



ORIGINAL ARTICLE

## Faculty development: Need assessment survey in a newly established Medical College of Lahore.

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**ABSTRACT... Objective:** To assess the needs of faculty regarding teaching, assessment and research methods so as to develop a faculty development program in a newly established medical college of Lahore. **Study Design:** Descriptive Cross-sectional study. **Setting:** Rashid Latif Khan University (RLKU) Medical and Dental College, Lahore. **Period:** July–December 2023. **Methods:** Descriptive study was conducted in RLKU Medical College within six months. Structured self-administered questionnaires were used for data collection via Google forms. A total of 50 faculty members gave data after verbal consent. IRB approvals were taken. Data was analysed using Excel. Frequencies and percentages were calculated. **Results:** Majority faculty members (88%) preferred student centered teaching approach with the usage (94%) of different methodologies in small group teaching. Feedback was being taken regarding teaching and assessment by majority (90%). Workshops on teaching methodologies was the area of interest especially small group teaching (62%), peer assisted learning (54%), problem based learning (54%) and large group teaching (52%). Most of them expressed need of workshops on assessment especially assessment types (60%), MCQ (56%), OSPE/OSCE (54%) construction. Faculty was of the opinion that workshops on mentoring (72%), reflection (56%), portfolio development (64%), research methodology (76%), computer skills (70%), ethics (60%) and soft skills (82%) need to be conducted. **Conclusion:** Workshops on teaching methodologies and assessments are essential our study concludes that although most of the faculty is trained but they still feel the need for workshops to keep them updated and trained in major aspects of curriculum delivery as well as research, mentoring, computer and soft skills highlighting the need of a robust faculty development program.

**Key words:** Faculty Development, Need Assessment, Workshops.

### INTRODUCTION

Faculty development has been found to have a vital impact on the quality of education, leading to progressive changes in the medical education system in Pakistan.<sup>1</sup> The main pumping force for faculty development are faculty feedback, changing in the strategies of teaching and maintenance of high standards in teaching.<sup>2</sup> Need Assessment survey is not only based on needs of the faculty but also deals with the deficiency of new information on teaching methodology to initiate faculty needs.<sup>3</sup> Less scheduled educational activities and protected time often prevents faculty from attending capacity development programs.<sup>4</sup> Instructional development has been found to have the highest degree of need followed by organizational and professional development.<sup>5</sup>

A study was done to assess the difference between faculty participants' 'current ability' and 'ideal ability' in their various roles and it was noticed that even senior teachers expressed a need to further improve their educational competencies.<sup>6</sup> A study dealt with the differences between 'perceived importance' and 'self-rated level of competence' as the basis for prioritizing faculty development needs so as to save resources and time.<sup>7</sup> Faculty development programs have proven to be beneficial leaving a significant positive effect on medical teachers' competencies and enhances their effectiveness of their performance as professionals.<sup>8</sup> Bland et al. described faculty development as a planned program to prepare institutions and faculty members for their academic roles including teaching, research, administration, writing/scholarship, and career

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management.<sup>9</sup> Steinart et al. explained that it is reasonable for institutions to expect that faculty development will result in improved teaching performance and better outcomes for students.<sup>10</sup> A need assessment study conducted locally at the Dow University of Health Sciences in Karachi searched the new self-perceived assessment of pedagogical skills of participants and the areas they felt needed further improvement, which were course and curriculum planning and assessment of professional behaviour.<sup>11</sup> Educationalists in Pakistani universities, have been emphasizing on the pressing need to initiate faculty development programs for instructional, professional and organizational development.<sup>12</sup> In the modern era of medical education, multiple tools of teaching and learning are being promoted. Role-modelling, interactive lecturing, web based learning, case-based discussions, mentoring, role plays are used as multiple instructional tools.<sup>13</sup> The medical program of Pakistan was originally taken from Britain after the subcontinent was partitioned in 1947.<sup>14</sup> Since then, there is almost no change in the medical curriculum<sup>15</sup>, and due to that traditional medical education system still in practice, debate on incorporating healthcare leadership training for undergraduates has not yet started. Lack of evidence and problem-based learning has resulted in considerable uncertainty about the future of medical graduates, as they face difficulties in solving the cases independently when they start clinical practice. According to the last curriculum review held in 2016 by Pakistan Medical and Dental Council (PMDC), the medical curriculum should be altered to bring medical education at par with international standards.<sup>16</sup> University of Health Sciences has introduced a new integrated curriculum to be implemented in all medical colleges across Punjab. Successful implementation of this curriculum is based on many factors the most essential being trained faculty the basis of conducting this study. The aim of this study was to assess the needs of faculty regarding teaching, assessment and research methods so as to develop a program in a newly established medical college of Lahore.

## METHODS

A Descriptive cross-sectional study was conducted

among the faculty of Rashid Latif Khan University (RLKU) Medical College, Lahore within six months (July–December 2023), after its inception in 2023. A total of 50 faculty members of basic and clinical sciences employed at RLKU medical college, Lahore giving consent were included in the study. Data was collected via Google forms after the IRB approval (RLKU.IRB-003/23). Purposive sampling technique was used. A structured self-administered questionnaire comprising of questions pertaining to faculty needs in the given domains, Teaching Methodology, Assessment tools, Feedback-Monitoring-Reflection and Research methodology was employed. Data was analyzed using Microsoft Excel. Frequencies and percentages for qualitative and means for quantitative variables were calculated respectively. Verbal consent were taken at the time of data collection.

## RESULTS

In this newly established medical college, a total of 50 faculty members from basic and clinical specialities were included in our study, out of which 23 (46%) members were of age group 25 to 30, 11 (22%) of the age group 31 to 40, 7 (14%) members of the age group 41 to 50, 9 (18%) were of age group 51 to 62 years.

Faculty members of different designations were included in this survey, 24 (48%) were Demonstrators, 13 (26%) Assistant Professors, 5 (10%) Associate Professors and 7 (14%) were Professors belonging to different specialities, 9 (18%) Physiology, 7 (14%) Anatomy, 8 (16%) Biochemistry, 6 (12%) Pathology, 4 (8%) Community Medicine, 3 (6%) Pharmacology and 2 (4%) each from Dermatology, Medicine, Forensic Medicine, Medical Education and 1 (2%) from Otorhinolaryngology, Psychiatry, Ophthalmology, Gynaecology and Emergency Medicine respectively.

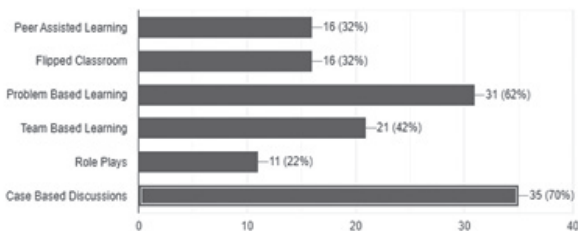
As far as teaching experience was concerned, 13 (26%) had a teaching experience of more than 10 years, 6 (12%) 5-10 years, 6 (12%) 2-5 years and 25 (50%) less than 2 years. In a total of 50 faculty members, 22 (44%) had received training on teaching methodologies including

Certificate in Health Professions Education (CHPE), Certificate Course in Medical Teaching (CMT), Workshops and Seminars compared to 28 (56%) having not received any such training.

Most of faculty members 44 (88%) preferred student centered teaching approach while few 6 (12%) preferred teacher centered approach. Small group teaching was preferred by 28 (56%) compared to 22 (44%) preferring teaching in both small and large groups. Majority agreed that lectures should be interactive 46 (92%). Faculty was using different teaching methodologies (Figure-1), but still felt the need of workshops on teaching methodologies (Figure-2).

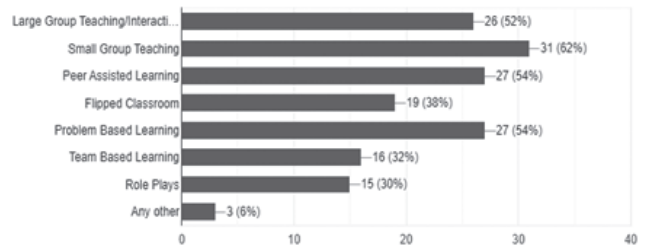
More than half of the faculty 29 (58%) were familiar with summative assessment compared to 21(42%) with formative assessment. Most of faculty members 31(62%) were involved in construction of assessment tools. The need for workshops on assessment types and tools was evident (Figure-3).

Feedback regarding teaching and assessment was a regular feature being taken by 45 (90%) of faculty members. Mentoring had been done by only 25(50%) of the faculty.



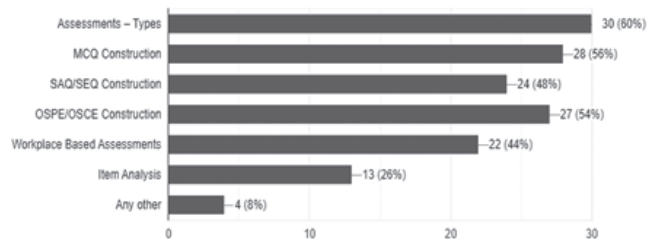
**Figure-1. Different teaching methodologies used by faculty**

In this figure, it is evident that 35(70%) of faculty were using case -based discussion, 31 (62%) were using problem-based learning method and 21(42%) were using team -based learning method.



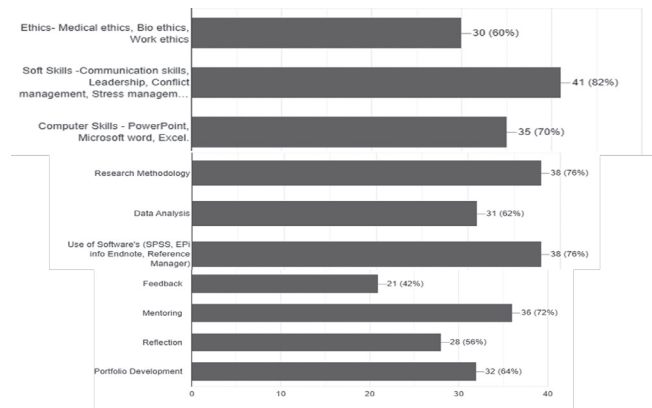
**Figure-2. Teaching methodology workshops: Faculty preference**

In this figure, Faculty preference for teaching methodology workshop is evident, 31 (62%) preferred small group teaching workshop, 27 (54%) peer assisted learning workshop, 27 (54%) problem based learning, and 26(52%) large group teaching workshop.



**Figure-3. Assessment tool workshops: Faculty preference**

In this figure, 30 (60%) faculty preferred workshop on assessment types, 28(56%) on MCQ construction, 24 (48%) on SAQ/SEQ construction and 27 (54%) on OSPE/OSCE construction.



**Figure-4. Workshops need: Faculty preference**

In this figure it is evident that faculty had interest and felt the need of workshops in research skills 38 (76%), soft skills 41 (82%) as well as IT software 38 (64%) respectively.

## DISCUSSION

Recently there has been a significant rise in number of medical colleges in the region, however maintaining the quality of medical education is a big challenge.<sup>17</sup> Among other important areas recommended by the World Health Organization (WHO) faculty development is considered to be an essentiality in health professionals' education. At national and institutional levels, faculty development was attributed to curriculum reforms, institutional accreditation and selection criteria for potential leadership positions.<sup>18,19,20</sup> Well planned faculty development programs were shown to facilitate community-based education, problem-based learning, integration between basic and clinical sciences, student-centred education, comprehensive evaluation and evidence-based medicine<sup>21</sup> a need of the hour especially after the introduction of an integrated curriculum.

Our study conducted on the faculty of a newly established medical college has two aspects. First was to identify the teaching methodologies and assessment tools used by faculty. Second aspect was to collect the information about the Trainings/Workshops required by the faculty to develop a faculty development program.

In our study, most of faculty members were in favour of student-centred teaching approach as student centred, active-learning pedagogies have been applied to help engage students, improve student learning, and promote success of students.<sup>22-25</sup> In our study, most of the faculty agreed that lectures should be interactive as an interactive lecture is the one in which knowledge is conveyed to students by involvement in the form of questions and answers.<sup>27</sup>

Faculty in our institution was using case -based discussion method in their teaching as they are basically a form of formative assessment in general practice (GP) training.<sup>26</sup> Most of our faculty was using problem based learning method (PBL) in their teaching as interest in medical PBL has been driven by three major factors: a need to fulfil the growing volume of knowledge required to practice medicine, the General and Professional

Education of the Physician (GPEP).<sup>29</sup>

As far as workshops on teaching methodologies are concerned, most of our faculty members preferred small group teaching workshop as smaller classes are a key ingredient in student success.<sup>30</sup> Peer assisted learning trainings were preferred as majority had the opinion that implementation of peer assisted learning programs will endorse the needs of students to teach in their future careers, giving them early opportunities in helping them to prepare for their roles in future.<sup>31,32</sup> Most of our faculty preferred workshop on interactive lectures as in the large group discussions, basic concepts with deep understanding forms the base of medical education which is best defined as one person speaking, more or less continuously, to a group of people on a particular subject or theme.<sup>33</sup>

As far as assessments are concerned, most of the faculty was in favour of assessment types workshop as a well-designed assessment sets clear expectations, establishes a reasonable workload and provides opportunities for students to self-monitor, rehearse, practise and receive feedback. Conversely, poorly designed assessments can mar the quality of learning.<sup>28</sup> As MCQS are major part of exam now-a-days, in our study a significant ratio of faculty favoured workshops on MCQS construction as MCQ-based exams are also very much valid because they are time saving and a short exam allows to test a broad topic in a shorter period of time assessing the understanding and application of knowledge.<sup>34</sup> In our study most of the faculty members found the need of workshops on Assessment types and tools, as it aids to measure the knowledge, skills, attributes and behaviours of medical students.<sup>37</sup> In another study done in Suez University, where they found that well designed reliable and valid assessment system should be accomplished for better performance and results of medical students.<sup>37</sup>

Our study describes the needs of faculty that they felt to be improvised in their development and trainings and workshops that should be conducted by Medical Education department

in order to overcome the academic needs in medical college. It has been seen that all over the world there is a decrease number of medical professionals that are also equipped with skills and trainings.<sup>35</sup> A medical teacher' role is just not to have teaching skills but also have to play as clinician, researcher, communicator and mentor.<sup>36</sup>

Soft skills are an important quality in a health care professional. Many studies have shown the importance of soft skills. A study took place in Canada Universities where they found team work, Communication and Leadership skills quite important for their academic development.<sup>38</sup> Our faculty expressed the need of trainings and workshops on soft skills.

Research is the need of the hour, especially in a country like Pakistan the need for training in research is essential. Our study shows that faculty found the need of trainings on Research methodologies, Software skills and Mentoring as supported by a study that when curriculum reforms, faculty would need more trainings on teaching skills, research methodologies to improve their teaching and learning outcomes.<sup>39</sup> Another study depicts innovation in faculty development regarding Mentoring would result in great institutional change.<sup>40</sup> Mentoring sessions lead the medical students to perform better both in personal and professional life.<sup>41</sup> As we are introducing a new integrated curriculum within our institution, faculty development is the foundation for the successful implementation of this curriculum.

## CONCLUSION

Workshops on teaching methodologies and assessments are essential our study concludes that although most of the faculty is trained but they still feel the need for workshops to keep them updated and trained in major aspects of curriculum delivery. In addition, research, mentoring, computer and soft skills need to be addressed. This highlights the need of a robust faculty development program. The study supports the conduction of trainings and workshop by the Department of Medical Education.

## CONFLICT OF INTEREST

The authors declare no conflict of interest.

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No.	Author(s) Full Name	Contribution to the paper	Author(s) Signature
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3	Kinza Ghafoor	Discussion.	
4	Faheem Mahmood	Results, Literature review.	
5	Mudassar Ali	Introduction, Literature review.	
6	Sahar Mudassar	Rationale, Literature review, References.	