ORIGINAL ARTICLE

Faculty Perceptions About Roles and Functions of a Department of Medical Education

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ABSTRACT

Objective: To determine faculty's perceptions and expectations from Department of Medical Education (DME).

Study Design: Mixed methods study (sequential exploratory design).

Place and Duration of Study: University Medical and Dental College (UMDC) and Punjab Medical College (PMC), Faisalabad, from March to May 2011.

Methodology: Faculty members teaching at PMC and UMDC were enrolled for semi-structured interviews with four senior faculty members (non-probability purposive sampling) in the qualitative phase to get in-depth information. After content analysis, themes were generated and a questionnaire with closed ended items was developed to validate the findings of the qualitative phase. In the quantitative phase, a cross-sectional survey was conducted using this questionnaire. It was sent to all 250 working faculty members, out of whom 149 (60%) responded. The results of this survey were analyzed by descriptive analysis using SPSS version 17. The analyses of qualitative and quantitative phases were integrated in the final interpretation phase to draw a conclusion.

Results: In faculty members' opinion, functions of DME were faculty development (83%), interdepartmental collaboration (81%), research (77%), curriculum development (66%), career counselling (62%) and faculty evaluation (60%). Development of DME was considered a positive change by 119 (80%) respondents.

Conclusion: Majority of the faculty members working in UMDC and PMC, Faisalabad considered DME a positive change.

Key words: *Faculty. Social perceptions. Medical education.*

INTRODUCTION

Increased public expectations relating to healthcare, societal demands for accountability, need to incorporate educational developments in teaching/learning process and to train more doctors within existing resources were some of the reasons that lead to development of a department of medical education (DME) in medical schools throughout the world.[1]

Some of the important functions of a DME are considered to be educational research, faculty development and service provision including advice and support in issues such as curriculum development and evaluation.[1,2]

In Pakistan, until recently, there was no formal structure of faculty training before or after induction. Isolated efforts in various institutions in terms of faculty development under the titles of CME and CPD activities were rapidly gaining momentum.[3] Some institutions dealing with undergraduate and post-graduate medical education across the country had established departments dealing with medical education on their own. However, a need for a framework of professional development for the medical faculty was increasingly felt throughout the country.[3,4] An important advancement in this concern came in 2008 when a DME became an essential requirement for medical schools in Pakistan in order to get accredited by Pakistan Medical and Dental Council (PMDC).[5]

Literature on change management in a medical context suggests that a successful change can be brought with involvement of those that are likely to be affected the most by that change.[6,7] Thorough consultations with stakeholders, explaining them the need for change, getting their input while designing the plan, giving ownership to people and team building are the *sine qua non* for change to sustain.[8,9]

Taking the development of DME in all medical schools as a change, faculty members' perceptions and expectations in this regard need to be understood in order to sustain this change. This understanding will not only help in developing future endeavours by DME but also identify any gap that exists between faculty members' expectations and the real scope of a DME. As the expectations of those involved in the change process are important in the successful achievement of change,[10] this study was conducted to understand what our faculty thinks about and expects from a DME.

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METHODOLOGY

This study was conducted at Punjab Medical College (PMC) and University Medical and Dental College (UMDC), Faisalabad, from 1st March to 31st May 2011, with approval from the ethics review committees of the two colleges.

A mixed method approach with sequential exploratory design was employed.[11] The study was conducted in three phases. The first phase was qualitative. Semi-structured, face-to-face interviews were conducted with four senior faculty members including institutional heads and senior professors who represented policy makers in their institutions after taking written informed consent. Non-probability purposive sampling was used. Three interviews were audio recorded and field notes were taken by the researcher. One participant was reluctant about the recording and only notes were taken in that case.

The recorded interviews were interpreted with the help of field notes through framework analysis. Emergent coding was used to generate themes and trends from the thick description (repeated readings/listening of each interview recording, identifying themes, coding without using preset categories, and recoding until the categories that emerge are saturated).[12]

In the second phase, a cross-sectional survey was conducted using a 13-item, closed ended questionnaire (Appendix 1), developed on the basis of the themes generated in content analysis of interviews. The purpose of this survey was to validate the responses received in the qualitative phase (triangulation).[11] The items focused on responsibilities of a DME (item no. 3,4,6,7,8,9,13), faculty responses to development of DME in their institutions (item no. 2,5,10,11) and DME as a change (item no. 1,12). Three items were negatively phrased. The questionnaire was pilot tested with 10 faculty members and the data thus generated was verified for content validity. Final questionnaire was delivered to all (250) faculty members working at the two medical colleges under study. To improve response rate, two telephonic reminders were given in each department at one week interval. The results of this survey were analyzed by descriptive statistics using Statistical Package for Social Sciences (SPSS) version 17. Chi-square test was used to determine the association of parameters such as postgraduation and specialty with faculty perceptions. The level of significance was taken as $p < 0.05$.

The analyses of first and second phases were integrated in the final interpretation phase to draw a conclusion.

In this study, DME was taken as a department in a medical college dealing with medical education as a separate discipline or specialty.[1] Faculty referred to teaching staff in a medical college designated as lecturer/demonstrator, senior registrar, assistant professor, associate professor and professor.[14]

Appendix 1: Questionnaire used for survey.

Faculty perceptions about roles and functions of a department of medical education (DME).

The purpose of this study is to understand what faculty members think about and expect from a DME. The faculty members working at Punjab medical college and university medical college, Faisalabad can participate in this study.

Please fill this questionnaire if you agree to participate in this study.

It is our responsibility to keep this information confidential and we will share the results with you as they get published.

Name (optional):

Designation:

Department:

Year of graduation:

Year of postgraduation:

Years in teaching:

For every statement please encircle your response

SA = Strongly agree; A = Agree; U = Unsure; D= Disagree; SD = Strongly disagree

1. Department of medical education (DME) is important for any medical college.
   SA A U D SD
2. Development of a DME in your institution is a positive change.
   SA A U D SD
3. Evaluation of an educational activity is DME's responsibility.
   SA A U D SD
4. Evaluation of teachers' performance is DME's responsibility.
   SA A U D SD
5. I will welcome evaluation of my teaching by DME.
   SA A U D SD
6. DME is responsible for curriculum development.
   SA A U D SD
7. Advisory service for students such as career counselling should be provided by DME.
   SA A U D SD
8. DME is responsible for providing and arranging training opportunities for the faculty.
   SA A U D SD
9. DME is responsible for generating local evidence through research about all academic activities.
   SA A U D SD
10. It is not important for you whether a DME exists in your institution or not.
    SA A U D SD
11. Academic activities arranged by DME are viewed as extra work.
    SA A U D SD
12. There is no need to change current teaching practices.
    SA A U D SD
13. DME can serve as a collaborative centre for other departments.
    SA A U D SD

RESULTS

The participants identified the functions or roles of a DME to be teacher training and motivation, faculty evaluation, student counselling, research and curriculum development.

Three out of 4 (75%) participants believed that training the teachers about new instructional and assessment methodologies and aspects like giving feedback to students is one of the prime responsibilities of DME.

Seventy-five percent participants considered faculty evaluation an important responsibility of a DME.

However, they thought that initially it should be on a voluntary basis and then as people realize that it is about improvement and not criticism, then it should involve all.

Providing counselling services to students such as career counselling, giving feedback and motivational support was considered a responsibility of DME by three participants (75%).

Two participants (50%) mentioned research as a role of DME. Both of them meant clinical research and made no mention of educational research.

Fifty percent considered curriculum development as one of the functions of DME.

Two participants' (50%) mentioned collaboration as a function of DME. One participant was talking about inter-departmental collaboration while the other meant collaboration with national and international institutions.

The participants' views differed regarding the development of a DME in their institutions. One participant (25%) thought that the faculty was apprehensive about development of DME in their institution. Another participant thought that majority of the faculty were indifferent about development of DME.

Table I: Demographic details of respondents.

Variable	Number (n = 149)	Percentage
Department		
Basic sciences	63	42
Clinical	86	58
Designation		
Professor	17	11
Associate professor	18	12
Assistant professor	38	26
Senior registrar	29	20
Senior lecturer	14	9
Lecturer / demonstrator	33	22
Postgraduation		
Yes	110	74
No	39	26

Two participants thought that there was a mixed response from the faculty with a negative response from the senior faculty and a more favourable response from the junior faculty. All agreed that the negative responses were due to lack of awareness about the importance and the responsibilities of a DME.

Two participants (50%) commented that they were comfortable with the idea. One participant (25%) said he was happy with the development whereas one participant (25%) confessed that he felt uncomfortable and found it to be an extra work-load.

Regarding mechanism of change 3 participants (75%) proposed a prescriptive plan. Only one participant (25%) suggested that students should be directly involved in any initiative taken by DME.

All (100%) were appreciative of the efforts carried out by their DME but were unsure of the impact. All (100%) agreed that there has been some success in sensitizing the faculty. Three (75%) participants thought that lack of an appreciable impact is due to lack of institutional support. All (100%) had very high expectations from the person representing DME.

Demographic details of survey participants are summarized in Table I. Teaching experience ranged from 6 months to 33 years with an average of 9 years. None of the participants had attended a formal program in medical education. Results of survey are summarized in Table II. There was a significant difference ($p < 0.05$) between the responses of faculty members from basic and clinical sciences (Table III). Postgraduation also affected the responses significantly. Perceptions of faculty members from clinical sciences and ones with postgraduate degrees were more positive than those without (Table III).

DISCUSSION

The functions of DME according to respondents were faculty development, interdepartmental collaboration, research, curriculum development, career counselling

Table II: Survey results.

Questions	Responses n (%)				
	SA	A	U	D	SD
Department of medical education (DME) is important for any medical college.	85 (57)	45 (30.2)	08 (5.4)	04 (2.7)	07 (4.7)
Development of a DME in your institution is a positive change.	58 (38.9)	60 (40.3)	18 (12.1)	03 (2)	10 (6.7)
Evaluation of an educational activity is DME's responsibility.	37 (24.8)	62 (41.6)	18 (12.1)	16 (10.7)	16 (10.7)
Evaluation of teacher's performance is DME's responsibility.	30 (20.1)	50 (33.6)	26 (17.4)	23 (15.4)	20 (13.4)
I will welcome evaluation of my teaching by DME.	36 (24.2)	57 (38.3)	14 (9.4)	20 (13.4)	22 (14.8)
DME is responsible for curriculum development.	36 (24.2)	64 (43)	28 (18.8)	11 (7.4)	10 (6.7)
Advisory service for students such as career counselling should be provided by DME.	49 (32.9)	60 (40.3)	21 (14.1)	11 (7.4)	08 (5.4)
DME is responsible for providing and arranging training opportunities for the faculty.	52 (34.9)	72 (48.3)	14 (9.4)	04 (2.7)	07 (4.7)
DME is responsible for generating local evidence through research about all academic activities.	32 (21.5)	83 (55.7)	18 (12.1)	09 (6)	07 (4.7)
It is not important for you whether a DME exists in your institution or not.	14 (9.4)	12 (8.1)	24 (16.1)	58 (38.9)	41 (27.5)
Academic activities arranged by DME are viewed as extra work.	12 (8.1)	31 (20.8)	26 (17.4)	60 (40.3)	20 (13.4)
There is no need to change current teaching practices.	11 (7.4)	13 (8.7)	12 (8.1)	72 (48.3)	41 (27.5)
DME can serve as a collaborative centre for other departments.	35 (23.5)	87 (58.4)	13 (8.7)	04 (2.7)	10 (6.7)

SA = Strongly agree; A = Agree; U = Unsure; D = Disagree; SD = Strongly disagree.

Table III: Comparison of responses from faculty members in basic and clinical sciences and those with and without postgraduation using chi-square test.

Questions	Comparison of faculty responses n (%)					
	Basic sciences Agree or strongly agree (n = 63)	Clinical sciences Agree or strongly agree (n = 86)	p-value	With postgraduation Agree or strongly agree (n = 110)	Without postgraduation Agree or strongly agree (n = 39)	p-value
Department of medical education (DME) is important for any medical college	49 (77.77)	81 (94.18)	.012	102 (92.72)	28 (71.79)	.000
Development of a DME in your institution is a positive change	45 (71.42)	72 (83.72)	.132	91 (82.72)	26 (66.66)	.001
Evaluation of an educational activity is DME's responsibility	33 (52.38)	66 (76.74)	.000	80 (72.72)	19 (48.71)	.000
Evaluation of teacher's performance is DME's responsibility	24 (38.09)	56 (65.11)	.000	63 (57.27)	17 (43.58)	.000
I will welcome evaluation of my teaching by DME	26 (41.26)	67 (77.90)	.000	77 (70)	16 (41.02)	.000
DME is responsible for curriculum development	33 (52.38)	67 (77.90)	.000	84 (76.36)	16 (41.02)	.000
Advisory service for students such as career counselling should be provided by DME	42 (66.66)	67 (77.90)	.011	84 (76.36)	25 (64.10)	.000
DME is responsible for providing and arranging training opportunities for the faculty	49 (77.77)	75 (87.20)	.031	97 (88.18)	27 (69.23)	.000
DME is responsible for generating local evidence through research about all academic activities	41 (65.07)	74 (86.04)	.002	90 (81.81)	25 (64.10)	.049
It is not important for you whether a DME exists in your institution or not	19 (30.15)	07 (8.13)	.000	10 (9.09)	16 (41.02)	.000
Academic activities arranged by DME are viewed as extra work	25 (39.68)	18 (20.93)	.004	26 (23.63)	17 (43.58)	.000
There is no need to change current teaching practices	20 (31.74)	04 (4.65)	.000	9 (8.18)	15 (38.46)	.000
DME can serve as a collaborative centre for other departments	47 (74.60)	75 (87.20)	.009	98 (89.09)	24 (61.53)	.000

and faculty evaluation. These are quite similar to those mentioned in other studies and AMEE education guide No. 28.[1,15] However, 81% of the respondents agreeing on interdepartmental collaboration as a function of DME are worth mentioning. This is a positive trend that indicates that faculty members recognize the lack of interdepartmental collaboration and feel the need of a mediator. It may also be taken as probably a willingness to step on the ladder of integration. Interdepartmental collaboration regarding educational activities has always been considered an important responsibility of a well established DME.[16,17]

Success stories of change in a medical context recommend thorough consultations with all the stake-holders including faculty members throughout the process, if a change is to sustain.[18] Giving ownership to people and team building are also considered necessary.[19] The qualitative data in this study revealed that development of departments of medical education in every medical school across the country in response to PMDC directive has come as a sudden change, apparently ignoring many of the above mentioned essentials. This becomes more important considering the fact that majority of the faculty members have received no formal training in medical education. However, 75% of the interviewed participants and 80% of survey respondents considered DME a positive change. This indicates that in the three and a half years since the PMDC directive, faculty has been sensitized at least to the extent that they realize the importance of DME in an institutional setting. A study done to establish the impact of a faculty development program on participants, 2 – 5 years after they had participated in that program, revealed similar results.[20]

The significant difference ($p < 0.05$) between responses of faculty members working in basic sciences and clinical departments as well as between those with and without postgraduation is worthy of note.

In a study carried out at eight medical schools under-going curriculum reforms, it was stated that a formidable obstacle to innovation is fear of loss of control by traditional educators. Any challenge to staff control over their field of knowledge may be perceived as a threat

to their status and their value to the institution.[6] Change produces uncertainty; questions accepted beliefs and practices, making some people feel uncomfortable or even aggressive.[21] Other studies have also reported that faculty perceptions vary depending on departments, ranks and educational backgrounds.[22] This finding has an important practical implication about bringing change. This difference of perceptions should be kept in mind while developing faculty development programs and other initiatives by DME.

The expectations of those involved in the change process are important in the successful achievement of change in academic contexts. This is why the outcomes of change must meet the expectations of the participants.[15,23] The results of our study, particularly the qualitative data indicate that the above mentioned protocols deemed necessary for a successful change, were probably not properly followed in our setup.

Faculty members from only two medical colleges were included in this study. As none of the participants in this study had attended a formal program in medical education the results can differ if the study is repeated on a sample of participants who have received formal training. Purposive sampling and a small sample size used in the qualitative phase have imposed restrictions regarding any attempt to generalize these results.

Nevertheless, the establishment of DME in the medical colleges is being viewed largely as a positive change. These positive perceptions can be utilized effectively by medical colleges to bring about and sustain a change in medical education in Pakistan. Giving due importance to faculty perceptions and expectations in policy making can help implement the change agenda. Large scale surveys and a bigger sample size for in-depth interviews including a representative sample from medical colleges across the country are recommended to develop a better understanding of this issue.

CONCLUSION

Majority of the faculty members working in UMDC and PMC, Faisalabad are aware of the roles and functions of DME and consider it a positive change. For DME to be successful, institutions must take all measures required to sustain change including consultations with stake holders, giving ownership to people and team building.

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