

Medical electives: Students perspective

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Abstract

Objective: To identify possible learning targets of undergraduates who opted for local and foreign medical electives and to quantify their level of achievement.

Methods: The cross-sectional study was conducted at Foundation University Medical College, Islamabad, in February 2014, and appraised undergraduates of either gender from second to final year MBBS who had already done medical electives in local or foreign hospitals for 2-4 weeks. Data collection tool was an anonymous questionnaire with four possible intended learning areas; career choice, learning from advanced system, career enhancement and peer pressure. Possible learning objectives were accredited with 'yes' or 'no' option and their level of achievement were quantified on Likert scale of 1 to 5.

Results: Among the 45 undergraduates, 12(26.6%) were males and 33(73.3%) were females. A total of 26(57%) believed that electives helped them in making career choice, while 6(14%) disagreed and 7(16%) were not sure. Besides, 20(66%) students were expecting to learn from advanced system, 12(26.66%) felt that their expectations were met, and 11(24%) felt them better than expected. Career enhancement was the main objective of 16(38%) students with an achievement level of 4 and 5 in 11(24%) of students. Only 7(16%) considered peer pressure as one of the motivating factors for electives.

Conclusion: Main professional targets of undergraduates who had done medical electives were found to be learning from advanced system and career selection and an overall significant number felt that their target achievement was up to or beyond their expectations

Keywords: Medical electives, Objectives, Level of achievement. (JPMA 66: 404; 2016)

Introduction

Recent years have seen an upsurge in the interest expressed by Pakistani medical undergraduate students in clinical electives. This is a new and interesting phenomenon, as traditionally, these medical electives have not been a part of academic and learning activities in this part of the world. On the other hand, international medical education scenario suggests that these electives are considered very important in directing and furthering students' interest in a specific clinical field. Along with that, international health electives (IHEs) are gaining popularity among medical students and the students are actively encouraged to take up these electives by their parent institutes because these electives are mostly carried out in an under-privileged setting and thus encourage rethinking of priorities and rechanneling on the part of the students.

With globalisation and forced migration of previously self-contained societies, the need of cultural sensitisation of the healthcare givers is greater than ever before. Being involved with global health work also enhances the leadership qualities of the students and helps with

broader skill development — like political advocacy, policy writing, and epidemiologic research.¹ For the First World medical student, being nurtured in clinically advanced and technologically sophisticated system, reasons for undertaking IHEs are rather altruistic.

Medicine is not just a profession; it is a calling for the young people choosing the medical profession fully knowing the hard work and long hours it entails. After availing the best of academic and clinical learning facilities their institutes have to offer, the need to reach out and share is visceral and instinctive. As Shaywitz and Ausiello state, "it is difficult to imagine a pursuit more closely aligned with the professional values and visceral instincts of doctors than the quest to improve global health".²

Apart from opportunity of acquiring clinical experience in diverse cultural and clinical settings and personal growth of the students, participation in IHEs benefits the society at large and may be associated with students choosing careers in primary care and serving disadvantaged communities, and with attitude changes involving the appreciation of the importance of public health, health service delivery, cross-cultural communication and the challenges of service delivery in underserved communities.³

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As we in Pakistan see more and more of our own medical students belonging to all levels of medical college opting to undertake these clinical electives (while sacrificing their vacations and often bearing heavy financial burdens), it was thought pertinent and timely to explore the reasons behind this upsurge of interest in electives. A host of questions arose. What impelled our already overworked students to forgo their free time and part with hard-earned cash? Was it a valuable clinical experience, or was it an impressive entrée in their biodata, or was it peer pressure they were succumbing to with electives being the latest fad to follow? Were they seeking on ground reality check before making up their minds for choice of future specialty or were they actually planning to pursue their career abroad? Were they looking to experience cultural diversity or advanced clinical techniques or enhancing their professional skills? Or maybe their objectives were same as that of their international counterparts, that is to gain the experience of healthcare in underprivileged strata of society and perhaps to share the burden of an over-stretched healthcare system. Furthermore, it was not clear whether the students actually gained any professional or intellectual advantage from this experience with no assessment ever done after the electives either by the host or the parent institutes.

The current study was planned to explore the reasons for electives and the gains, if any, made from the experience.

Subjects and Methods

The cross-sectional study was carried out at the Department of Physiology, Foundation University Medical College, Islamabad, in February 2014, and comprised medical students both males and females from second to final year MBBS who volunteered to participate in the study after approval from the institutional review committee. All the subjects had already done medical electives in local or foreign hospitals for 2-4 weeks. A study questionnaire was designed after literature review^{4,5} and informal interaction with the students who had already completed electives or had the intention to go for electives either abroad or locally. A pilot survey was done on 2 students from each class and necessary

alterations were included in the questionnaire. Four possible achievement targets were identified. Each category was further explored by asking participants a series of close-ended questions. The four areas were career choice, learning from advanced system, career enhancement, and overcoming peer pressure. Possible learning objectives for each category were accredited with 'yes' or 'no' option and their self-evaluated level of achievement were quantified on Likert scale of 1 to 5 (1 = Not up to my expectations, 2 = Not sure, 3 = Meets my expectations, 4 = Better than my expectations and 5 = Much better than my expectations). Improvement level was measured on Likert scale where 1 = None, 2= Slight, 3= Some, 4= Much, and 5= Huge.

Data was entered on Excel sheets, and descriptive statistics and mean response for all questions in each category were calculated.

Results

Among the 45 undergraduates, 12(26.6%) were males and 33(73.3%) were females. The response rate was 100%. Of the total, 39(86.6%) had done electives locally and 6(13.3%) had gone abroad. Mean duration of electives was 3 weeks ± 5 days. Local electives were done in tertiary care teaching hospitals and foreign electives were carried out in US and UK. All students (100%) had self-financed their placement for electives. Of the 45students, 21(46.6%) belonged to the final year. Choosing specialty for future career was the objective of 26(57%) students, and 19(42%) had decided their future specialty after completion of electives (Table-1).

For the category of 'learning from advanced system', 20(66%) students agreed that it was also one of their main objectives of electives. Achievement level of learning objectives like acquiring specialised medical knowledge, learning latest treatment guidelines, professionalism, medical ethics, communication skills, foreign language and cultural differences in patient care were also assessed (Table-2).

Besides, 12(26.66%) felt that their expectations from electives were met and 11(24%) felt them 'better than expected'. 'Career enhancement' in terms of improvement

Table-1: Response of undergraduates to the questions exploring the objective of 'career choice'. (n=45).

Questions n(%)	Yes n(%)	No n(%)	Not Sure n(%)	No Response
Do you plan to build your future career in Pakistan?	21(47)	4(9)	20(44)	0(0)
If yes, do you think your electives will help your career here?	34(76)	2(4)	2(4)	7(16)
If no, do you think your electives will help your career elsewhere?	28(62)	1(2)	1(2)	15(33)
Did you opt for electives to choose your future specialty?	26(58)	15(33)	4(9)	0(0)

Table-2: Response of undergraduates to the questions exploring the objective of 'learning from advanced system' (n=45).

Questions	Yes n(%)	No n(%)	Rating of achievement in Positive Response n(%)					No Response n(%)
			1	2	3	4	5	
Did you expect to improve your communication skills?	39(87)	4(9)	2(4)	10(22)	12(27)	16(36)	3(7)	2(4)
Did you expect to learn medical ethics?	39(87)	3(7)	5(11)	6(13)	12(27)	15(33)	5(11)	3(6)
Did you expect to acquire specialized medical knowledge?	37(82)	7(16)	6(13)	7(16)	14(31)	9(20)	5(11)	1(2)
Did you expect to learn latest treatment guidelines	35(78)	8(18)	3(7)	7(16)	15(33)	7(16)	7(16)	2(4)
Did you expect to learn professionalism	44(98)	1(2)	3(7)	8(18)	12(27)	18(40)	4(9)	0(0)
Did you expect to familiarize yourself with foreign language?	19(42)	20(44)	2(4)	8(18)	9(20)	4(9)	2(4)	6(12)
Did you expect to learn out cultural differences in patient care?	33(73)	8(18)	5(11)	4(9)	12(27)	10(22)	5(11)	4(8)

in biodata, making professional contacts and help in performing better in foreign license exams was the objective of 22(49%) students with an overall 'some' positive achievement in 44% students with maximum achievement level of 4 and 5 (Much to Huge) in 11 students. These students felt that their biodata was improved and they had been able to make professional contacts. Only 7(16%) students felt peer pressure and there was much improvement in their competitiveness amongst other students after completion of medical electives.

Discussion

The study was planned to identify the possible learning domains for medical electives as perceived by the students and to quantify their level of achievement of their goals after completing electives.

A study has identified four key learning domains (clinical knowledge and skills, attitudes, global perspectives and personal and professional development) and two broader issues (institutional benefits and moral/ethical considerations).⁶ In the present study, the four possible learning domains were identified beforehand through informal discussions with students and literature research: making career choice, learning from advanced system, career enhancement and overcoming peer pressure. The students who had undertaken electives were asked to specify objectives most relevant to their expected learning domains. It was seen that students found learning from advanced system to be most relevant and applicable (66% gave positive response) and more than half of them had career choice (57%) and career enhancement (55%) as their outcome goals while peer pressure was the least relevant (only 16% positive response). No local or regional studies were found on searching the internet to compare with our findings for the identification of leading goals of electives by the students themselves.

A large majority of study participants did their electives

within the country (86.6%) and only 13% went abroad for international electives. The reason may be that our institution (like most of the medical schools in Pakistan) does not have an official electives programme and students undertake electives in their own time, using their own contacts and having them self-financed. Therefore, it is more feasible to opt for locally available opportunities for advanced, specialised clinical care experience. On the other hand, students who were able to undertake electives abroad had a higher achievement level compared to students who had done local electives, which indicates that an official structured programme helping students to secure IHEs can result in more positive outcomes and higher achievement levels.

As shown by our results, 58% of our students undertook electives hoping to be able to choose their future specialty, and in fact 42% of all the students had been able to make up their minds in this regard after electives. This is borne out by research carried out elsewhere, when the students having done electives were surer of future specialties or career trajectory (e.g., public health, public service) to pursue.⁶

Of far more importance was the difference in aims and goals of doing electives by our students compared to the western students. While for our students, learning from advanced system and career advancement were main objectives, medical students in the West usually opt for IHEs in developing countries to experience a different healthcare setting/practice, a different culture/country/demography, a different set of diseases and treatments and to gain experience at procedures not possible at home.⁷ Therefore, in a study documenting the effects of IHEs on a western medical student's learning and career choice, it was observed that having IHE experiences contributed to a more well-rounded training for medical students; students reported being more culturally competent and were more likely to choose a primary care specialty and/or a public service career.⁵

It cannot be overemphasised that the learning objectives of our local students are radically different from those documented for medical students in more technologically advanced countries. Their objectives are to meet the challenges of globalisation of health issues, which includes mass mobilisation of the vulnerable population, and moral obligation towards less privileged people. The IHEs provide western medical students opportunity for developing a holistic and less elitist approach towards global health problems.

A few things remain common though. Electives everywhere are mostly voluntary in nature, the choice of locale and speciality is that of the student, and that depends primarily upon financial affordability and personal contacts. Only the institutions with well-structured and established electives programmes can give their students the educational advantage along with providing security and safety at locality away from own home ground.

As far as assessment of achievement levels in their goals is concerned, while our students reported meeting their expectations or even exceeding their expectations as far as their goals of learning from advanced system and career enhancement were concerned, this achievement was self-reported and no external/formal evaluation of the achievement of learning objectives was carried out. However, this deficiency is not limited to our study alone. In a systematic review of studies among US and Canadian medical students, the authors noted that the enthusiasm [of students] has not been matched by medical educators' interest (or ability) to evaluate IHEs with more rigorous studies.³

Our study identified learning from advanced system as a major motivational factor for medical electives. It is a matter of concern whether our students after acquiring all the high tech knowledge would like to come back to a backward system which may not reward or utilise their expertise acquired at great personal expense. Our medical colleges in any case are accused of producing elitist doctors best suited to practice in big cities rather than in the less privileged rural communities.⁸ It also follows from this argument that by encouraging our students to go for electives abroad or even local highly specialised tertiary care health facilities, we are in fact promoting discontent within the present system and showing our students an escape route and promoting brain drain. A logical deduction from this observation can be that we are training and grooming our local potential for the benefit of western healthcare system.

We suggest mandatory electives within our existing

healthcare system in underserved areas, like Basic Health Units (BHUs), tehsil and district level hospitals under competent supervision and guidance to acquaint out students with medical care at grassroots level. Away from high tech diagnostic tools, the students will get a chance to polish their core clinical competencies and reconnect with the high ideals of serving the suffering humanity every medical student initially aspires for.

Another point to consider here is that mass mobilization of vulnerable population within the country is as big an issue for our local health authorities as is international mass migrations from underdeveloped regions to developed countries. We have hot spots of regional instability with poor health coverage and some chronically neglected areas which serve as source of manual work force and as well as reservoirs of various communicable diseases in big cities. Culturally isolated, socially disadvantaged and historically reluctant to open up to new ideas, these diverse ethnic groups should be our focal point for community integrated medical practices and clinical electives. Experiencing a different healthcare setting, a different culture/demography, a different set of diseases and treatments and to gain experience at procedures possible with limited resources should be high on our students' list as well. We venture to hope that our students are not self-indulgent as surveys like the present one portray, but, in fact, given a chance and proper exposure, they are as socially responsible as their counterparts in the West.

About half of our students were sure about their future plans of pursuing a career in Pakistan, while an equal number remain unsure. This gives hope that giving proper exposure and making them aware of their moral obligations may refocus our future doctors towards community-oriented services.

The current study is the first of its kind to document students' perspective of voluntary medical electives. It needs to be replicated with different sample groups and followed up for their career progression and any probable effect of these electives on students' long-term learning objectives like foreign licensing exam, speciality choice and it should also be assessed whether any gains that they report are persistent over the long term.

Conclusion

Main professional targets of undergraduates who had done medical electives were found to be learning from advanced system and career selection and an overall significant number felt that their target achievement was up to or beyond their expectations.

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