

FACULTY DEVELOPMENT ---- LOOKING THROUGH DIFFERENT LENSES

Muhammad Imran Anwar, Ayesha Humayun

Shaikh Zayed Medical Complex, Lahore

ABSTRACT

Objective: To understand how the faculty and students perceive the needs, barriers and possible solutions for instructional, professional and organizational development of faculty in context of a medical school.

Study Design: Mixed method sequential study.

Place and Duration of Study: Shaikh Khalifa Bin Zayed Al-Nahyan Medical College (SKZMC) Lahore from September 2013 to March 2014.

Methods: Five-point Likert scale, focus group discussions (FGDs) and in-depth, face-to-face interviews (IDI) were used to collect data. Using convenience sampling, 21 faculty members for Likert scale forms, 10 for FGD and 12 for IDI were selected along with 93 students for Likert scale and 20 students for 2 FGDs. Scale data summarized using mean \pm SD and categorized using median score. Thematic analysis was done on interview and focus group data and findings were triangulated.

Results: Triangulation showed lack of motivation, poor time management, deficiencies in curriculum understanding and alignment with instruction and assessment, unawareness of innovative instruction and assessment tools, lack of feedback use and reflection, poor learning environment, and almost no rewards and recognition of excellence in teaching. Weak institutional leadership and unsupportive administration were impediments too. Enhanced motivation by incentives, rewards and institutional support along with a robust faculty development program, training faculty and improving instructional, professional and organizational structure were identified as context specific solutions to address the needs and barriers.

Conclusion: Innovative instructional training, development of research, leadership and scholarship, with organizational restructuring and support, are the main elements for faculty development in this specific context.

Keywords: Faculty development, instructional development, professional development, organizational development.

INTRODUCTION

Faculty development has gained tremendous attention and focus of medical educationists. It involves all activities which help faculty members in enhancing their academic competencies and skills in mainly three domains personal development, professional development and instructional development¹ while proposed earlier by Centrathere are four possible types of development: personal (interpersonal skills, career development, and life planning issues); instructional (course design and development, instructional technology); organizational (ways to improve the institutional environment to better support teaching); and

professional (ways to support faculty members so that they fulfill their multiple roles of teaching, research, and service)².

Medical education in any country is linked with its health care system determining what type of competencies are required in their medical graduates in given circumstances and how we can ensure development of these competencies³. Medical education has evolved as a discipline in its own right during last few decades⁴. This discipline needs a robust, effective, competent and growing faculty, a faculty which can bring in change in medical education through inspiration, motivation and role modeling⁵.

To introduce a culture of professional and instructional development the need is to enhance focus on content, duration, collective participation, active learning and coherence in faculty development activities. Less focus should

Correspondence: Dr Muhammad Imran Anwar, 54/2-E, Phase I, DHA, Lahore

Email: imran_anwar21@hotmail.com

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be on breadth of faculty development but more on higher-quality, in-depth, more influential instructional and professional development⁶. Steinert and colleagues have highlighted, workshops, seminars, short courses, sabbaticals and fellowships as flexible and feasible

roles, an insight into the actual needs through analyzing the situation, looking for the barriers and their context specific possible and plausible solutions is required.

Undergraduate teaching has its own pace and dynamics and an experienced post graduate

Table-1: Methodological and data source triangulation.

Aspects	Perceived by	Methods of gathering data		
		Survey	In-depth interview	Focus group discussion
Needs for FD	Faculty	X	X	X
	Students	X		X
Barriers to FD	Faculty	X	X	X
	Students			X
Solutions addressing barriers to FD	Faculty		X	X
	Students			X

educational formats for faculty⁷.

Society demands from health care professionals to develop not only as a medical experts, but also as a professionals, scholars, health advocates, managers, collaborators, and communicators⁸. Any medical graduate cannot be considered capable of teaching. It is apparent that teaching is not an innate gift so while assessing the need for faculty development we have to consider teaching not only involving content but 'process' and to develop the 'art' of teaching⁹. Multiple quantitative and qualitative studies identified personal, faculty and institutional level barriers to instructional, professional and organizational development¹⁰⁻¹².

Medical education in Pakistan is working and developing in resource constraint settings, the need is to remain focused on contextual FD activities so the resources are not wasted and purpose is achieved. Because of rapidly changing technological and social structures, professional development has to be considered as the basic vehicle for changing adult educational practices¹³. Faculty development is a difficult task requiring a lot of political commitment, supportive leadership, resource allocation and recognition of excellence in teaching⁴. So before designing a comprehensive program for developing and nurturing faculty in its instructional, professional and organizational

faculty at Shaikh Khalifa bin Zayed-AlNahyan Medical College (SKZMC) are faced with a challenge to deliver within its new role. Hence there is tremendous need to develop and train the faculty for its new role. This qualitative study is being designed in the context of this medical college in Lahore. Research question guiding this case study was to get an understanding of how does the faculty and students perceive the needs, barriers and possible solutions for instructional, professional and organizational development of faculty in the context of a newly commissioned medical school in Pakistan.

METHODS

This mixed method sequential study was conducted in Shaikh Khalifa Bin Zayed Al-Nahyan Medical College in Lahore from Sep 2013 to Mar 2014. Total strength of faculty involved in undergraduate teaching is 85. Three methods for data collection Closed ended Likert scale Performa, focus group discussion(FGD), In-depth, face-to-face interviews (IDI), and two sources of data (Faculty and students) were used in this study (Table-1). Self-constructed, pre-tested, and self-administered, 5-point Likert scale forms were used for assessing perceptions of students and faculty, about the needs and barriers for instructional, professional and organizational development. Using convenience sampling, 21 faculty members for Likert scale

forms, 10 for FGD and 12 for IDI were selected along with 93 students for Likert scale and 20 students for 2 FGDs. Negative and positive statements were used in balance to minimize the effect of acquiescence bias which was analyzed using reverse scoring in SPSS version 20. Likert data was summarized calculating means, standard deviations and median for individual items and then categorized into three categories based on median score. In the questionnaire on needs for faculty development the categories were no need (Median ≤ 2), definite need (Median score at and between 2.01 and 3), critical need (Median score at and between 3.01 and 5). In the questionnaire on barriers for addressing these needs, categorization was, no barriers (Median ≤ 2), low level barriers (Median score at and between 2.01 and 3), high level barriers (Median score at and between 3.01 and 5).

Thematic analysis was done on interview and focus group data. Codes were classified using a pre-formed coding scheme. Common and uncommon themes were extracted. Data was triangulated to identify points of convergence and divergence. Formal ethical approval from Institutional Review Board was obtained. Written informed consent was taken from the participants on purpose-designed separate consent forms for survey, interview and focus group.

RESULTS

In Likert scale data, median score categorization on faculty and students perceptions showed faculty training and development needs in many key areas in instructional, professional and organizational development (Table-2). In FGDs, themes emerged on need of instructional, professional and organizational development. These were triangulated with themes from IDIs and need assessment done through median score from scale data (Table-3).

Triangulating themes of needs showed need for training and development of faculty in curriculum related areas. In addition need for developing faculty in overall teaching

methodologies in practice and efficient use of traditional and new innovative teaching and assessment methods was identified. Identified barriers were lack of faculty training in curriculum, instruction and assessment. The solution for curriculum issues was identified as conducting frequent training activities on all identified aspects of curriculum under a comprehensive, need based, faculty development program.

In the feedback and evaluation category, there was need for faculty training in taking, giving and using feedback regularly from students, peers and by DME. Barriers to this need were lack of appropriate feedback system due to poor political commitment and will, apprehension of being exposed, along administrative weakness. A purpose-built, comprehensive feedback system through DME, and faculty training to overcome fears of exposure, were the identified solutions.

Training faculty in engaging and motivating students, facilitating their self-directed learning and developing positive attitudes among students were identified as needs while barriers were poor level of motivation and attitude of faculty towards teaching, teaching by humiliation and low level of commitment especially in senior faculty members. All the stake holders emphasized the role of feedback in overall growth of faculty.

For developing desired level of motivation in faculty to teach, the needs identified were in developing a system of incentive or rewards/awards for recognition of excellence in faculty and to address multitasking. Need for desired motivation level for professional development is hindered due to poor commitment for lifelong learning and multi-tasking among faculty. Solutions identified were addressing the shortage of faculty, ensuring and developing political will and institutionalization of motivational strategies for the faculty through training activities, system of incentives and recognition of excellence in teaching, professional growth and research.

Research culture among teachers is needed. institutional support. Solutions identified were However it is barricaded by faculty's lack of promoting research by DME through organizing

Table-2: Need for Instructional, professional and organizational development as perceived by faculty and students.

Sr.#	Perceptions of Faculty	Faculty development needs							
		Mean	SD	Faculty Median	Categorizing median	Mean	SD	Students Median	Categorizing median
Instructional Development									
1.	Over all teaching methodology needs improvement	4.48	.512	4.0	Critical need	4.32	.754	4.00	Critical need
2.	Faculty is knowledgeable	1.86	.573	2.0	No need	1.92	.769	2.00	No need
3.	Faculty Manages Curriculum implementation	2.95	.973	3.0	Definite need	2.88	1.284	3.00	Definite need
4.	Faculty need training in Teaching	4.48	.512	4.0	Critical need	4.10	.898	4.00	Critical need
5.	Faculty need training in innovative and appropriate assessment methods	4.38	.740	4.0	Critical need	4.02	.955	4.00	Critical need
6.	Faculty need training in making methodology and assessment in line with curriculum	4.43	.507	4.0	Critical need	3.82	1.142	4.00	Critical need
7.	Faculty don't take students regular feed back	4.29	.463	4.0	Critical need	3.71	1.256	4.00	Critical need
8.	Faculty is concerned with the feedback of Students	2.81	1.167	2.0	No need	2.99	1.211	3.00	Definite need
9.	Faculty is ready for peer feedback	3.0	1.140	3.0	Definite need	2.97	1.005	3.00	Definite need
10.	Focuses on Positive attitude development in students	2.76	1.091	3.0	Definite need	2.89	1.238	3.00	Definite need
11.	Faculty need training in communication skills	4.24	.889	4.0	Critical need	3.73	1.190	4.00	Critical need
12.	Faculty need training in leadership skills	4.38	.740	4.0	Critical need	3.66	1.128	4.00	Critical need
13.	Faculty show good mentoring and supervisory skills	2.48	.928	2.0	No need	2.69	1.073	2.00	No need
14.	Faculty manage time well	3.0	1.183	4.0	Critical need	3.17	1.265	3.00	Definite need
15.	Faculty use evidence based medicine in teaching effectively	3.14	1.014	3.0	Definite need	2.85	1.160	3.00	Definite need
Professional Development									
16.	Faculty need training in research skills	3.57	.746	4.0	Critical need	3.85	1.010	4.00	Critical need
17.	Faculty show strong aptitude towards professional development	3.33	1.197	3.0	Definitive need	2.70	1.121	3.00	Definite need
Organizational development:									
18.	Learning tools and resources are not up to standard	4.38	.590	4.0	Critical need	3.81	1.154	4.00	Critical need
19.	Learning environment is student friendly	2.57	1.076	2.0	No need	2.86	1.273	3.00	Definite need
20.	Learning environment needs improvement	4.19	.928	4.0	Critical need	4.18	.872	4.00	Critical need
21.	The institution does not support faculty development effectively	2.10	1.091	2.0	No need	3.76	1.004	4.00	Critical need
22.	Faculty development program should be mandatory for faculty	4.38	.740	4.0	Critical need	4.23	.898	4.00	Critical need

involvement, multi-tasking and negligible educational activities, awards and recognition of

good work and acquiring national and international grants (Table-3).

For professional development and growth, there is need for administrative, political and financial support from college, university, PMDC and government. Barriers and solutions are given in Table-3.

For organizational development there is need for developing conducive learning environment and also for improving learning tools and resources. Barriers are poor administrative commitment and financial constraints. Solutions were political will of institutional leadership and vigilance by regulatory bodies.

DISCUSSION

Global paradigm change in medical education and rapid growth of medical colleges in Pakistan, demand tremendous expectations from medical teachers. Society, now, wants them to be fully equipped with all the latest tools, techniques and attitudes required as per international standards.

Keeping in view 'professionalization of teaching practice' this study is focused toward looking into context based needs, hurdles to these needs, and defining plausible solutions keeping in view the perspectives of the stakeholders. By triangulation, we actually identified the capacities which should be developed in the faculty. The findings provided a base for developing a comprehensive, systematic and operational faculty development program.¹⁴ There is a huge gap between discussing faculty development and developing a program for it in a given context¹⁵.

The areas for capacity development (purposeful training) found to be more focusing on instructional skills, including skills for small and large group communication, leadership and knowledge, skills transfer and also for innovative teaching and assessment. These areas are quite similar to many relevant studies¹⁶⁻¹⁸. Faculty and students very much emphasized on feedback

which shows the need for teachers to reflect upon themselves and also by students and peers. For this, individuals, faculty and institution should work for a functional feedback system and similar is desired in literature¹⁹.

For instructional development, commitment of faculty at individual level and structured and planned training activities by DME/ institution through a comprehensive, need-based faculty development program is required for which unsupportive leadership, resistance to change, poor faculty motivation to develop new skills and knowledge are common barriers²⁰.

Desired perspectives, attributes and behaviors identified in faculty were all focusing on enhancing motivation. BEME systematic review showed that faculty development activities were highly valued by participants and they also reported changes in learning and behavior⁷. Barriers to the development of these attributes and behaviors were perceived as poor time management, multitasking, resistance to change, lack of faculty motivation and unwillingness of faculty to accept deficiencies in their teaching ability, knowledge and skills and were similar to available evidence in literature²⁰. These were individual level barriers and faculty showed willingness for developing motivation, attitude and behavior change but at the same time desired institutional measures to overcome barriers.

In professional development, emphasis was on research skills development and support for research through changing mind set of faculty by making research part of faculty performance at individual level and promoting research culture through incentives, international and national grants. As in post Flexner period, research quickly outstripped teaching in importance in medical education and now faculty was being judged more on the metric of research productivity²¹. Professional development faces few major obstacles such as time requirements, developing and using technology and support from administration and monetary or non-

monetary awards for faculty, similar barriers were reported in few studies^{11,12}. support at all levels from college to university and regulatory bodies to government. Provision of

Table-3: Triangulating the findings from focus group, interviews and closed ended data on need of instructional, professional and organizational development

Common themes from Focus Group Discussions	Common themes from in-depth interviews	Faculty's responses based on MEDIAN from Likert scale	Students' responses based on MEDIAN from Likert scale
Instructional development:			
-Gap in assessment and curriculum -Poor integration and no modular system -Engaging, motivating students and involving with them in whole learning process -Multitasking but more on clinical side -incentive or rewards for recognition of excellence	-Training needs in curriculum development, revision and implementation -Faculty training need in traditional and new innovative teaching methods -Quality of assessment system needs improvement through training faculty in assessment methods and tools -Feedback system required -Rewards and incentives for faculty -Attitude change and motivation in faculty	CRITICAL NEED: -to develop themselves in overall teaching methodologies, -in use of innovative teaching and assessment methods, -in making methodology and assessment in line with the curricular objectives, -in taking and using students' feedback regularly, -to be trained in communication and leadership skills DEFINITE NEED: -in managing curriculum implementation, -in taking and giving peer feedback, -in use of evidence based medicine in teaching and -also training in developing positive attitude among students	CRITICAL NEED: -overall teaching methodology in use in terms of improvement and innovation, -in training of faculty in innovative teaching and assessment methodologies, -in making methodology and assessment in line with curricular objectives, -in taking regular feedback of students to improve their teaching and in leadership skills DEFINITE NEED: -in managing curriculum, -giving importance to feedback of students and readiness for peers' feedback, -in developing positive attitude in students, -managing time well and -use of evidence based medicine in teaching.
Professional development:			
-Encourage research culture among teachers -Faculty need to update knowledge, qualification and professional skills -Motivation in faculty for PD -PMDC/Govt/university/college etc. no one is spending on or giving priority to professional development of faculty. -University guidelines for FD	-Research training and culture needed -Support for Professional growth from seniors and administration needed	CRITICAL NEED: -in research skills development	CRITICAL NEED: -in research skills DEFINITE NEED: -aptitude for professional development
Organizational development:			
-Need for administrative support and political will -Appropriate learning environment -A system of check and balance should be in place -Award and incentives for teachers	-Learning environment needs improvement -Organizational environment need to be conducive for faculty development	CRITICAL NEED: for improvement in learning environment, for institutional support for effective faculty development, for an operational and comprehensive faculty development program and for improving learning tools and resources	CRITICAL NEED: institutional support for faculty development, making faculty development program mandatory for faculty, in making learning tools and resources up to standard and in improvement in learning environment

Professional and organizational development need administrative, political, leadership and financial commitment and appropriate learning environment, learning tools and resources are the responsibility of institution but their optimal use is of the faculty. Regulatory

bodies can ensure appropriate learning environment and institutional management can look into administrative, financial, and system related barriers. Similar need areas were identified in literature showing that the alertness level of colleges and universities unfortunately is inadequate to the changing circumstances.¹⁵.

Perceptions in current case study are more focused on instructional role and much less emphasis is given to professional and organizational development. The reason found to be inadequate awareness of faculty and students on all aspects of faculty development and this showed the need for training faculty in different aspects of faculty development, which could only be achieved through an efficient, comprehensive and need-based faculty development program, using workshops to develop motivation in faculty²².

The results lead to the conclusion, that mere faculty training and motivation are not required but a strong institutional leadership and support remains the mainstay. Looking through different lenses (of faculty and students) needs for FD appears to have a more convergent image than a divergent. All themes discussed so far are convergent ones and divergent trends were seen in peer feedback as faculty opposed it whereas students strongly suggested it. The difference in under and postgraduate teaching was not given much emphasis by the faculty but students strongly pointed the need for changing behavior and developing instructional skills to teach undergraduates because they think it is very much different.

The concept of faculty development in our context is all about change. A change which will be gradual and sustainable, keeping pace with globalization, digitalization, and societal empowerment and with intense international competition should be strived for. Focus on instruction is not enough for nurturing a robust and dynamic faculty. FD programs need to be designed to enhance leadership, management

skills, professional academic skills and organizational development²³.

FD makes teachers aware of their beliefs about teaching, promotes motivation and self-efficacy, and this translates into a healthy competitively complementing environment.

CONCLUSION

The faculty and students perception of needs, barriers and possible solutions for instructional, professional and organizational development of faculty in context of this medical school provides a useful insight of the issue. Along with teaching skills there is immense need of training faculty in self-directed learning, educational leadership, reflection, research, curriculum understanding implementation, and professionalism. A strong institutional support, dynamic leadership and friendly learning environment promoting excellence in teaching remain inevitable.

Conflict of Interest

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

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