation processes cannot, therefore, be limited to assessment tool modification driven by reliability and validity concerns, but must also take into account of the critical issue of feedback and the factors that influence it[1]. So according to Christopher and his colleagues, it is extremely important to understand the views of recipients, which, in our case are trainees of FCPS. Similarly Khalid A. Bin Abdulrahman conducted a study in Saudi Arabia to explore the resident's views about their training experiences in family medicine and community medicine course. The results of this study indicated that, it is the time to evaluate the curriculum of Saudi family medicine training program. AR Mustafa and his colleagues also concluded that Trainees' skills and the teaching process can be improved by consideration of candidates' views[2]. Another

Correspondence: Dr Shahid Mahmood, Associate Dean, HBS Medical & Dental College Islamabad Pakistan
Email: shahiddr63@gmail.com
Received: 14 Mar 2016; revised received: 13 Oct 2016; accepted: 24 Apr 2017

study from Iran revealed that the educational climate was generally perceived positively by trainees and trainees were happy with their teaching, their supports and the work they did. The study also showed problematic components of learning environment in their university hospitals which enabled them to adopt some remedial measures[3]. Abdullah *et al* published a study in Annals of Saudi Medicine in 2002. The aim of the study was to determine how Saudi medical trainees in Canada perceive their training programs with regards to educational, ethnical and socio-cultural issues, and if different factors such as the chosen field of training, place or level of training make any difference to this perception. Conclusion was, majority of Saudi medical trainees in Canada perceived the educational aspects of their training as a positive experience. Major problems faced were related to administrative matters and to some extent, social adjustment[4]. A very interesting study was conducted in Sri Lanka showing differences in the level of satisfaction of different years of trainees. They proved that Stage 3 trainees have shown the least amount of satisfaction in contrast to the stage 1 trainees who have shown the highest amount of satisfaction, with regard to the clinical learning environment as a whole and in all 3 sub categories or satges[5]. Similarly in UK, a multi-center pilot study has demonstrated a lack of confidence among UK trainee doctors in managing diabetes[6]. Another study on resuscitation was conducted on pediatric residents. This study revealed that pediatric residents infrequently lead or participate in real or mock resuscitations. It was concluded that current pediatric residency training may not provide sufficient experience to develop adequate skills, knowledge, or confidence needed for resuscitation[7]. FCPS is competency based training program. The duration of training varies from four to six years depending on the specialty. Currently FCPS is being offered in seventy two clinical specialties. The objectives of this training program are to produce specialists who are capable of practicing medicine independently to high international standards expertly, humanly and ethically and have achieved competency as a scholar, a collabo-rator, a communicator, a manager, a health advo-cate and as a professional and can successfully compete for advanced fellowship training posi-tions elsewhere. There are very few studies pre-sent in the literature on the level of satisfaction of trainees in Pakistan. This study will help the faculty about the level of satisfaction of trainees and introduce the possible changes if required. The objective of my study is to determine the level of satisfaction of post graduate trainees.

MATERIAL AND METHODS

This prospective study was conducted in Social Security Hospital, Benazir Bhutto Hospital, District Headquarters Hospital, Fauji Foundation Hospital, Federal Government Services Hospital, Holy Family Hospital, Kahutta Research Laboratories Hospital and Pakistan Institute of Medical Sciences Islamabad. Specialties included in the research are general surgery, general medicine, gynaecology and obstetrics and paediatrics in the different hospitals of Rawalpindi and Islamabad. Non-probability convenience sampling technique was used and size was calculated according to World Health Organization (WHO) formula. This study included 155 trainees from the above mentioned hospitals. Data collection tool used was self-made questionnaire. Informed written consent was taken with explanation of purpose from all the participants. Data were collected on a prescribed proforma and SPSS 17 was used to analyzed the data. Frequencies and percentages were used for descriptive data.

RESULTS

A total of 155 trainees participated in the study and 47 (38.70%) were from surgery. Among all only 46 (28%) trainees were satisfied with the internet and library during the working hours. Fifty five percent either disagree or strongly disagree that internet is provided to them by their institution. Not only College of Physicians & Surgeons Pakistan, Pakistan Medical & Dental Council inspectors also keenly observe the books present in the library. Also, according to the rules

and regulations, respective departments were also responsible to maintain their own library. Perception of trainees regarding condition of libraries & internet is given in table-I. Next question (table-II) asked to the trainees was regarding the level of comfort of their residential rooms. Only 11% trainees were satisfied with their residences. A total of 55.16% trainee doctor were not comfortable in his or her residence provided by the hospital. Ninety trainees (58%) were happy and satisfied with the regularity of grand round. Only a very small number of candidates (22%) were not satisfied with grand round in their institution. Satisfaction regarding grand round is given in table-III. Majority of the trainees (48%) were able to receive reasonable level of guidance from their supervisors. Only 33% of trainees from different specialties were not happy with their supervisors. Interestingly maximum dissatisfaction was observed in the Gynecology department.

Table-I: Satisfaction level of post graduate trainees regarding internet and library.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Medicine	2	11	9	16	11
Surgery	4	9	9	16	9
Gynecology	1	7	2	9	8
Pediatrics	5	7	5	9	6
Total 155	12 (6.89%)	34 (22.06%)	25 (15.86%)	50 (33.10%)	34 (22.06%)

Table-II: Satisfaction level of post graduate trainees regarding doctor rooms.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Medicine	2	4	9	12	16
Surgery	2	5	8	18	30
Gynaecology	0	1	4	9	11
Paediatrics	2	1	5	7	9
Total (155)	6(04%)	11(07%)	26(17%)	46(30%)	66(42%)

Table-III: Satisfaction level of post graduate trainees regarding grand round.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Medicine	3	20	9	8	3
Surgery	17	31	6	5	0
Gynecology	3	4	9	7	3
Pediatrics	4	8	6	7	2
Total (155)	27(18%)	63(40%)	30(20%)	27(17%)	8(05%)

DISCUSSION

First question we asked in our study was about the satisfaction of FCPS part II trainees regarding entry test for post graduate training program. Thirty percent disagree while 21% remained neutral or did not like to answer clearly. In any field, job satisfaction is the key to one's personal motivation towards work[8]. It is the responsibility of respective institution to provide internet to the trainees. In the era of e-learning, only 29% of trainees were satisfied with internet and library facility during working hours. Training institutions should be equipped by facilities like internet, a library updated with latest literature, a conference hall for conducting conferences, MDM, CPCs and modern gadgetry for improving technical expertise in respective specialties. Working hour should be fixed so that a trainee gets maximum benefit of his/her training without being over worked. Increased workload is linked to higher stress levels and a reduced job performance and quality of life[9,10]. Level of job satisfaction can affect both individuals and organizations. It is should be worrisome for the administration of training institutes and CPSP that only 11% trainees were satisfied with their working conditions/ residences[11,12]. We know very well that MDM is a very important part of training. Unfortunately, only 37% of

our participants were happy with the arrangements of MDM. Lectures, clinical teaching, MDM, CPCs, journal club, clinical audits all are modes of teaching and should be adopted effectively in training of a post-graduate resident. According to a study conducted by O'Leary KJ and his colleagues, structured inter-disciplinary rounds significantly reduced the adjusted rate of mismanagement in a medical teaching unit and are extremely important in the teaching of under as well as post graduate training program[13]. The educational qualities of multidisciplinary case conferences/meetings need to be constantly evaluated to ensure that the learning needs of the different disciplines who attend are being met[14]. Another satisfactory point in our study was majority of the trainees (48%) were able to receive reasonable level of guidance from their supervisors. An important role of supervisors is assessment of trainees' progress. In our study, only 22% trainees were intimated about the schedule of assessments at the beginning. Although, assessment schedule of CPSP are fixed and available to the trainees but uncertainty is present regarding informal internal assessment. Supervisors are required to provide annual reports to CPSP on fellowship candidates. Supervisors should be given guidelines of struc-tured training and assessment and post graduate institution should ensure strict compliance of these genuine periodic assessment of trainee. Our assessment systems should be comprehensive, sound and robust enough to assess the requisite attributes along with testing for essential knowledge and skills[15].

Even if the trainees had their internal assessment schedule, most of the time, they did not receive the result of their performance in assessment. In our study, only 24% participants received feedback of their assessments. Purpose of feedback is to highlight achievements of trainees on one hand and to identify trainees who may need additional help on the other hand. Feedback should provide new knowledge to the trainees, consist of deep discussion, and should explore new ways of planning for their future[16]. We were happy to know that 42% of trainees were maintaining their portfolios. The word portfolio means brief case. Portfolios are increasingly used in postgraduate medical education and in gastroenterology training as an assessment tool, as documentation of competence, a database of procedure experience (for example endoscopy experience) and for revalidation purposes[17].

Until the end of the last century, medical migrants from Pakistan and other developing countries constituted a significant proportion of the medical workforce in the US, UK and many other developed countries[18]. The introduction of foundation programs in UK has minimized the chances of obtaining a career post in a desired specialty and majority of specialists end up in non-career grade posts such as trust doctor, staff grade, and associate specialists or return to their homeland with a sense of failure[19,20]. There was a survey conducted by an Australian educationist on Pakistani doctors and found certain deficiencies in their postgraduate training. Lack of guidance regarding career paths and poor working condition of the hospitals were identified. Furthermore a sharp contrast was noted between the selection criteria, examination system and training structure of the programs offered by CPSP and the locally organized degree programs of MD and MS[21]. Hence to meet international requirements and to regain our lost position as medical workforce in developed countries we need to re-evaluate and improve our post-graduate training system. After having said that, postgraduate training of doctors in Pakistan has a remarkable record. For example, in 1947, there were only seven medical specialists in the whole country. If we compare this figure with the record of CPSP in 2007, the number of specialist increased to eighteen thousand. CPSP also introduced new methods of teaching like teacher-centered, old-fashioned postgraduate teaching approach is being replaced by a self-directed and a learner-centered approach[22,23] and the training program was changed from objective oriented to outcome based approach. It is the

only institution which is running training programs in more than 72 specialties. Study included only four specialties, hence the results cannot be generalized to other specialties and institutions. These results may be different from the views of trainees from other cities. Similarly trainees from specialties like cardiac surgery or radiology may be facing different problems and got different perception about the training program.

CONCLUSION

It has been concluded that majority of post graduate trainees working in these institutions were not satisfied with level of comfort environment essential for their training program, regardless of their training specialties. They had more concerns about their accommodation, followed by internet & library facilities.

RECOMMENDATIONS

Level of satisfaction of trainees can be improved by arranging better facilities like living conditions teaching atmosphere of junior doctors. This will indirectly effect the quality of patient care of patients.

CONFLICT OF INTEREST

This study has no conflict of interest to declare by any author.

REFERENCES

1. Christopher J. Watling, Lorelei Lingard. Toward meaningful evaluation of medical trainees: the influence of participants' perceptions of the process. Adv Health Sci Educ Theory Pract 2012; 17(2): 183-94.
2. Mustafa AR, Madhi S, Al-Qenaei H, Al-Baho A. Understanding Trainees' Perception Concerning The Educational Process In General Practice, Does It help? Soc Sci Med 2010; 46: 112
3. Badsar A, Taramsar MR, Hoseinpour J, Jahromi SK. Postgraduate Trainees' Perception of the Clinical Learning Environment at an Iranian Medical Sciences University. Procedia 2012; 46: 1084-90.
4. Assiri, Abdullah, Jarallah SA. Al-Amari, Omar. Turnbull, Jeff. Perception of Canadian training programs by Saudi resident trainees. Ann Saudi Med 2002; 22 (5): 320-23.
5. M N Lucas, Samarage DK. Trainees' perception of the clinical learning environment in the postgraduate training program in pediatrics. Sri Lanka J. Child Health 2008; 37: 76-80.
6. Jyothis TG, McGrane DJ, Warriner D, Kavitha S, Price HC, Wilmot EG, et. Al. Protocol for a national audit on self-reported confidence levels, training requirements and current practice among trainee doctors in the UK: The Trainees Own Perception of Delivery of Care in Diabetes (TOPDO) Study. BMC Medical Education 2010; 10: 54.
7. Nadel FM1, Lavelle JM, Fein JA, Giardino AP, Decker JM, Durbin DR. Assessing pediatric senior residents' training in resuscitation: Fund of knowledge, technical skills, and perception of confidence. Pediatr Emerg Care 2000; 16(2): 73-6.
8. Ostroff C. The relationship between satisfaction, attitudes and performance: an organizational level analysis. J Applied Psycho 1992; 32: 963-74.
9. Howard SK, Gaba DM, Rosekind MR, Zarcone VP. The risks and implications of excessive daytime sleepiness inresident physicians. Acad Med 2012; 77: 1019-25.
10. Parshuram CS, Dhanani S, Kirsh JA, Cox PN. Fellowship training, workload, fatigue and physical stress: A prospective observational study. CMAJ 2004; 170: 965-70.
11. Robbins S. Organizational Behavior, 9th ed, Prentice Hall of India; 1998.
12. Mac Donald NE, Davidson S. The wellness programme for medical faculty at the University of Ottawa: a work in progress. CMAJ 2012; 163(6): 735-8.
13. O'Leary KJ, Buck R, Fligiel HM, Haviley C, Slade ME, Landler MP, et al. Structured interdisciplinary rounds in a medical teaching unit: improving patient safety. Arch Intern Med 2013; 171(7): 678-84.
14. Naughton M, MacSuibhne S, Callanan I, Guerandel A, Malone K. Quality of education at multidisciplinary case conferences in psychiatry.Int J Health Care Qual Assur 2011; 24(1): 31-41.
15. Tabish SA. Assessment Methods in Medical Education. Int J Health Sci (Qassim) 2008; 2(2): 3-7.
16. Wen CC, Lin MJ, Lin CW, Chu SY. Exploratory study of the characteristics of feedback in the reflective dialogue group given to medical students in a clinical clerkship. Med Educ Online 2015 6; 20: 123.
17. Haldane T. Portfolios" as a method of assessment in medical education. Gastroenterol Hepatol Bed Bench 2014; 7(2): 89-93.
18. Astor A, Akhtar T, Matallana MA, Muthuswamy V, Olowu FA, Tallo V, Lie RK. Physician migration: Views from professionals in Colombia, Nigeria, India, Pakistan and the Philippines. Soc Sci Med 2005; 9: 67-69.
19. Tait MJ, Fellows GA, Pushpananthan S, Sergides Y, Papadopoulos MC, Bell BA. Current neurosurgical trainees' perceptions of the European working time directive and shift work. Bri J Neurosurg 2008; 22: 28-31.
20. Shiwani MH. Light of Immigrant Doctors in UK: Grass Is Not That Green. J Pak Med Assoc 2006; 56: 251-2.
21. Biggs JSG. Postgraduate medical training in Pakistan: observations and recommendations. J Coll Physicians Surg Pak 2008; 18(1): 58-63.
22. Kalkat RK, Khan KS. Meeting advanced learning needs of senior postgraduate trainees through practice-based reflective medical education: evaluation of a formal structured training program in obstetrics and gynaecology. J Obstet Gynaecol 2010; 30: 115-8.
23. Khan JS. Evaluation of the educational environment of postgraduate surgical teaching. J Ayub Med Coll Abbottabad 2008; 20: 104-7.