ORIGINAL ARTICLE

Faculty Development Practices in Medical Colleges of Lahore, Pakistan

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ABSTRACT

Background: Faculty has to undertake various roles, being an important aspect of medical education they need to be developed for the varied faculty activities.
Aim: To identify the faculty development practices conducted in the medical colleges of Lahore.
Methods: February to July, 2016 a quantitative, cross sectional study was carried out on the participating (n=17) medical colleges of Lahore. Minor modifications were made in the questionnaire which was adapted from two questionnaires, thereby pilot tested and distributed to the institutions for their responses. Responses related to institution wide practices, assessment, teaching and course development, conduction of workshops, seminars or programs, as well as obstacles and challenges influencing faculty practices were collected and calculated as frequencies and percentages. Fischer Exact test was applied to determine the significance of differences (proportion of frequencies) for individual items, and rank order of institutions positive responses calculated as percentages.
Results: There were 18 institutions of which 17 participated in the survey. There were 19 questions related to responses about institution wide, assessment and teaching practices for faculty development showed a low positive response (30-60%) by respondents for majority and few had over 80% response. Respondents for 13 questions related to conduction of workshops, seminars for faculty practices gave high positive responses (>80%). Course development related practices gave a 58-76% positive response. Obstacles and challenges influencing faculty development practices were being faced by most institutions giving a response of 50-65%. There was no significant difference between state and private college's responses ($p > .05$).
Conclusion: Faculty development practices were being conducted in medical institutions but lack proper structuring. Private institution in comparison to government were conducting relatively more faculty development practices but without overall significant difference..
Keywords: Faculty development, staff development, professional development, faculty practices

INTRODUCTION

Faculty is the strong foundation of medical education, who are called upon to perform various roles. Developing faculty for these roles is an important aspect with the rapid spread of medical education, though it is not an easy task and still a burgeoning issue.

In the history of medicine, in 1910 'Flexner Report' was shocking, and shook the foundation of condition of medicine in America[1]. Along with Pakistan, the Asian countries were facing serious issues, especially with rapidly mushrooming private medical colleges, raising queries about quality of medical education[2]. In our local setup, Pakistan has less public (40) and more private (60) medical colleges, increasing concerns about quality of teaching and learning standards[3]. Important and essential foundation of any institution is the faculty, which has effect on the medical students and medical education. Time was not for the initial random efforts but an elaborate approach to develop faculty and improve teaching and learning was requisite[4]. Detailed literature on ERIC, Pub Med and Google Scholar rewarded in finding material relevant to study. Original articles (full text and abstracts), systemic reviews, were included and non-relevant articles, editorials and commentaries were excluded. Boolean operators were used to broadened or constrict search with keywords and synonyms. With formation of Association of American colleges in 1915, there were institutions and presidents for the next sixty years rather than faculty members. With passing time, educationists have been developing various definitions for faculty development, but it wasn't until 1975 that Graff, described faculty development[5].John Centra stated that these were activities undertaken by institutions to support or renew faulty in their various roles[6]. Bland and Stritter broadened the definition by adding a new focus as to need of department and institutions rather than individuals for faculty development[7].

Various terms define faculty development and an overview entails these as skills relevant to

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maintain the faculty members position and vitality in present and future[8]. However, as is commonly used in health professional education evidenced by thorough literature search, the term faculty development was used in research[9].

Organized activities which define faculty development were an infrequent occurrence, as was evident after thorough search of the literature. In order to support college for developing postgraduate training programs, examination systems and training staff, in 1979 College of Physicians and Surgeons(CPSP) developed the Department of Medical Education, namely "National Teacher Training Centre" for trainees and supervisors of CPSP programs.

In 2002, faculty development took a foothold in higher education albeit in the context of Continuous Professional Development (CPD), with the formation of Higher Education Commission (HEC).

The main focus of medical colleges is on degrees, experience certificates and publication when hiring faculty, even though it i important to understand that faculty first and foremost is a teacher. Some teachers may have inborn talent to teach without any formal training, but the majority need to be trained. Whatever training is given it is in the discipline of the faculty such as healthcare rather than in research, administration or education. Role of a teacher does not rely on chance or aptitude but was recognized as a core professional activity which requires participation in faculty development[10].

John Centra[6] study showed there were hundreds of faculty development practices, making it a monumental task to develop faculty in their varied roles as leaders, educators, scholar, researchers. With passing time an ever-increasing list, but only local context feasible faculty development activities should be considered by an institution. Every institution cannot apply all practices, but some basics, in actuality, maybe same for all institutions. Not much literature support was found to elaborate that the government or private institutions had their own differences in faculty development. Further research regarding faculty development practices is the need of time in our setup to see where we are now and where we will be in future.

World Federation of Medical Education, (WFME) have outlined standards of medical education and requires institutions to uplift and develop their faculty, if standards are to be maintained[11.] The impact of faculty development is far reaching running as immediate, developing to lasting in future though these two words appear to be innocuously simple! These impacts had been studied but in abroad literature with little local input[12].

MATERIALS AND METHODS

Advanced Studies and Ethical Review Board of University of Lahore approved the study. Assuring full confidentiality to the sample institutions, quantitative cross-sectional survey was carried out with data collected from all medical colleges of Lahore which were the unit of analysis, rather than any individual. There were a total of 100 recognized medical colleges in Pakistan, of which 60 were private and 40 government owned.[3]The study was conducted for six months duration from February 2016 to July 2016 in all the PM&DC recognized private (12) and government (six) medical colleges of Lahore with data collection from May 2016 to June 2016.A 43 items questionnaire divided in six sections as in faculty practices related to institution wide practices, assessment, teaching and course development, conduction of workshops, seminars or programs, as well as obstacles and challenges influencing faculty practices was the instrument of data collection. Afour-options Likert type scale was applied. The questionnaire was adapted from two questionnaires[6,14]. Pilot study as well as consultation by full/part time medical educationists working in Department of Medical Education (DME) was carried out to assess validity and reliability of the questionnaire.

The head of DME or equivalent or faculty working part time for DME was required to fill the questionnaire. The questionnaire was sent by hand, registered post to the institutions, and liaison kept until duly filled and received by post in few and hand delivered in others. The ethical board of each institution approved the questionnaire, gave consent to be filled by respondent as in head of medical education department or equivalent person. Fortunately, majority institutions consented to take part in the study, but all requested total anonymity.
The data was entered in SPSS Version 16 and accordingly analyzed. For each question of each section on faculty practices of the institutions distribution of responses was calculated as frequencies and percentages. Test of significance Fischer Exact test was applied so as to determine the significance of differences (proportion of frequencies) for individual items.

RESULTS

Once data was entered in SPSS version 16 it was used for analysis, by calculating distribution of responses for each question of each section on faculty practices of the institutions as frequencies and percentages. Test of significance Fischer Exact test was applied to determine the significance of differences (proportion of frequencies) for individual

items. The results follow as presented in tables for each section of the questionnaire.

Institution Wide Faculty Development Practices: Regarding these practices, respondents were asked 11 questions in this section, related to organization and management and availability of institutional faculty practices. Most practices were carried out in more than fifty percent institutions except for those relating to awarding faculty travel grants; low teaching load in first year of teaching and evaluation of practices. Table 1 provides the responses of the participants for these practices in the institutions.

Assessment Related Faculty Development Practices in the Institutions: The assessment related faulty development practices had a total of four questions about teacher and student's involvement in these activities to be answered by the respondents. Table 2 shows the distribution of these responses, with low response in self and by colleague's formal assessment.

Teaching Related Faculty Development Practices in the Institutions: Respondents had to answer five questions related to experts and senior faculty involved in teaching related practices for faculty development. The use of audiovisual aids gave good response percentage except for devising faculty professional plans as depicted in Table 3.

Workshops, Seminars or Programs on Common Faculty Development Areas: Although workshops and seminars for faculty development may entail wide ranging topics, but there is always a need for workshops on some common areas, for example, communication skills, MCQ's development, module development, microteaching and assessment skills etc. Respondents were asked about faculty training through such activities, Table 4 shows high positive responses about most of these activities.

Availability of Consultants for Guiding Faculty on Course Development Practices: It is not feasible to expect all institutional faculties to be trained professionals independently conducting various course development practices such as test construction, student performance evaluation, course development etc. Professionally trained consultants should be made available to guide faculty for these activities. Responding institutions gave more than eighty percent positive responses for most activities as depicted in Table 5.

Influence of Obstacles and Challenges on Institutional Faculty Development Practices: Faculty development is not without roadblocks which can be from institutional administration, departments or even faculty itself. Responses as depicted in Table 6 show there is lack in follow up activities and standardized faculty training.

Table 1: Distribution of responses for faculty development practices in the institutions

Institution wide faculty development practices					
Were institution wide practices carried out, such as:					
Q No.	**Question**	**Yes**		**No**	
		n	**%**	**n**	**%**
1	Practices for faculty development?	15	88.2	2	11.8
2	Need assessment in planning faculty development practices?	14	82.4	2	11.8
3	Providing sufficient resources (e.g. funding, space, technology, and materials), and administrative support for faculty development practices?	15	88.2	2	11.8
4	Carrying out periodic review of the performance of all faculty members whether tenured or not?	9	52.9	7	41.1
5	Giving less than normal teaching load in first year of job to newly inducted faculty?	5	29.4	8	47.1
6	Providing rewards/ promotion incentive in Annual Character Report (ACR) for faculty, taking part in faculty development practices?	7	41.1	9	52.9
7	Providing faculty with travel grants for faculty development practices?	3	17.6	14	82.4
8	A campus committee on faculty development?	7	41.1	7	41.1
9	Faculty exchange programs with other institutions?	7	41.2	10	58.8
10	Conducting evaluations aimed at improving and measuring the impact of implemented practices?	5	29.4	10	58.8
11	Having a system for providing feedback on faculty development practices?	7	41.2	10	58.8

n = frequency

Table 2 Distribution of responses for assessment related faculty development practices in the institutions

Assessment practices					
What were the assessment practices of the institution in:					
No.	**Question**	**Yes**		**No**	
		n	**%**	**n**	**%**
Q1	Rating of instruction by students to helping faculty improve?	9	52.9	8	47.1
Q2	Formal assessments by colleagues for teaching or course improvement?	6	35.3	9	52.9
Q3	Faculty involvement in self-assessment techniques?	6	35.3	11	64.7
Q4	Having policies on curricular planning and development?	15	88.2	2	11.8

n=frequency

Table 3 Distribution of responses for teaching related faculty development practices in the institutions

Teaching practices					
What were the teaching practices of the institution in:					
No.	**Question**	**Yes**		**No**	
		n	**%**	**N**	**%**
Q1	Providing instructional expert consultation about teaching practices of faculty?	9	52.9	8	47.1
Q2	The senior faculty working closely with new or apprentice teachers? (Workplace based learning)	13	76.5	2	11.7
Q3	The uses of instructional technology for teaching practices?	10	58.8	7	41.2
Q4	The professional or personal development plan for individual faculty members of the institution?	7	41.1	9	52.9
Q5	The IT experts on campus to assist faculty in use of audiovisual aids in instruction?	14	82.4	1	5.9

n = frequency

Table 4: Distribution of responses for conducting workshops, seminars or programs on few common areas of faculty training

Workshops, seminars or programs					
Were workshops, seminars, or programs conducted for:					
No.	**Question**	**Yes**		**No**	
		n	**%**	**n**	**%**
Q1	Using techniques of instruction?	16	94.1	-	-
Q2	Introducing new educational strategies?	17	100	-	-
Q3	Communication skills?	14	82.4	3	17.6
Q4	Curricular planning and development?	16	94.1	1	5.9
Q5	MCQ/OSCE development?	15	88.2	2	11.8
Q6	Assessment skills?	12	70.6	4	23.6
Q7	Use of information and communication technology (ICT)?	13	76.5	4	23.5
Q8	Academic counseling?	9	52.9	7	41.2
Q9	Research and scholarships?	9	52.9	5	29.4
Q10	Orientation for medical education?	16	94.1	1	5.9
Q11	Skills Lab?	14	82.4	3	17.6
Q12	Improving the management of departmental operations?	12	70.6	3	17.6
Q13	Personal development programs (improving interpersonal skills, ability to work effectively in groups and career counseling)?	8	47.1	8	47.1

n = frequency

Table 5: Distribution of responses for course development practices in the institutions

Course development practices					
Were course development practices carried out by:					
No.	**Question**	**Yes**		**No**	
		n	**%**	**n**	**%**
Q1	Consultants to assist faculty in constructing tests?	10	58.8	6	35.4
Q2	Consultants to assist faculty in evaluating student performance?	13	76.5	4	23.5
Q3	Consultants to assist faculty in instructional methodology and developing teaching skills?	13	76.5	4	23.5
Q4	Consultants to assist faculty in course development?	13	76.5	2	11.7
Q5	Providing readily accessible professional library for faculty? (such as for instructional methodology, teaching skills, psychology of learning)	12	70.6	3	17.6

n = frequency

Table 6 Distribution of responses of influence of obstacles and challenges on institutional faculty development practices

Obstacles and challenges influencing faculty practices					
What were the obstacles and challenges influencing FPD as in:					
No	**Question**	**Yes**		**No**	
		n	**%**	**n**	**%**
Q1	Inadequacy of support from the institute?	5	29.4	11	64.7
Q2	Inadequacy of support from the departments?	4	23.5	12	70.6
Q3	Resistance to change by faculty?	8	47.1	9	52.9
Q4	Lack of standards in faculty training (i.e. no formal definition and compilation of minimum requirements for the professional skills of faculty)?	10	58.8	7	41.2
Q5	Lack of follow-up activities?	14	82.4	2	11.8

n = frequency

DISCUSSION

An essential component of medical education in an institution was the faculty. Individual faculty and also the academic environment they work in have to go through high quality faculty development so as to initiate and sustain educational changes.[15]Steinert[16] describes faculty development as a:

"Planned program or set of programs designed to prepare institutions and faculty members for their various roles, with the option of improvising instructor's knowledge and skills in the areas of teaching, research and administration."

Thus, we need to teach the teachers or educate the educators as teaching expertise of faculty is independent of their content expertise.[17] Each section of questionnaire is discussed in respect to results of faculty development practices in government and private medical colleges of Lahore.

Institution Wide Faculty Development Practices: Each institution had its own description of faculty development practices, though majority were involved in it but extent of these, requires further analysis in future. Most institutions claimed to have performed needs assessment for planning faculty development, with one refraining from responding which could be indicating their reservations. Sufficient resources and administrative support was given by most but the limiting factor was to have evidence by acquiring more information. Easing the load of new faculty thus helping them to adjust to the norms of the institution was seen in few and not a routine practice especially in the private setup. Non-responsive private colleges gave an emerging picture of maybe lack of faculty as staff still prefers government jobs, where as increasing number of students over the years, could be reason in government colleges. Institutional committee for faculty development was mostly evident in government institutions, with almost majority private responding negative. This lack again points towards need for strengthening and organization of faculty training.

Of about fifty percent institutions practicing review of faculty performance and giving incentives in ACR were mostly private. Hardly few medical colleges were heading towards easing the economic burden of faculty by giving travel grants for faculty development purposes. Almost half the institutions carried out faculty exchange programs with other institutions, but major responses were from private and government were hardly in picture probably due to lacking resources. It was a bleak less than forty percent institutions providing feedback on faculty development practices, evaluation for improving faculty practices and for measuring its impact was not in practice by almost seventy percent institutions evident in studies abroad.

In developing countries faculty development was given low priority with no systematic approach, whereas studies conducted abroad show highly developed faculty programs as is evident in a Canadian study.[17, 18] In local context few studies have been conducted to emphasize the need for faculty development.[19]

Assessment Related Faculty Development Practices in the Institutions: A useful diagnostic tool of information I to assess teaching performance by students, colleagues or experts. Student evaluation of instruction may help improve faculty, even though it was not evident in government institutions and only few private were in the picture. Almost half the private institutions practice faculty and self- assessment but government were very deficient. Assessing all faculty maybe a demanding task, but efforts should be made for those critically involved in the teaching and learning practices. It was fortunate majority of institutions were developing strategies for curricular planning and development within their own means. A local study concluded that for overall improvement in teaching though limiting, student rating can be an effective source of faculty evaluation .[20]To be effective formal assessment though needs to be further enlightened.

Teaching Related Faculty Development Practices in the Institutions: In some institutions faculty who had some medical education background in addition to their other roles were the experts giving consultation for teaching practices and helping newly inducted staff. Almost sixty percent institutions had instructional technology for teaching along with experts to assist faculty in using audiovisual aids for instruction. Two colleges didn't know about senior faculty and IT experts' assistance, which could be due to lack of these. Very few mostly private colleges were providing professional development plans for faculty in conjunction with a development specialist or administrator with rest lacking it. With the ever-increasing number of students probably, most faculty especially in government institutions felt the burden of teaching.

Further studies with evidence, was required to see the format and extent of implementing teaching practices to give an insight of how well they were practiced. In literature, a study conducted showed participants see personal development as part and parcel of faculty development, though career or professional development was not seen in this study.[21] Faculty development brought to workplace learning had much to offer than the tradition of being conducted away from teacher's place of work.[22]

Workshops, Seminars or Programs on Common Faculty Development Areas: As was evident by the high positive response by most colleges,

workshops and seminars were a frequent occurrence and majority were using them for instructional techniques, introducing new educational strategies and course curricular planning and development. For a long time for various areas of faculty training workshops have been in practice on a small scale until more organized setups came up. Communication skills, MCQ/OSCE development and assessment skills workshops were very much in effect is most institutions mostly in ICT, research and scholarships, skills lab and for orientation to medical education.

As part of staff professional development glimmer of change can be seen as institutions were found to be involved in providing academic counseling and improving interpersonal skills. Private colleges were involved more in these activities and government need to start heading in this direction. However, few didn't know about assessment skills, research and scholarships and departmental management. Despite a low frequency response, some future research should be carried out to find the reasons[23] where deficiencies exist in implementation.

Over seventy percent institutions conducted workshops on various aspects within different departments, however government colleges had an edge as most were in this field long before the private colleges were established. Experienced faculty aware of new innovations in their fields had a penchant to bring improvement at their workplace as was seen by low resistance to change by faculty. Workshops and seminars were inherently flexible, promoting active learning by interaction and exchange of ideas. Workshops were most popular worldwide and conducted for short as well as longer duration, but overall for busy clinician short, work better[24].

Availability of Consultants for Guiding Faculty on Course Development Practices: To assist faculty in instructional and teaching methods, evaluating students as well as constructing assessment tools and course development was evident in most institutions. It is refreshing to know institutions realize that not all faculties were capable of being professional in these practices. Though similar standards may not be possible but at least there should be some form of basic training for those who were involved in these activities. Government colleges were more active in course development practices but private lagged behind. Almost seventy percent colleges of which most were private had proviso of a professional library which can bea useful aid for faculty, though, two colleges didn't know if their library had the capability to provide professional aid to faculty. The ability of government colleges to improve their libraries was probably effected by funds and priority issues. These practices need more attention and incorporation as a training need of faculty as was found in literature[25].

Obstacles and Challenges Influencing Faculty Development Practices: Institutional and departmental support was seen in most colleges without much resistance from faculty in implementing faculty practices. Standardization which gives a formal definition to faculty training was not on scene and added to that no follow up or evaluation was being carried out. It is imperative that when a change comes with it challenges as well as obstacles should be anticipated and recognized so as to find appropriate ways to solve them. Political and financial support by administration was required for successful implementation as institutional resistance was a hindrance, but more essential was a motivated faculty[26].

CONCLUSION

Most medical colleges considered keeping faculty development on top of their agenda but lack was in planning, organization but more so in assessments and evaluation. Government colleges need to come out of their narrow vision of limited resources and obstacles. Time for them to work in coalition to overcome these problems, within a pertinent and realistic atmosphere complementing their institutional culture in providing high value faculty development. With more financial and other resources private medical colleges may possibly be able to take lead in newer advances in faculty development. Internationally institutions were years ahead of us and lest we are left far behind we must wake up to the call of redefining our institutional strategies to train the instructors.

It is for us to recognize and learn from our needs to apply and evaluate so as to develop and augment the future of faculty development. It wasn't in the scope of this study, but further research avenues need to be explored regarding the extent and evidence for the faculty practices being conducted in these institutions.

RECOMMENDATIONS

1. The regulatory bodies as HEC and PM&DC must make it mandatory for every recognized institution to implement at least essential faculty development practices.
2. Each institution should set aside an appropriate financial plan for developing faculty.
3. To improve faculty development practices every institution should plan and implement its evaluation.
4. It is strongly recommended that the quality and standards of faculty development applied must

be on similar lines at government as well as private medical institutions.

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