

Curriculum Reform and Teaching Methodologies: A Survey on Teachers' Perspectives in the University of Medicine 1, Yangon

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Abstract

Background: Medical education in Myanmar is in the era of reform. Its medical schools' curriculum is under transformation to outcome based integrated curriculum (OBIC). As the success of education transformation is usually influenced by teaching technology and educator's perspectives on transformation, this study aimed to assess the experiences and perspectives of the teachers on the existing educational programme, teaching methods they are practicing and their perception and confidence in implementing the new curriculum.

Methods: Self-administered questionnaire survey was conducted on all teaching staff of the University of Medicine 1, Yangon. Data analysis was done using SPSS (Statistical Package for the Social Sciences) software Version 16.0, 2007.

Results: Out of a total of 447 teaching staff, 79% participated in the survey. Forty-six percent (46%) of the participants had more than 15 years of teaching service, 3.6% had Diploma in Medical education degree, 56.1% had received training in Medical Education through workshops and seminars, and 30% hadn't undergone medical education training. The majority of respondents stated small group tutorial (57.9%), and practical (54.1%) as their favorite and comfortable teaching method, followed by lecture (40.4%); team based learning (10.3%), problem based learning (17.7%) and case based discussion (18.2%). Sixty percent (60%) of participants had positive attitude towards the existing curriculum and 85% were satisfied with the overall training programme. Ninety two percent (92%) had "confidence" in the role as a teacher, and felt they had contributed to students' learning. As regards the new OBIC, 92% agreed that integrated curriculum could be a better model to achieve students' competency and had positive perception on the implementation of the new curriculum.

Conclusion: The teaching faculty showed positive attitude towards curriculum reform and expressed their needs in pedagogic skills training. Faculty development programmes for capacity strengthening and upgrading of university's infrastructure are mandatory for effective and successful implementation of new curriculum.

Keywords: curriculum reform, pedagogic skills, faculty development programme

Introduction

University of Medicine 1, Yangon (UM 1) was established since 1907 when Myanmar medical education started as 4 year-certificate course in Licentiate in Medical Practice (L.M.P). The course was upgraded in 1923 to Bachelor of Medicine and Bachelor of Surgery (M.B.,B.S) Course which was based on early British medical education model¹.

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Periodic reviews and revisions on the curriculum were done during National Medical Education Seminars, but the traditional discipline based model of the curriculum remains essentially unchanged. In 2016, the 10th National Medical Education Seminar recommended that the Myanmar medical curriculum be transformed to “Outcome Based Curriculum” with integrated model (OBIC) that emphasizes on student centred teaching methods with integration of different disciplines in system modules.

Changing characteristics of student generations, expectations of the community and emerging trends in new teaching technologies have been driving for a change in medical education programmes, but evidences for these perspective shifts and advantages of changes need to be provided to assure evidence-based curriculum responsiveness to change². Many medical education programmes have mission or vision statements on acquired knowledge, skills and attitudes of the graduates that enable them to serve the health needs of the population³. The success of education transformation, however, is influenced by teaching technology employed and educator’s perspectives on transformation. The impact of teaching strategies used by the educators play a major role in determining the achievement of their expected outcomes. Educators in transformation shift might face many challenges and teachers need to be well equipped with skills in students centred teaching, updated teaching tools and positive attitude towards educational transformation⁴.

Research in medical education has contributed substantially to innovative teaching methodologies and assessment systems, and the education community is becoming aware of the importance of evidence in education decision making⁵. This study aimed to assess the experiences and perspectives of the teachers towards the existing educational programme, their experience in different teaching methods they are practicing, and their perception and confidence in implementing the new curriculum. The findings of this study are expected to give practical insights into successful implementation of the medical education reform process.

Method

Self-administered questionnaire survey was conducted to all members of the teaching staff of the University of Medicine 1, Yangon (UM 1) who gave informed consent. Survey questionnaires were distributed to all undergraduate teaching departments in 2018 June. The questionnaire, to be responded anonymously, was developed in English, and comprised the participants’ demographic data, teaching experience (in years), and training opportunity for medical education. Single response questionnaires were constructed to explore participant’s knowledge, perception and experiences in different teaching methods used in existing and the outcome based integrated curriculum. Likert-scale-type questions were used for measuring participant’s satisfaction on quality of existing teaching programme and confidence aspects and readiness for teaching in new curriculum. Data analysis was done using SPSS software Version 16.0, 2007.

Results

Out of a total 447 teaching staffs, 353 participated in the survey having an overall response rate of 79%. Distribution of teaching faculty in respondents is pre-medical year teachers (38%), teachers from Basic Medical Science years (43.5%) and teachers of clinical years (18.4%). The reasons for non-response from Basic Medical Science departments and clinical departments included being on leave, on trip or involved in the various training programmes.

Among 353 respondents, (83.6%) of the participants hold master degrees, 21.4% doctorate degrees and 10.4% fellowship certificates. Among 353 respondents, 46.1% had teaching experience of more than 15 years, 9.6% had 12-15 years, 7.6% had 9-12 years and 35.3 % had less than 9 years. Only 3.6% of participants had completed Diploma in Medical Education Course 56.1% had attended Medical Education Workshops and seminars, 30% had no Medical Education training, 10.3% learned through peer teaching and from other sources (Fig. 1 A and B).

Figure 1 A. Teaching Experience of Faculty (in Years)

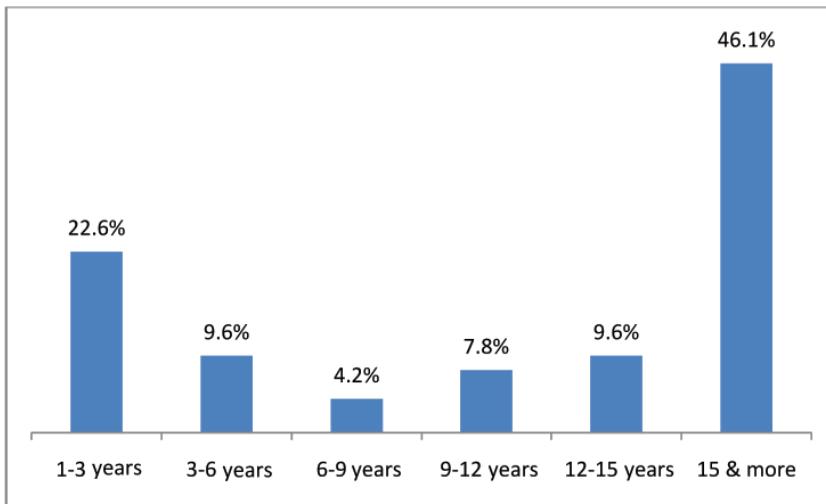
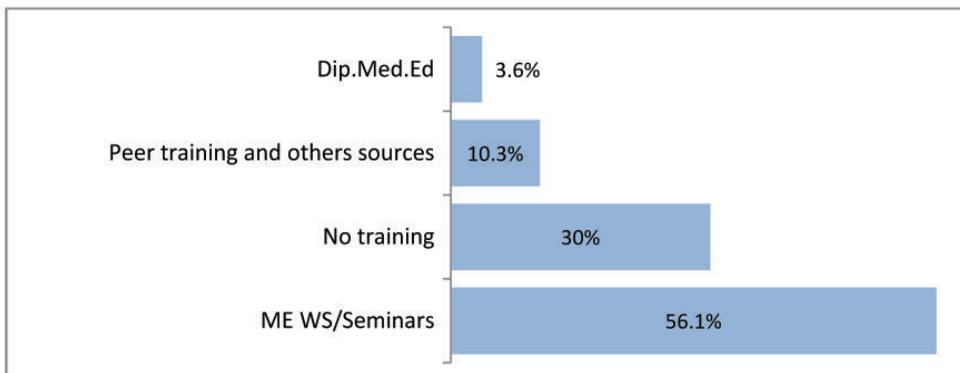
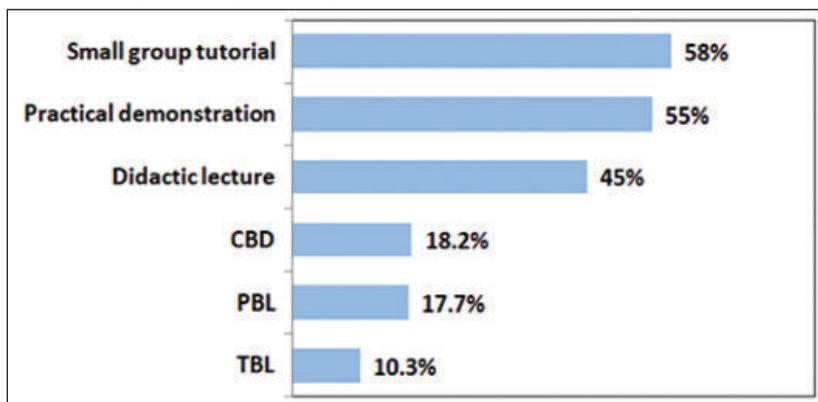


Figure 1 B. Training Opportunities for Medical Education in University’s Faculty



The majority of respondents stated small group tutorial (57.9%), practical (54.1%) as their favorite and comfortable teaching method, followed by lecture (40.4%); problem based learning (PBL) (17.7%), case based discussion (CBD) (18.2%) and team based learning (TBL) (10.3%). (Fig. 2)

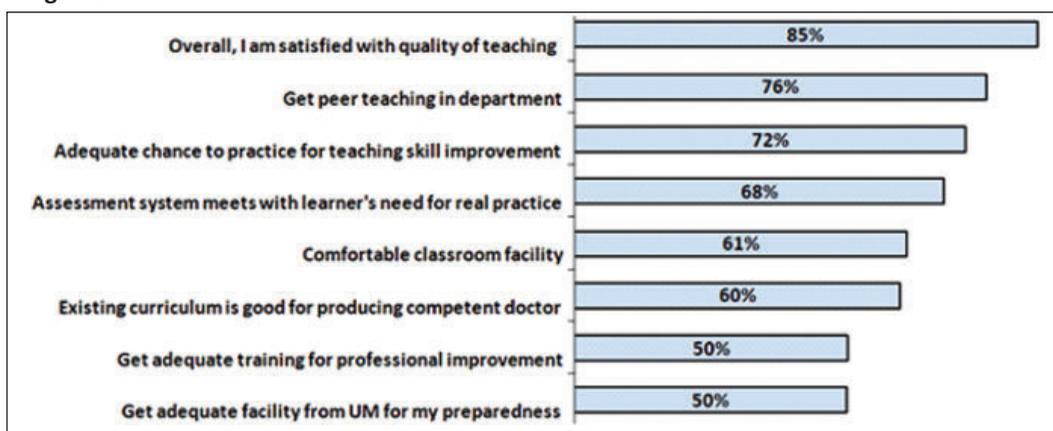
Figure 2. Teaching method stated as “favorite/comfortable by the faculty (in terms of percentage of respondents).



CBD - case based discussion; PBL - problem based learning; TBL - team based learning

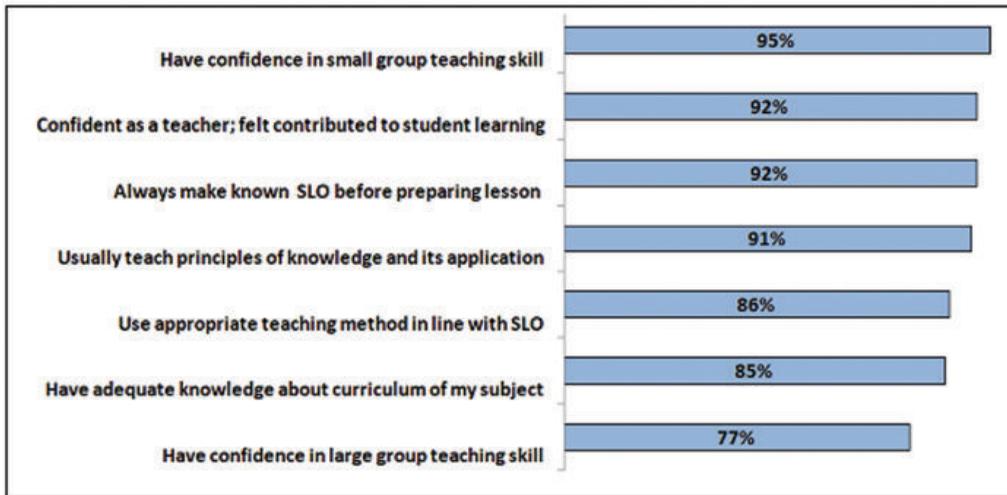
Regarding the questions concerned with overall education programme, teaching-learning facility and professional development training of the University, majority (60%) of respondents have positive attitude in overall educational programme (good enough to produce competent basic medical doctors) while about only 50% of respondents gave positive response (strongly agree and agree) on faculty development programmes of UM 1, and on teaching-learning facilities. (Fig. 3)

Figure 3. Percentage of positive responders (strongly agree and agree) on existing teaching programme: Satisfaction on quality of teaching-learning facility and faculty development Programme



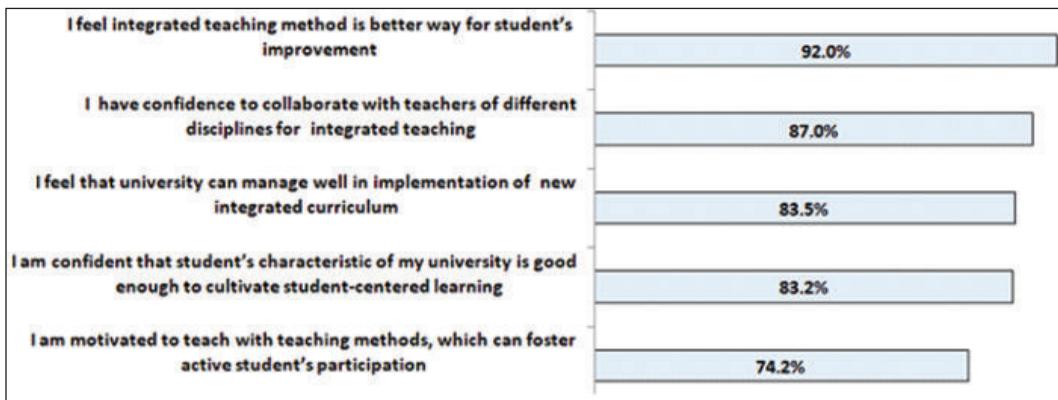
With regard to confidence in teaching skill and knowledge on curriculum, majority of respondents (77%) had positive perspective “has confidence on their contribution for student’s learning improvement” and more than 85% had confidence on their teaching skill. (Fig. 4)

Figure 4. Percentage of respondents with positive responses (strongly agree and agree) to various aspects of teaching skill



Regarding transformation of medical curriculum, 92% of participants agreed or strongly agreed that integrated teaching is the better way to improve student’s competency, 87% had confidence in inter-departmental collaboration for integrated teaching, 83.5% had confidence in the university for successful implementation of the new curriculum, 83.2% were confident that student’s characteristics are favourable to practice student centre teaching methodologies and 74.2% had motivation for teaching in new methodologies, which can foster student’s participation. (Fig. 5)

Figure 5. Percentage of respondents with positive responses (strongly agree and agree) to Outcome Based Integrated Curriculum



Discussion

Many curriculum changes have been implemented at the end of the 20th century. In many medical schools undergoing transition from traditional discipline based to integrated curriculum, there have been resistance to cross disciplinary approaches as discipline based curriculum model favors departmental governance and conserves

discipline identity⁶. This study, however, reveals that teachers of the UM 1 had positive attitude towards the transformation of discipline based traditional curriculum to outcome based integrated curriculum. Moreover, majority of the teachers had confidence to collaborate in interdisciplinary approach and were confident that the students have the characteristics favourable to practicing student centred teaching methods (pedagogic teaching).

Although University of Medicine 1 has been conducting faculty development training on medical education year after year, it has so far covered only about 60% of the teachers; 50% of respondents felt that “they were getting adequate training for their professional improvement”. In line with this, the University needs to plan faculty development programs in more structured and systematic manner (i.e. need based and time based). As regards pedagogic teaching skills required for the new outcome based curriculum, this survey shows that teachers of UM 1 are confident and comfortable with small group teaching and practical demonstration, but not familiar with team based learning and case based learning (at the time of survey). As one of the core competencies for medical teachers is engaging students by using active teaching and learning methods⁷, faculty training should focus on how to foster student centred teaching methods (teacher as a facilitator for effective small group discussion and team based learning) and assessment strategies. In this survey, 61% of respondents were satisfied with classroom facilities, while 50% were satisfied with facilities of the University for their preparation of teaching-learning tools used in the current curriculum. The new medical curriculum emphasizes on student’s self directed learning (SDL) and student’s participation in learning activities that empower student’s thinking, reasoning and application of knowledge and skills. As such, teacher’s as well as student’s preparedness for teaching sessions will be more demanding. The University’s infrastructure need to be upgraded to induce educational environment, expand e-learning resources and enhance teaching-learning facilities in line with the new teaching methodologies.

Conclusion

Myanmar medical education is moving towards competency-based education, change could be implemented through curriculum reform with the efforts of qualified faculty members in presence of an enabling learning environment. The findings reveal the positive attitude of teaching faculty on curriculum reform and their needs in pedagogic skills trainings, and indicate that faculty development, upgrading of university’s infrastructure, institutional support and monitoring are key factors for successful and effective implementation of new curriculum.

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