

ORIGINAL ARTICLE

Feedback of Certificate in Medical Teaching Programme at King Edward Medical University Lahore

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ABSTRACT

Background: The concept of feedback is central to medical education. There is gradual shift from sandwich feedback to Pendleton feedback which is learner centred. Pragmatic worldview was proposed in this study. Certificate in Medical Teaching (CMT) programme was initiated at King Edward Medical University (KEMU) Lahore since 2019. The study objective was to improve learning outcome.

Methods: Mixed Method research design was chosen, out of all mixed method procedures "Convergent parallel mixed method design" was followed collecting simultaneously quantitative and qualitative data, then results were analysed and compared separately. This study was carried out from 01-06-2020 to 31-03-2021 at King Edward Medical University Lahore. Sample size of 43 participants from CMT (Certificate in Medical Teaching) Batch 1 and 2 took part in this study. Doctors from clinical side, demonstrators and personnel of Allied health sciences attended this course. A predesigned proforma designed on google form was sent to each participant via e-mail..

Results: Quantitative data collected was interpreted as percentages and in form of tables and presented as pie charts. Qualitative data collected was analysed by segregating data into codes. Corresponding themes were made of each code and presented in tabular form.

Conclusion: On the basis of feedback and mixed method approach, it can be concluded that certificate in medical teaching is a new teaching program at king Edward Medical University Lahore which can serve as basis to start master's degree at this institution.

Keywords: Feedback, medical teaching, KEMU

INTRODUCTION

Feedback is part and parcel of medical education. According to Merriam-Webster dictionary, feedback is "the transmission of evaluative or corrective information about an action, event or process to the original or contributing source"¹. Feedback basically involves observation, evaluation and guidance to the next level of performance. Informal summative feedback method using focused, short information after the course was employed. Its purpose was to give constructive feedback which is focused on specific task and its aim was to enhance learning experience². Conventionally Sandwich feedback method in which weak points are sandwiched between two layers of strength points is employed but now there is move toward Pendleton feedback which is learner centered, straight forward and it can be reproduced with convenience³.

King Edward Medical University (KEMU) has initiated six months programme named Certificate in Medical Teaching (CMT) from 2019. Graduate degree in medical, dental and allied health sciences is prerequisite for CMT. It is basically directed to improve knowledge, skills and competence of medical teachers so they are more successful in their teaching career. This course is taught in three modules, two months apart, each of four days duration at department of medical education KEMU. Formative assessment during course is by assignments which are submitted online to supervisors. It is mandatory to attend all modules and submit assignments. At the end, summative assessment is conducted and a certificate is awarded to successful candidates. Currently two batches have successfully completed CMT course. This programme is taught in three modules, module one is about teaching and learning: participants are able to deliver effective lecture, design it, describe strategies of engaging and disengaging students and describe some uses of technology to enhance student learning. Module two teaches about curriculum and assessment: explain key concepts used in assessment, describe assessment methods, role of feedback in student learning, discuss some major educational issues and trends in medical education at national and international level. Module three is concerned about professionalism, evaluation and research: role of evaluation in educational strategies, evaluation methods and sources of evaluation data, designing an educational intervention, current trends and issues in medical education.

It is kind of interprofessional teaching programme. Between the teaching sessions, series of activities are carried out and evidence is gathered of teaching practice. Handbooks are given for assessment requirements. Final assessment should be

successfully completed and passed in order to achieve certificate in medical teaching. Mentors are provided to students who will support them between contact sessions⁴. If participants have any query and want to discuss anything, they can contact their mentor and in turn mentors also contact participants to check their progress and also facilitators assess portfolio of evidence of teaching practice of participants. The purpose of this study was to determine feedback of CMT from participants so as to further improve, guide and facilitate this learning process and make it a basis for master's degree in medical education⁵. The rationale behind using mixed method approach was to acquire in depth knowledge and understanding of CMT programme and develop suggestions for improvement of upcoming courses to enhance learning quality.

The research problem was to gain feedback from participants of this course to adopt ways to improve it and implement its development effectively⁶.

Feedback has been quoted and defined diversely in literature. There are more than ten thousand publications on the subject of feedback in medical education reported in literature. On PubMed more than fourteen thousand publications have been cited, about more than half of these have been published in last decade so this is topic of intense research now a days.

Although feedback is backbone of medical education to enhance knowledge and maintain standards of effective teaching but various challenges and deficiencies have been reported in literature about feedback in medical education that feedback is underused and often missed and most of the times it is not specific and very brief. Feedback is more accurate if delivered early and delayed feedback carries less value⁶.

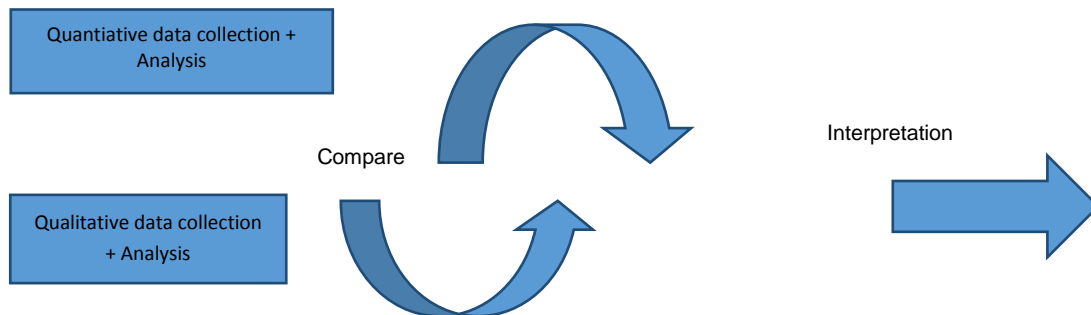
The relevance of study for the audience is to improve learning experience, cognition and educational outcomes.

MATERIAL AND METHODS

Mixed method research approach was employed which involves collection of both quantitative and qualitative data and integration of both types of data. It provides more in-depth understanding of research problem than either qualitative or quantitative approach used alone. From various mixed methods designs available, Convergent Parallel Mixed Methods Design was selected which involves simultaneous collection of quantitative and qualitative data and it is analyzed separately then results are compared.

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Convergent Parallel Mixed method design is most basic of the designs used in mixed method approaches and it is used most often. There is mixture of Quantitative and qualitative data but different information is collected at same time, different perspectives are compared and the two databases are converged. This reinforces the concept of Campbell and Fiske (1959) to collect and compare two data types and freedom of expression is also there. The philosophical worldview proposed in study was Pragmatic worldview: its main idea was derived from work of Murphy, Mead and Rotry, it is consequence of actions and research problem is addressed. Particularly used in mixed method approach, the researcher has freedom to choose the methods of research. It is pluralistic and emphasis is on real world practice.

In this study participants were asked to give feedback about CMT programme. It was carried out at King Edward Medical University Lahore. Study period was of nine months duration from 1-06 -2020 to 31-03-2020. Sixty-nine health care professionals from CMT batch 1 and 2 participated in study. Four participants were dropped out due to non despondence. Professors, Associate professors, Assistant professors, senior registrars (medicine, Obstetrics and Gynaecology, surgery, Radiology, Orthopaedics, Urology).

Role of researcher: I collected data by e-mailing questionnaire to participants, analysed it, I also attended certificate in medical teaching programme at King Edward medical university Lahore and also added suggestions to improve this course.

Data collection procedure:

Quantitative and data collection: Questionnaire proforma was developed on Google forms and it was sent by e-mail to all participants of course. Quantitative research questions were as following: 1. Age 2. Designation 3. CMT batch 4. What is your opinion about teaching environment? 5. Did you understand learning objectives of course? 6. What was motivational factor for doing CMT? 7. Did you motivate others to do this course? 8. What difference you experienced after doing this course? Which part of course you enjoyed most? Four to five options were made. Participants were asked to answer these closed ended questions by choosing single option and at the end proforma was sent back to researcher by clicking submit button⁷.

Qualitative research question asked was: Give suggestions to improve CMT course?

Open ended question was asked and participant's views were probed, data consisting of words was collected and transcribed in forms of codes and corresponding themes were made.

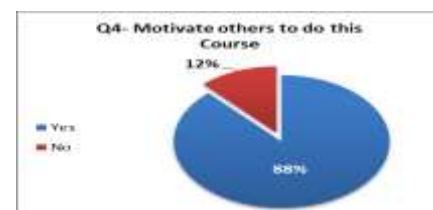
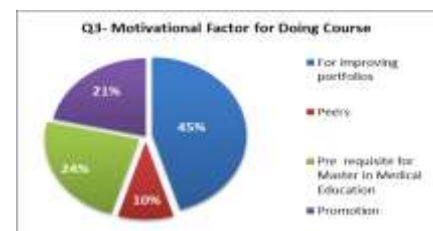
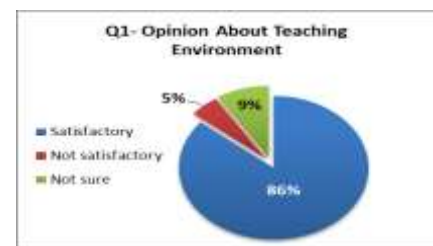
Mixed method approach was chosen to have better understanding of research problem than both quantitative or qualitative data and one type of research data was not enough for CMT course improvement⁸. These two data types were collected concurrently and then analysed separately. These two databases are mixed by merging results during interpretation. This type of research is efficient and intuitive but it needs efforts and expertise, issues related to sample size are encountered and difficulty is encountered while converging two sets of different data and resolve discrepancy of results.

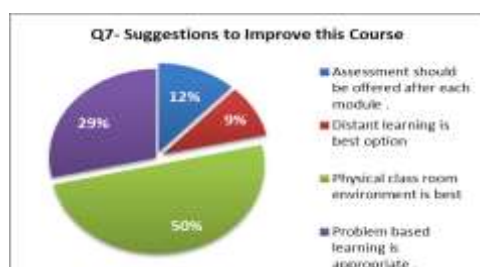
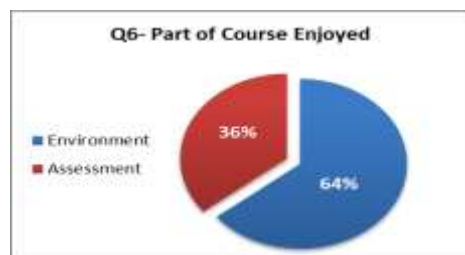
A specific approach of data analysis was used. Each proforma was analysed in detail by Microsoft Excel. The process of data analysis and collection were completed side by side. Codes of data segregated. Themes were made of each code and presented in tabular form⁹.

Anticipated ethical issues: Synopsis proforma was filled and presented before Institutional Review Board/Ethical Committee of King Edward Medical University and it was discussed in meeting of board of studies and approved, then study was initiated.

RESULTS

Quantitative and qualitative data collected was analysed and presented in form of tables and figures, percentages were made for quantitative data while codes and corresponding themes were made of qualitative data.





DISCUSSION

The results of this feedback about certificate in medical teaching highlighted many important points¹⁰. Results of both types of data were discussed concurrently taking in account the feedback of participants and their suggestions to improve this course. Majority of participants (86%) were satisfied from teaching environment, 9% were not sure and 5% were not satisfied¹¹.

Participants were of view that lecture time of this CMT course should be specified and not more than 30 minutes. Time of practice session should be increased so everyone gets a chance to participate. Some refreshment should be provided at the end of session and give equal importance to demonstrators and clinical teachers. In case of zoom meeting there should be back up of internet facility¹².

Most (93%) understood learning objectives of this course, 5% not understood and 2% not sure¹³. 45% did this course for improving portfolio, 10% were motivated by peers, 24% thought that it is pre-requisite for masters in medical education, 21% did this course for promotion purpose¹⁴.

Pre and posttest of each module should be norm and pre lecture teaching material sent by e-mail. Sessions should be more interactive and regular mentor-mentee meetings held. Lectures are delivered on how to make presentations, each participant motivated to give individual presentation and whole six months curriculum distributed at start of session¹⁵.

Most of the participants (88%) motivated others to do this course. After doing this course 45% experienced difference in attitude, 29% in knowledge and 26% in skills. 64% enjoyed environment of course, 36% were of view that assessment was optimal¹⁶.

Every student and backbenchers motivated to take part in it, time spared for individual class, lecture rehearsal and it is mandatory for everyone to give presentation on stage. To improve this course 12% said assessment should be offered after each module, 10% were of view that distant learning is best option, 50% said physical class room environment is best, 23% highlighted importance of problem based learning¹⁷.

CONCLUSION

On the basis of this feedback, it can be concluded that this CMT course can be improved by increasing time for practise sessions and enhancing individual participation concurrently strengthening the knowledge, skills and attitudes and King Edward Medical University Lahore to take initiative for master's degree in field of medical education. (18)

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