Kathmandu University Medical Journal (2003) Vol. 2, No. 3, Issue 7, 244-251

Medical Education

Faculty opinion survey following attendance to teacher training workshops in Kathmandu Medical College

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Abstract
Introduction: With the growing awareness of the importance of teaching and learning in Universities, the need to improve professional qualities in teachers has been identified.
Aim and Objectives: This paper describes the outcome of the impact of teacher training workshops on faculty-teaching performance.
Methodology: A total of 30 faculties who had undergone teacher training in the one-year period were included in the study. Survey questionnaire were distributed and all the forms were returned.
Results: All (100%) respondents found the teacher training to be very useful/useful for improvement of teaching skills. A total of 76.66% said that the skills learnt in the workshop were very applicable, 80% perceived changes in students' classroom behaviour and found their lecture to be more participatory and interactive. As for their own change in behaviour, 66.66% respondents experienced better interaction with the students in classroom.
Discussion: The overall impression of the training was very positive. Future studies should include student feed back and classroom teaching observation for faculty teaching evaluation. We also need to utilise the feed back information obtained in this article, to further improve the strength of the future teacher training workshops. The future workshops should include sessions in problem-based learning and follow up refresher courses.

Key Words: Teacher- training, Survey, KMC

The educational system has encountered massive transformation over the last few decades. Rather than the traditional concept of injecting knowledge, the urge to change the students' confusion into understanding is the main aim of the modern effective teaching.[1] The purpose of teaching is to facilitate learning and encourage the learner to learn more effectively and develop life long learning habits.[2]

Making the learning process more readily available to the students is the emerging concept in educational endeavour. The educational goals have changed from teaching facts to helping students to learn how to find relevant information, assess it and organise disparate information into the cohesive whole.[3]

To teach effectively, one must possess considerable skill, knowledge, patience, caring and commitment.[4] These insights put forward a genuine need for innovations into teaching and learning strategies. Formal training for teachers has been a routine in many medical schools. In 1996, University of Illinois at Chicago College of Medicine developed programmes to improve teaching skills of junior faculty. The programme saw participant's progression in promotion and tenure.[5]

Medical schools are the only institutions with the responsibility of preparing medical students to become doctors. If medical academic staffs are to be involved in teaching, they have an obligation to become educators, not just experts in content.[6]

Not all good doctors are good teachers. Without proper training or vocation, most of the medical faculties lack the skill. The technical know how of the teaching skills are the criteria that medical schools nowadays look for, in the health professionals who take up faculty positions in medical schools.[7]

Clinicians with advanced education training possess a significantly greater knowledge of pedagogic principles than those with no targeted training.

So, in the context of educational theory it is better to encourage both tacit and formal pedagogic knowledge acquisition.[8]

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Training programme aimed at helping teachers master the knowledge and the skills; help to understand the fundamental perspectives on the process of constructing, sharing and transferring knowledge, and bringing organisational changes.[9]

Following this insight, 10 faculty members from Kathmandu Medical College (KMC) were sponsored to attend the "Teacher Training Workshop" organized by Medical Education Department, Institute of Medicine (IOM), Kathmandu Nepal, in Feb. 2003. Then, with the bunch of freshly trained faculty, Department of Medical Education, KMC following the footsteps of IOM organized the same sort of "Teacher Training Workshop" in June and December 2003.

As many medical schools follow the new teaching learning strategies, the need for effective evaluation of the process, is the fundamental part of the educational advancement.[10] For the study of effectiveness of teacher trainings at KMC, the Department of Medical Education conducted the preliminary assessment of the training during the final days of the workshops. The response was positive.

This study is designed to assess formally in the form of questionnaire survey, with the aim of identifying:

1. Whether or not the faculty gained the potential to achieve the goals of effective teaching?
2. If they practiced the skills learnt at the workshop?
3. The usefulness and effectiveness of the workshops.
4. The behavioural changes in the teachers and students.
5. The strengths and drawbacks of the teacher training workshops.

Materials and Methods

The study was conducted based on questionnaires distributed as part of the survey. Ten faculties (including two of the authors) of different departments of KMC had undergone a week long teacher training at Institute of Medicine (IOM), Tribhuvan University Teaching Hospital (TUTH), Kathmandu, Nepal in Feb. 2003. Another ten faculty attended a four-day workshop organized by Department of Medical Education, KMC in June 2003 and additional twelve faculty attended similar five-day workshop at KMC in Dec 2003. The list of all (excluding two of the authors) faculty teachers who had undergone teacher training was collected. Survey questionnaire was prepared. There were altogether twenty- two items that consisted of structured, semi structured and open- ended questions. The questionnaire was distributed to 30 participants who had undergone teacher training in the past one year in IOM and KMC. All completed questionnaires (100%) were returned in three weeks time. The data was tabulated and analysed.

Results

All, 30 faculty teachers from 16 departments of KMC included in the study responded promptly to the questionnaire distributed.

Majority of the faculty (73.33%) were at the lecturer level. Out of 22 lecturers, 3 of them are no more working with KMC. Amongst the three tutors, one of them is also a post- graduate student and two of them had dual appointment of registrar/tutor in KMC.

Table 1. Position of the respondent faculty teachers

Current faculty position	**Respondents, N = 30 (%)**
Assoc. Professors	2 (6.66)
Asst. Professors	2 (6.66)
Lecturers	19 (63.33)
Tutor	3 (10)
Others (Pharmacist)	1 (3.33)
Lecturers, no more working with KMC	3 (10)
Total	30 (100)

Amongst the 30 respondents, 16 had started their career as a teacher. So nearly half (53.33%) had teaching experience before attending the workshop.

The class size of majority of the respondents was quite large. Out of 30 respondents, 11 (36.66%) had been teaching to a class size of 100 students and 14 (46.66%) were teaching a class size of 50 students.

Table 2. Attendance of teacher-training workshop

Time when training was attended	Respondents, N = 30 (%)
>1 year back	8 (26.66)
6 months back	10 (33.33)
<6 months back	12 (40)
Total	30 (100)

Only 26.66% of the respondents had attended the workshop one year back. .

Table 3. Usefulness of the workshop

Was the workshop useful?	Respondents, N = 30 (%)
Very useful	20 (66.66)
Useful	10 (33.33)
Total	30 (100)

All the respondents (100%) expressed that the workshop was useful.

Majority of the respondents (56.66%) found the microteaching session to be the most useful and interesting of all the topics of the workshop. And all the respondents had been using the skills learnt in the workshop, someway or the other. The 70% respondents had practiced the skills fully and 30% were able to put in practice to some extent only. The sessions on curriculum design, community based studies and audio-visual (A/V) aids were felt to be least useful by 33.33%, each of the faculty respondent.

Table 4. The extent to which the skills learnt was applicable to everyday teaching

Extent of applicability of the skills learnt	Respondents, N = 30 (%)
Very applicable	23 (76.66)
Applicable to some extent	7 (23.33)
Total	30 (100)

All the respondents said that the skills learnt were very applicable or applicable to some extent depending on the teaching situation.

Table 5. Result for lesson plan done for lectures

How often do you do lesson plan?	Respondents, N = 30 (%)
Almost always	14 (46.66)
Frequently	11 (36.66)
Sometimes	2 (6.66)
Occasionally	2 (6.66)
Hardly ever	0
Never	0
No response to this question	1 (3.33)
Total	30 (100)

Majority of the respondents (83.32%) were doing lesson planning almost always or frequently.

Table 6. Objectives of attending the teacher training

Why did you attend the teacher training?	Respondents, N = 30 (%)
To improve teaching learning techniques	26 (86.66)
To improve student evaluation	9 (30)
To improve communication and interaction skills	23 (76.66)
To Learn specific skills like, (modern and effective teaching learning techniques, microteaching concepts, how to approach a large group of students)	12 (40)
To learn innovative approaches to teaching and learning	18 (60)
To familiarize recent advances in Health professions education	14 (46.66)
To gain new ideas, knowledge and skills	19 (63.33)
For fun	2 (6.66)

The majority (86.66%) faculty respondents had attended the workshop to improve teaching and learning techniques.

Table 7. Perceived changes in the behaviour of students in the class after the implementation of the skills attained in the workshop

Behavioural change of students	Respondents, N = 30 (%)
Increment in the students' attendance in class	4 (13.33)
More students passed	2 (6.66)
Lectures were more participatory	24 (80)
Better teacher student interaction	2 (6.66)
No answer	4 (13.33)

Majority of the respondents (24, i.e. 80%) noticed significant changes in the students' classroom behaviour. Rest of the respondents either did not notice any change or did not comment to the question. The changes that were noticed by the faculty are shown in Table no 7.

Table 8. Perceived changes in teaching practice after attending the workshop

Perceived changes in practice after attending the workshop	Respondents, N = 30 (%)
More relaxed when entering the class	10 (33.33)
More lesson plan	18 (60)
Better interaction with students	20 (66.66)
Improvement in the use of A/V aids	15 (50)
Improvement in the various components of lecture methods	12 (40)
Use of various teaching learning methods	9 (30)
Improvement in the use of objective	8 (26.66)
Better teacher student relationship	16 (53.33)
No answer	3 (10)

After using the skills learnt in the workshops, the most favourable change perceived in the teaching practice, were, improvement in the classroom interaction (66.66%) and better teacher student relationship (53.33%).

Table 9. Quality of the resource persons who had taken lectures in the teacher training workshops in Feb 2003, June '03 and December '03

Rate of the resource persons	Respondents, N = 30 (%)
All of them were good	6 (20)
Few of them were good	1 (3.33)
Majority of them were good	23 (76.66)
None of them were good	0
Total	30 (100)

All the respondents liked the majority of the resource persons who were involved in the teacher- training workshop, both at IOM and KMC.

Half the respondents, (15 i.e. 50%) showed eagerness to be involved in medical education department and take lecture on any of the topics in the forthcoming teacher training workshops being organized, 11 (36.66%) were not interested and 4 (13.33%) respondents ignored this question.

Majority of the respondents were keen on using overhead projector and multimedia presentation, as the most effective and efficient means of classroom A/V aid. In addition to these, CD, video, slides, charts and models were also used as teaching aids. Some of the faculty teachers (13.33%) did not respond to the question on A/V aids.

Table 10. Areas of improvements for future workshops

Areas of improvements	Respondents, N = 30 (%)
Follow up and refresher training to be organized	19 (63.33)
Improvement on the facilitators side	3 (10)
Increment in the duration of the training	9 (30)
Improvement in workshop facilities	9 (30)
More emphasis on PBL (problem based learning)	12 (40)
Additional topics	1 (3.33)
No answer	1 (3.33)

Majority (63.33%) of the respondents suggested for follow up and refresher teacher training courses in future.

Table 11. Strength of the Teacher Training identified by the respondents

Strength of the workshop	Respondents, N = 30 (%)
Had opportunity to share ideas/team work	17 (56.66)
Opportunity to develop new knowledge and skill	23 (76.66)
Excellent trainers	10 (33.33)
Microteaching practice sessions	22 (73.33)
Highly informative and motivating	16 (53.33)
Systematic organization of the workshop	9 (30)

Discussion

The establishment of a medical school lies in the successful creation of faculty teams composed of physicians on the one hand and educationists on the other. George E Miller's vision of developing sufficient expertise in medical education is the initiation to set up training programmes ranging from short teaching workshops to years long fellowships leading to a masters degree in medical education.[11] As part of following this vision, three teacher- training workshops were organized for new faculty of KMC in the year 2003.

Teachers can find out how well they teach by examining what they do in relation to what they achieve. What teachers do is in turn reflected in their encounter with students in the process of teaching. What they achieve is reflected in what students learn. It is necessary therefore to obtain information concerning both the process and the outcomes of teaching.[12] So, with this objective, the participants who had undergone teacher training over the past one

year at three intervals were requested to provide formal responses to brief questionnaires.

The respondents were asked about the objective of attending the workshop, applicability of the skills learnt in the workshop, perceived changes in the behaviour of the students in the class after the implementation of the skills attained, perceived changes in the teaching practice, strength of the training etc.
All the respondents returned the questionnaire in due time, answering a majority of the 22 questions. Specific questions on classroom teaching were not answered by a pharmacist and a general practitioner who had also participated in the training.

Majority of the participants were lecturers (73.33%) who had recently embarked on this field. The time when they had undergone the training was the most appropriate so that they would be able to use the skills in their future career as a medical teacher. It is good that KMC invested on the right people at the right time. Out of 21, 3 of them are no more working at KMC. However, such situations are as likely to occur elsewhere too.

The respondents expressed several views regarding their reason for choosing teaching as their career. The overall view for choosing teaching profession was, to update and share knowledge and to stay active both in clinical practice and academic career. Some even expressed that they had joined teaching as an honourable profession, while one of the participants had joined the profession out of compulsion, which is because of being involved in medical school, clinical practice and teaching have to go together.

For the majority of the faculty respondents (86.66%), the main objective of attending the teacher training was to improve teaching and learning techniques. Faculty also aimed to improve communication and interaction skills (76.66%); gain new ideas, knowledge and skills (63.33%); familiarise recent advances in health profession education (46.66%); to learn specific skills like modern effective teaching learning techniques and microteaching concepts (40%).

All the respondents (100%) expressed the workshop to be useful for their transformation from clinicians to medical teacher. They further explained that by attending the training, they gained various theoretical and practical issues in medical education. They noticed change in their teaching style with development of more professional confidence, better lectures with clear objectives. Hence the result of this study agrees with that of Pant et al 2003[13]. In which the overall impact of teacher training was positive and majority (81%) had expressed that the skills learned during the workshops were either extremely useful or moderately applicable to their job situation. Hence we could say for sure that the investment on teacher training was worth it.

The most serious misconception about teaching is the tendency to equate it solely with dispensing of information. Teachers in medical school develop as teachers in much the same way as they develop as medical practitioners. To become an effective teacher one should examine and accept ones liabilities and assets in teaching. This will require introspection and external feedback. [14]

A very intensive source of feedback is 'self-confrontation because when one confront oneself, one cannot discount the source of the feedback as unreliable and/or unqualified to pass judgment. An excellent method of confronting oneself is to view ones performance on a videotape recording, rather than being told by others, one discover oneself.[14] This is the reason why the respondents found microteaching session to be the most useful (56.66%), followed by lesson plan 20%.
Majority of the respondents (76.66%) said that the skills learnt in the workshop were very applicable, whereas 23.33% stated that the skills learnt in the training is not applicable all the time. Such could be for various reasons like, size of the class (83.32%, of the respondents had been teaching to a class size of 50-100 students), lack of proper facilities at the present context of KMC. One respondent said that, time would be required to change personal and conventional reservations in the teaching methods. So if the study had been conducted after at least 6 months of attendance for all, the view regarding this could have improved.

The 40% of the respondents had attended the training in Dec 2003, i.e. less than six months back and 33.33% had attended six months back.

A total of 80% of the respondent perceived changes in student behaviour in class and found their lecture to be more interactive and participatory after the workshop. Interactive lecturing involves an increased interchange between teachers, students and the lecture content. The use of interactive lectures can promote active learning, heighten attention and motivation, give feedback to the teacher and student, and increase satisfaction for both.[15] Two faculties (6.66%) said that more students passed. There are many variables that affect the student pass rate. It

would be too simplistic and too early to relate the specific impact of teacher training to the student pass rate at this stage.

Regarding the perceived change in teaching practice, 66.66% respondents experienced better interaction with the students after the workshop and 60% were doing more lesson plan before the lectures, which is a significant change, attributed to the teacher training. After the training, 53.33% respondents noticed improved teacher student relation and 50% improved their use of audio video aids in lectures.

The 40% of the respondents used transparencies and power point presentations most of the time whereas 23.33% were comfortable using transparencies only, because they were either not very familiar with the new technology or it was due to lack of computing facilities.

When asked specifically; 'How often do you do lesson plan?' 46.66% expressed that they almost always did lesson plan for the lectures; 36.66% did it frequently; 6.66 % sometimes; 6.66% occasionally; and 3.33% did not respond. In overall, 25 respondents (83.33%) were doing more lesson plan after the training.

The overall strength of the workshop identified by the respondents were, opportunity to develop new knowledge and skill (76.66%), and sessions on microteaching concepts (73.33%).

Regarding the possible areas of improvements, 63.33% commented that there should be more follow up and refresher training schedule to be added as part of the teacher training course and 40% expected that more emphasis would be given on PBL in future trainings. In KMC, we need to structure more faculty development programmes through teacher training for PBL. It may be noted that faculty development programme was conducted in Dokuz Eylul School of Medicine, Turkey, in the process of curriculum change from traditional to PBL. The course gave medical staff the opportunity to develop the understanding of PBL methodology and theory.[16]

Participants suggested that, every teacher who is new in the field must attend the workshop and that, more sessions on internet and power point should be added in the training schedule.

This paper is a preliminary study of the outcome of the faculty teacher training in KMC; eventually we will need to determine additional outcomes as well. This study assesses teaching productivity, after teacher training on the basis of questionnaires. In future we need to include additional evidence of increased effectiveness and creative teaching, by involving the students to get the feedback. Because student could be excellent source of information, as they are the consumers and it is the effectiveness of their learning that determines whether one is a good teacher or not[14]. We could also employ additional tools (such as observational feed back from peers or educationists)) to observe and record teacher performance in future to evaluate the actual classroom performance.[12]

We also need to utilise the feed back information obtained in this article, to further improve the strength of the future teacher training workshops.

Conclusion

The data described here are completely supportive that the teacher-training workshop has been a welcome positive force for pedagogic improvement in KMC. The data also demonstrate that behavioural changes in the process of teaching and learning are being evidenced for both teachers and students.

Acknowledgement

We are grateful to KMC for providing financial support, all the resource persons & Medical Education Department, IOM for the invaluable sessions in the workshops. We are also thankful to all respondent faculty teachers who volunteered to fill up the questionnaire.

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